

**PRIDĖTINĖS VERTĖS MOKESČIO INFORMACIJOS MAINAMS TARP EUROPOS SĄJUNGOS
VALSTYBIŲ SKIRTOS INFORMACINĖS SISTEMOS ITIS_EU PLĖTROS PASLAUGŲ VIEŠOJO PIRKIMO
SUTARTIS**

Nr.
Vilnius

Valstybinė mokesčių inspekcija prie Lietuvos Respublikos finansų ministerijos, į. k. 188659752 (toliau – UŽSAKOVAS arba VMI prie FM), atstovaujama viršininko pavaduotojo Martyno Endrijaičio, veikiančio pagal Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2023 m. kovo 21 d. įsakymą Nr. V-117 „Dėl įgaliojimų suteikimo“ ir UAB „Elsis Pro“ (į.k. 300064148), kuri numato pasitelkti subtiekęją – UAB „NRD CS“ (į.k. 303115085) (toliau – TIEKĖJAS), atstovaujama UAB „Elsis Pro generalinio direktoriaus Rimvydo Jančiausko, veikiančio pagal bendrovės įstatus (toliau kiekviena vadinama ŠALIMI, o kartu – ŠALIMIS), remdamosi įvykusio atviro konkurso „Pridėtinės vertės mokesčio informacijos mainams tarp Europos Sąjungos valstybių skirtos informacinės sistemos ITIS_EU plėtros paslaugų viešasis pirkimas“ (pirkimo Nr. 676726) (toliau – KONKURSAS) rezultatais bei vadovaudamosi Lietuvos Respublikos viešųjų pirkimų įstatymu ir Lietuvos Respublikos civiliniu kodeksu (toliau – Civilinis kodeksas), sudarė šią sutartį (toliau – SUTARTIS).

KONKURSE TIEKĖJUI pateikti KONKURSO dokumentai bei TIEKĖJO KONKURSE pateiktas pasiūlymas toliau yra vadinami KONKURSO DOKUMENTAIS. Jeigu SUTARTIS nenustato kitaip, SUTARTYJE vartojamos sąvokos reiškia tą patį, ką ir KONKURSO DOKUMENTUOSE vartojamos sąvokos.

1. SUTARTIES DALYKAS

1.1. SUTARTIES dalykas – Pridėtinės vertės mokesčio informacijos mainams tarp Europos Sąjungos valstybių skirtos informacinės sistemos ITIS_EU plėtros paslaugos (toliau – PASLAUGA arba PASLAUGOS ATLIKIMAS). PASLAUGA detalizuota SUTARTYJE.

1.2. Visa nauda, kurią TIEKĖJAS suteiks UŽSAKOVUI SUTARTIES galiojimo metu, vykdydamas SUTARTIES nuostatas, toliau vadinama - PASLAUGOS dalimi.

1.3. PASLAUGĄ atlieka TIEKĖJAS UŽSAKOVUI.

1.4. SUTARTYJE, KONKURSO DOKUMENTUOSE ir kituose dokumentuose, į kuriuos daro nuorodą KONKURSO DOKUMENTAI, nustatyti reikalavimai PASLAUGOS ATLIKIMUI ir ŠALIMS, toliau SUTARTYJE vadinami REIKALAVIMAIS.

1.5. PASLAUGOS atlikimas turi būti vykdomas pagal REIKALAVIMUS.

1.6. Įsigaliojus naujiems teisės aktams, ar jų pakeitimams, susijusiems su PASLAUGA, TIEKĖJAS privalo vykdyti tokių teisės aktų nuostatas nuo jų įsigaliojimo datos. Kiekviena REIKALAVIMŲ nuostata, neatitinkanti įsigaliojusio naujojo teisės akto ar jo pakeitimo, susijusio su PASLAUGA, nuo tokio naujojo teisės akto ar jo pakeitimo įsigaliojimo datos netaikoma, o vietoj jos taikoma įsigaliojusio naujojo teisės akto ar jo pakeitimo, susijusio su PASLAUGA, nuostata.

1.7. ŠALYS, siekdamos užtikrinti aplinkosauginių principų laikymąsi, kad PASLAUGAI teikti būtų sunaudojama mažiau gamtos išteklių, įsipareigoja nespausdinti popierinių dokumentų, susijusių su sutarties vykdymu ir naudoti tik elektroninius dokumentus.

2. KAINA IR ATSISKAITYMAS

2.1. UŽSAKOVAS TIEKĖJUI avanso nemoka, t. y. iš anksto su TIEKĖJU neatsiskaito.

2.2. SUTARTIES vertė 1 009 338, 84 EUR be PVM, 1 221 300 EUR su PVM. Į PASLAUGOS įkainius įtraukti visi susiję su TIEKĖJO įsipareigojimų pagal SUTARTį vykdymu TIEKĖJO mokami mokesčiai, pridėtinės išlaidos, išlaidos susijusios su „E. sąskaita“ sistema.

2.3. PASLAUGOS kainą sudaro PASLAUGOS dalių įkainiai, kuriuos TIEKĖJAS turi nurodyti žemiau pateikiamose 1-oje ir 2-oje lentelėse:

1 lentelė

Eil. Nr.	PASLAUGOS dalis	Kaina EUR be PVM	Kaina EUR su PVM

1	Realizuoti galimybę asmenims ar juos atstovaujantiems asmenims (toliau - asmenys), kurie siekia pasinaudoti SME schema, išoriniame portale užpildyti ir pateikti bei atnaujinti išankstinį pranešimą arba tam tikrą išankstinio pranešimo dalį pagal EK teisės aktų ir EK funkcinėje ir techninėje specifikacijoje (pateikiama prieduose „SS-SME Functional Specifications“ ir „SS-SME Technical Specifications“) numatytus išankstinio pranešimo proceso reikalavimus, užtikrinant asmenų informavimą apie išankstinio pranešimo pateikimo / atnaujinimo rezultatus.	73 910,00	89 431,10
2	Sukurti automatines teikiamų išankstinių pranešimų tikrinimo priemones jų teikimo / atnaujinimo metu pagal EK funkcinėje ir techninėje specifikacijoje numatytus reikalavimus ir pateiktų duomenų peržiūrą išoriniams ir vidiniams naudotojams (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus).	44 250,00	53 542,50
3	Realizuoti galimybę asmenims, kurie siekia nutraukti naudojimąsi SME schema arba nebetaikyti išimties konkrečioje valstybėje narėje, išoriniame portale užpildyti ir pateikti prašymus pagal EK teisės aktų, EK funkcinėje ir techninėje specifikacijose numatytus schemos nutraukimo proceso reikalavimus, užtikrinant asmenų informavimą apie schemos nutraukimo ir išimties nebetaikymo rezultatus.	14 600,00	17 666,00
4	Sukurti automatines teikiamų naudojimosi schema nutraukimo duomenų tikrinimo priemones jų teikimo / atnaujinimo metu pagal EK funkcinėje ir techninėje specifikacijoje numatytus reikalavimus ir pateiktų duomenų peržiūrą išoriniams ir vidiniams naudotojams (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus).	17 900,00	21 659,00
5	Realizuoti galimybes vertinti asmens, įsisteigusio Lietuvoje, pateiktą informaciją, priimti sprendimus dėl siekiamybės pasinaudoti / nutraukti naudojimąsi SME schema pagal EK funkcinės ir techninės specifikacijos reikalavimus, užtikrinant asmenų informavimą ir sprendimų registravimą DODVS.	45 350,00	54 873,50
6	Sukurti sprendinį, kuris leistų priskirti, anuliuoti arba patvirtinti asmens, kuriam taikoma išimtis, unikalų identifikatorių (ID) pagal EK teisės aktų ir funkcinės bei techninės specifikacijos reikalavimus.	25 900,00	31 339,00
7	Realizuoti galimybę asmenims, kurie naudoja SME schema, išoriniame portale užpildyti ir pateikti bei patikslinti pateiktas ketvirtines ataskaitas pagal EK teisės aktų ir EK funkcinėje ir techninėje specifikacijoje numatytus ketvirtinių ataskaitų teikimo proceso reikalavimus, užtikrinant asmenų informavimą.	23 400,00	28 314,00
8	Sukurti automatines teikiamų ketvirtinių ataskaitų duomenų tikrinimo / apdorojimo priemones jų teikimo /	23 400,00	28 314,00

	tikslinimo metu pagal EK funkcinėje ir techninėje specifikacijoje numatytus reikalavimus ir pateiktų duomenų peržiūrą (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus).		
9	Realizuoti galimybę asmenims, kurie viršija EK metinės apyvartos ribą, išoriniame portale pateikti informaciją apie EK ribos viršijimą ir bendrą tiekimų / teikimų vertę pagal EK teisės aktų ir EK funkcinėje ir techninėje specifikacijoje numatytus reikalavimus, užtikrinant asmenų informavimą.	20 500,00	24 805,00
10	Registravimo ir ataskaitų teikimo procesuose reikalinga sukurti automatizuotas priemones tikrinti ribos viršijimą pagal VN ribas (tais atvejais kai VN turi sektorines ribas, pagal sektorines ribas), bendrą ES ribą ir mokesčių mokėtojų pateiktus / teikiamus duomenis, užtikrinant asmenų informavimą apie bendros ES ir / ar VN ribos viršijimo rezultatus.	34 400,00	41 624,00
11	Užtikrinti naudotojo vieningą (SSO) prisijungimą prie sistemos vadovaujantis ESKIS CAS reikalavimais bei galimybe atstovauti schemos dalyvį pagal suteiktas teises ESKIS ir kuriamame komponente, išnaudojant galimybes pagal aktualią autentifikavimo posistemės (CAS) naudojimo specifikaciją.	28 900,00	34 969,00
12	ESKIS 39 paslaugos - „Ilgaliotų išorinių vartotojų VMI IS keitimas“ pagrindu turi būti realizuotas SME schemos naudotojų bei priskirtų teisių sukūrimas.	17 900,00	21 659,00
13	Reikalinga realizuoti / modernizuoti integraciją su MMR registracijos duomenų perdavimui bei MMR esančių asmens duomenų ir kontaktų gavimui.	17 900,00	21 659,00
14	Sukurti priemones iš EK SME kodų patikros puslapio serviso CCN2 tinklu (ar analogišku) gaunamų užklausų (vieno tipo) aptarnavimui, užtikrinant operatyvią registracijos pagal gautą informaciją patikrą ir atsakymo pateikimą. Atlikti funkcionalumo testavimo darbus su EK techniniu centru.	53 600,00	64 856,00
15	Paruošti išankstinių pranešimų / naudojimosi schema nutraukimo duomenis kitoms VMI IS teikti.	8 800,00	10 648,00
16	Paruošti ketvirtinių ataskaitų duomenis kitoms VMI IS teikti.	10 200,00	12 342,00
17	Sukurti numatytų procesų ir funkcijų įgyvendinimui reikalingų žinytų struktūras bei duomenų įvedimo, modifikavimo, peržiūros ekraninės formos arba panaudoti ITIS_EU esamų žinytų rengimo ir naudojimo sprendimus.	6 900,00	8 349,00
18	Sukurti VN klasifikatorių, kuriame būtų galima saugoti, peržiūrėti ir tvarkyti kiekvienos VN schemos naudojimo ypatumus. Šio klasifikatoriaus duomenys būtų naudojami kontrolei vykdyti.	17 900,00	21 659,00
19	Sukurti iki 5 ataskaitų (suminių, sąrašinių) pagal UŽSAKOVO poreikį.	45 350,00	54 873,50
20	Sukurti išorinių naudotojų informavimo priemones dėl techninių slapukų naudojimo portale, jiems pirmą kartą apsilankius portale.	12 400,00	15 004,00
21	Realizuoti sprendinį - vidiniams vartotojams valdyti naujienas / informaciją, kurios būtų matomos išoriniame portale.	28 900,00	34 969,00
22	Išorinio portalo ekraninės formos ir pranešimai bei	12 400,00	15 004,00

	dokumentų šablonai turi būti realizuoti naudojant dvikalbystės funkcionalumą.		
23	Realizuoti SME modulio naudotojų veiksmų auditavimą, naudojant i.MAS naudotojų veiksmų auditavimo komponentą ir jo specifikuotus bei realizuotus sprendimus duomenų fiksavimui ir audituojamų duomenų struktūrai.	17 900,00	21 659,00
24	Sukurti sprendinį duomenų mainams su kitomis VN, kad būtų galima dalintis informacija, kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos ir CCN2 tinklo reikalavimus (pateikiama prieduose „CCN2 Platform Integration Manual“), užtikrinant duomenų ir jų sąsajų peržiūrą (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus) bei vertinimą.	89 300,00	108 053,00
25	Vadovaujantis specifikacijomis ir rekomendacijomis, kurias pateiks EK, atlikti numatytus funkcionalumą testavimo su EK techniniu centru darbus, užtikrinant SME testavimų vykdymą ne vėliau nei numatyta EK projekto ir / ar EK pateiktame „Master Plan“ plane (pateikiama prieduose „SME-SS Master Plan“).	38 500,00	46 585,00
26	Sukurti iš kitų VN gaunamų išankstinių pranešimų dėl siekiamybės pasinaudoti SME schema peržiūros (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus), tikrinimo (užtikrinant galimybę panaudoti EK validavimo modulį), vertinimo, papildomų dokumentų prašymo ir jų apdorojimo funkcionalumą kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos ir CCN2 tinklo reikalavimus.	38 800,00	46 948,00
27	Sukurti iš kitų VN gaunamų naudojimosi SME schema nutraukimo duomenų peržiūros (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus), tikrinimo (užtikrinant galimybę panaudoti EK validavimo modulį), apdorojimo mechanizmą kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos reikalavimus.	17 900,00	21 659,00
28	Realizuoti galimybes vertinti iš kitos VN gautą, įsteigusio kitoje VN asmens informaciją, priimti sprendimus dėl siekiamybės pasinaudoti / nutraukti naudojimąsi SME schema pagal EK funkcinės ir techninės specifikacijos reikalavimus, užtikrinant asmenų informavimą bei pagal poreikį sprendimų registravimą DODVS.	17 900,00	21 659,00
29	Sukurti iš kitų VN gautų ketvirtinių ataskaitų peržiūros (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus), tikrinimo (užtikrinant galimybę panaudoti EK validavimo modulį), apdorojimo mechanizmą kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos reikalavimus.	17 900,00	21 659,00
30	Sukurti iš kitų VN gaunamų EK metinės apyvartos ribos viršijimo ir bendros tiekimų / teikimų vertės duomenų peržiūros (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus), tikrinimo (užtikrinant galimybę panaudoti EK validavimo modulį), apdorojimo mechanizmą kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos reikalavimus.	17 900,00	21 659,00
31	Informacijos saugumo rizikos analizė ir jos rezultatų ataskaita.	7 000,00	8 470,00

32	ITIS_EU SME atsparumo įsilaužimams testavimas ir jo rezultatų ataskaita	9 000,00	10 890,00

SUTARTIES bendrųjų (nefunkcinių) reikalavimų, nustatytų PASLAUGOS TECHNINĖS SPECIFIKACIJOS 3.3.6.3 p. (ITIS_EU SME apkrovos ir greitaveikos testavimas), 3.3.11.6 p. (ITIS_EU SME apkrovos ir greitaveikos testavimo ataskaitų parengimas ir suderinimas), įgyvendinimas turi būti įtrauktas į bendrą SUTARTIES vertę ir nereikalauti iš UŽSAKOVO jokių papildomų išlaidų ar darbų užsakymo, išskyrus, jeigu UŽSAKOVAS nusprendžia atsisakyti funkcinių reikalavimų, kurių vertė didesnė nei 50 proc. SUTARTIES vertės, tuomet TIEKĖJUI apmokama už faktiškai atliktus darbus įgyvendinant 3.3.6.3 p. (ITIS_EU SME apkrovos ir greitaveikos testavimas), 3.3.11.6 p. (ITIS_EU SME apkrovos ir greitaveikos testavimo ataskaitų parengimas ir suderinimas).

2 lentelė:

PASLAUGOS dalis ¹	Mato vienetas	Orientacinis kiekis ²	Vienos val. kaina, Eur be PVM	Vienos val. kaina, Eur su PVM
Papildomos nenumatytiems poreikiams skirtos valandos	Val.	3 000	50,00	60,50

Visos funkcionalumui užtikrinti reikalingos licencijos (duomenų bazių valdymo programinės įrangos licencijos, papildomos duomenų bazių valdymo opcijos (pvz., partitioning, advanced compression ir kt.); taikomosios programinės įrangos web ir integracinių sprendimų taikymui (aplikacijų serveriais) reikalingos licencijos; sisteminės, operacinės sistemos, duomenų rezervinio kopijavimo, virtualizavimo, duomenų archyvavimo programinės įrangos licencijos) turi būti pateiktos su gamintojo techniniu palaikymu, kurio galiojimas turi būti ne trumpesnis nei kokybės garantija.

Visų į 1 lentelėje nurodytas PASLAUGOS dalis įtrauktų sertifikatų ir licencijų pavadinimai, kiekiai, kainos, techninio palaikymo kainos detalizuojamos 3 lentelėje (į šią lentelę netraukiamos taikomosios programinės įrangos licencijos, kurios gali būti teikiamos kaip valstybės IT debesijos paslaugos (IaaS, PaaS, SaaS ir kitos), patvirtintos Lietuvos Respublikos ekonomikos ir inovacijų ministro 2020-04-20 įsakymu Nr. 4-241 „Dėl informacinių technologijų paslaugų teikėjo centralizuotai teikiamų informacinių technologijų paslaugų katalogo patvirtinimo“).

3 lentelė*

Eil. Nr.	Pilnas pavadinimas, versijos numeris, gamintojo pavadinimas	Kiekis	Sertifikatų pavadinimai ir Licencijų tipai: procesorinės, vardinės, neribotos ir pan.	Vieneto kaina be PVM, EUR	Vieneto kaina su PVM, EUR	Suma su PVM, EUR
1.						
2.						
3.						
Iš viso EUR su PVM (1+2+3+...) eil.:						

*TIEKĖJAS, teikdamas pasiūlymą KONKURSE, lentelės neužpildė.

¹ Kiekvienos PASLAUGOS dalies realizacija ir įvykdymo terminai turi būti derinami su UŽSAKOVU.

² Nurodytas orientacinis valandų kiekis, kuris bus užsakomas tik pagal faktinį UŽSAKOVO poreikį, todėl negali būti pagrindas reikalauti iš UŽSAKOVO užsakyti visą valandų kiekį. UŽSAKOVAS pasilieka teisę užsakyti ir daugiau valandų nei numatyta, tačiau bendra SUTARTIES vertė negali viršyti pirkiniai skirtų lėšų sumos.

2.4. Už tinkamai įvykdytą PASLAUGOS dalį (patvirtinama PASLAUGOS dalies perdavimo - priėmimo aktu), UŽSAKOVAS atsiskaito su TIEKĖJU ne vėliau kaip per 30 kalendorinių dienų laikotarpį nuo dienos, kai pasirašomas PASLAUGOS dalies perdavimo - priėmimo aktas ir UŽSAKOVAS patvirtina PVM sąskaitą faktūrą „E. sąskaita“ IS.

2.5. UŽSAKOVAS pasilieka teisę už faktiškai įvykdytus pagal SUTARTĮ TIEKĖJO įsipareigojimus sumokėti TIEKĖJUI iki PASLAUGOS dalies perdavimo - priėmimo akto pasirašymo dienos.

2.6. TIEKĖJAS privalo PVM sąskaitą faktūrą pateikti per informacinę sistemą „E. sąskaita“. Elektroninės paslaugos „E. sąskaita“ svetainė pasiekama adresu www.esaskaita.eu.

2.7. PASLAUGOS įkainiai dėl kainų lygio pasikeitimo ir pasikeitusių mokesčių neperskaičiuojami, išskyrus 2.8. ir 2.9 punktuose nurodytus atvejus.

2.8. SUTARTIES kainodaros taisyklė - fiksuotas įkainis su peržiūra. SUTARTYJE nustatytų įkainių su PVM peržiūra atliekama, kai pasikeičia pridėtinės vertės mokestis (PVM). SUTARTIES galiojimo metu joje nustatyti PASLAUGOS įkainiai, turi būti koreguojami, taikant naują pasikeitusį PVM dydį.

2.9. Bet kuri SUTARTIES ŠALIS SUTARTIES galiojimo metu turi teisę inicijuoti SUTARTYJE numatytų kainų/įkainių perskaičiavimą (keitimą, susitarimą) ne anksčiau kaip po 6 (šešių) mėnesių nuo SUTARTIES įsigaliojimo dienos (*jeigu perskaičiavimas jau buvo atliktas - nuo paskutinio perskaičiavimo pagal šį punktą dienos*), jeigu Ūkio subjektams suteiktų paslaugų kainų pokytis (k), apskaičiuotas kaip nustatyta 2.12 punkte, viršija 5 procentus. Atlikdamos perskaičiavimą ŠALYS vadovaujasi Valstybės duomenų agentūros viešai Oficialiosios statistikos portale paskelbtais Rodiklių duomenų bazės duomenimis, iš kitos Šalies nereikalaujamos pateikti oficialaus Valstybės duomenų agentūros ar kitos institucijos išduoto dokumento ar patvirtinimo.

2.10. ŠALYS privalo keitime nurodyti indekso reikšmę laikotarpio pradžioje ir jos nustatymo datą, indekso reikšmę laikotarpio pabaigoje ir jos nustatymo datą, kainų pokytį (k), perskaičiuotas kainas/įkainius, perskaičiuotą pradinės SUTARTIES vertę.

2.11. Perskaičiuotieji įkainiai taikomi užsakymams, pateiktiems po to, kai ŠALYS sudaro susitarimą dėl įkainių perskaičiavimo.

2.12. Naujos kainos/įkainiai apskaičiuojami pagal formulę:

$$a_1 = a + \left(\frac{k}{100} \times a \right), \text{ kur}$$

a - kaina/įkainis (EUR be PVM)) (jei jis jau buvo perskaičiuotas, tai po paskutinio perskaičiavimo).

a₁ - perskaičiuota (pakeista) kaina/įkainis (EUR be PVM)

k - Pagal Ūkio subjektams suteiktų paslaugų kainų indeksą (J62 Kompiuterių programavimo, konsultacinė ir susijusi veikla) apskaičiuotas Ūkio subjektams suteiktų paslaugų kainų pokytis (padidėjimas arba sumažėjimas) (%). „k“ reikšmė skaičiuojama pagal formulę:

$$k = \frac{Ind_{\text{naujausias}}}{Ind_{\text{pradžia}}} \times 100 - 100, \text{ (proc.) kurlnd}_{\text{naujausias}} - \text{kreipimosi dėl kainos perskaičiavimo išsiuntimo}$$

kitai šaliai datą naujausias paskelbtas Ūkio subjektams suteiktų paslaugų kainų indeksas (J62 Kompiuterių programavimo, konsultacinė ir susijusi veikla). Ind_{pradžia} - laikotarpio pradžios datos (metų ketvirčio) Ūkio subjektams suteiktų paslaugų kainų indeksas (J62 Kompiuterių programavimo, konsultacinė ir susijusi veikla). Pirmojo perskaičiavimo atveju laikotarpio pradžia yra paskutinės pirkimo, kurio pagrindu sudaryta ši SUTARTIS, pasiūlymų pateikimo termino dienos metų ketvirtis. Antrojo ir vėlesnių perskaičiavimų atveju laikotarpio pradžia (metų ketvirtis) yra paskutinio perskaičiavimo metu naudotos paskelbto atitinkamo indekso reikšmės metų ketvirtis.

2.13. Skaičiavimams indeksų reikšmės imamos keturių skaitmenų po kablelio tikslumu. Apskaičiuotas pokytis (k) tolimesniems skaičiavimams naudojamas suapvalinus iki vieno skaitmens po kablelio, o apskaičiuotas įkainis „a“ suapvalinamas iki dviejų skaitmenų po kablelio.

2.14. Vėlesnis kainų arba įkainių perskaičiavimas negali apimti laikotarpio, už kurį jau buvo atliktas perskaičiavimas.

2.15. SUTARTIES 2.4. punkte minimas atsiskaitymas įvykdomas atitinkamą sumą pervedus į SUTARTYJE nurodytą TIEKĖJO sąskaitą.

2.16. Visos SUTARTYJE numatytos sumos ir mokėjimai yra apskaičiuojami ir atliekami eurai.

2.17. PASLAUGOS dalies naudojimas negali reikalauti iš UŽSAKOVO jokių didinančių PASLAUGOS įkainius išlaidų.

2.18. UŽSAKOVAS taip pat nustato tiesioginio atsiskaitymo su subtiekejais galimybę. UŽSAKOVAS, TIEKĖJUI pasiūlyme nurodžius pasitelkiamus subtiekejus, arba, vadovaujantis SUTARTIES 3.18 punktu, pranešus apie subtiekejo pasitelkimą, ne vėliau kaip per 3 darbo dienas nuo SUTARTIES sudarymo ar TIEKĖJO pranešimo, informuoja subtiekejus apie tiesioginio atsiskaitymo galimybę, o subtiekejas, norėdamas pasinaudoti tokia galimybe, raštu pateikia prašymą UŽSAKOVUI. Tuo tikslu turi būti sudaroma trišalė sutartis tarp UŽSAKOVO, TIEKĖJO ir konkretaus subtiekejo, o TIEKĖJAS turi teisę tik pagrįstai prieštarauti tiesioginiams mokėjimams subtiekejui. Jei TIEKĖJAS neprieštarauja mokėjimams subtiekejui, UŽSAKOVAS perveda sumas, nurodytas TIEKĖJO pateikiamose PVM sąskaitose-faktūrose arba subtiekejo TIEKĖJUI pateiktuose dokumentuose kaip subtiekejui mokėtinas sumas už TIEKĖJO įsipareigojimų pagal SUTARTĮ dalį, tiesiogiai atitinkamam subtiekejui į jo nurodytą banko sąskaitą. Tokie mokėjimai yra laikomi tinkamu UŽSAKOVO atsiskaitymu su TIEKĖJU pagal SUTARTĮ.

3. PASLAUGOS VYKDYMAS IR ATLIKIMAS

3.1. Visi REIKALAVIMAI (visos sąlygos), susiję su PASLAUGOS ATLIKIMU, SUTARTYJE tampa TIEKĖJO įsipareigojimais.

3.2. TIEKĖJAS per 20 darbo dienų nuo pateikimo dienos su UŽSAKOVU suderina Projekto valdymo planą (pradinę Projekto valdymo plano versiją pateikia UŽSAKOVAS) ir Projekto darbų atlikimo grafiką, VMI IT išteklių grupių ir reikalingų teisių sąrašą, pateikia kitus PASLAUGAI teikti reikalingus dokumentus.

3.3. TIEKĖJAS SUTARTIES vykdymo metu turi turėti ir naudoti Projekto valdymo sistemą (pvz., Confluence ar kitą lygiavertę) ir incidentų valdymo sistemą (pvz., JIRA ar kitą lygiavertę). Projekto ir incidentų valdymo sistemos turi turėti sąryšį. UŽSAKOVO atstovams (ne mažiau nei 15) turi būti suteikta galimybė naudoti abi sistemas (projekto ir incidentų valdymo), o kokybės garantijos laikotarpiu - ne mažiau nei 2 UŽSAKOVO atstovams. PROJEKTO pabaigoje TIEKĖJAS turi pateikti visą Projekto valdymo sistemoje užfiksuotą informaciją į VMI Confluence importuojamą formatu.

3.4. Nenumatytų darbų užsakymai suderinami detalios analizės ir projektavimo metu. Planuojami preliminarūs įgyvendinti poreikiai UŽSAKOVO užsakomi raštu (kiekvieną kartą užsakant ir priimant PASLAUGOS dalį ar PASLAUGOS atlikimą, tai bus įforminama priėmimo - perdavimo aktu ar kitu dokumentu (protokolu)).

3.5. Užsakyme privalo būti nurodytos pagrįstos ir suderintos užsakomų valandų apimtys ir priežastys jų užsakymui, bei užsakymo įvykdymo terminai.

3.6. Užsakymo priėmimo privalo būti nurodytos faktiškai sunaudotas TIEKĖJO darbo valandų skaičius ir ar jis atitinka užsakyme nustatytą darbų atlikimui skirtą laiką.

3.7. Jei PASLAUGOS atlikimas vykdomas dalimis, kiekviena PASLAUGOS dalis dokumentuojama ir įforminama PASLAUGOS dalies perdavimo - priėmimo aktu.

3.8. Pagrindas pasirašyti PASLAUGOS dalies perdavimo - priėmimo aktą atsiranda tik tuo atveju, jeigu PASLAUGOS dalis atlikta tinkamai ir kokybiškai. Pagal SUTARTIES REIKALAVIMUS laikoma, kad kiekvienas SUTARTYJE įvardintas TIEKĖJO įsipareigojimas tinkamai įvykdytas, ir su tokio įsipareigojimu susijusi PASLAUGOS dalis yra tinkamos kokybės, kai tokia PASLAUGOS dalis atitinka PASLAUGOS REIKALAVIMUS, kurie būtinai tokie PASLAUGOS daliai, kad ją būtų galima naudoti pagal įprastinę ir specialią paskirtį. Jeigu PASLAUGOS dalis atlikta tinkamai ir kokybiškai, PASLAUGOS dalies perdavimo - priėmimo aktas pasirašomas ne vėliau kaip per 5 darbo dienas nuo tokio akto gavimo.

3.9. PASLAUGOS dalies įgyvendinimo terminai gali keistis priklausomai nuo teisės aktų nuostatų pasikeitimų, reglamentuojančių ir turinčių įtakos PASLAUGOS atlikimui. Tokiu atveju, UŽSAKOVUI nusprendus, galioja terminai nurodyti teisės aktuose. Bendras PASLAUGOS atlikimo ir atsiskaitymo terminas negali viršyti sutartinių įsipareigojimų įgyvendinimo termino.

3.10. SUTARTYJE įvardinta PASLAUGA ir jos REIKALAVIMAI turi būti įdiegti į gamybinę aplinką, atlikta jų bandomoji eksploatacija bei pateikta ir su UŽSAKOVU suderinta visa SUTARTYJE numatyta dokumentacija.

3.11. Kompiuterių programos (pagal Lietuvos Respublikos autorių teisių ir gretutinių teisių įstatymo naudojamus apibrėžimus) TIEKĖJO sukurtos vykdant SUTARTĮ yra TIEKĖJO autorinių teisių objektas. TIEKĖJAS, nepažeidžiant autoriaus teisių turėtojo ar trečiųjų šalių intelektualios nuosavybės teisių, SUTARTIMI UŽSAKOVUI perduoda autorių turtines teises į pagal SUTARTĮ sukurtą programinę įrangą ir parengtus projektinius dokumentus, įskaitant, bet

neapsiribojant, teisę neribotą laiką ir be papildomo atlygio naudoti sukurta programinę įrangą; teisę daryti sukurtos programinės įrangos kopijas; teisę modernizuoti ir toliau plėtoti sukurta programinę įrangą; teisę perkelti programinę įrangą į kitą technologinę platformą; teisę naudoti ir keisti jai sukurtos programinės įrangos pradinį kodą (mašininės kalbos pradinį tekstus). Šiame punkte numatytas teisės UŽSAKOVAS turės visoje Lietuvos Respublikos ir ES šalių teritorijoje ir neribotą laiką.

3.12. PASLAUGOS atlikimo vieta - Vilnius.

3.13. UŽSAKOVO nuosavybės teisė kiekvienai PASLAUGOS daliai, kuris pagal Lietuvos Respublikos civilinį kodeksą (toliau - Civilinis kodeksas) yra nuosavybės teisių objektas, atsiranda nuo to momento, kai TIEKĖJAS tokią PASLAUGOS dalį perduoda UŽSAKOVUI.

3.14. TIEKĖJO siūlomos PASLAUGOS turi nekelti grėsmės nacionaliniam saugumui. UŽSAKOVAS spęs ar TIEKĖJO siūlomos PASLAUGOS kelia grėsmę nacionaliniam saugumui, įvertinęs kompetentingų institucijų pateiktą informaciją. Bus laikoma, kad TIEKĖJO siūlomos PASLAUGOS kelia grėsmę nacionaliniam saugumui, kai Lietuvos Respublikos Vyriausybė yra priėmusi sprendimą, patvirtinantį, kad ketinamas sudaryti sandoris neatitinka nacionalinio saugumo interesų vadovaudamasi Nacionaliniam saugumui užtikrinti svarbių objektų apsaugos įstatymu.

3.15. PASLAUGOS kokybė privalo atitikti Lietuvos Respublikoje galiojančius teisės aktus, REIKALAVIMUS ir Civilinio kodekso nuostatas.

3.16. TIEKĖJO atstovai PASLAUGOS ATLIKIMO klausimais su UŽSAKOVO atstovais bendrauja lietuvių kalba.

3.17. Reikalavimai TIEKĖJO komandai:

3.17.1. Jei tenka keisti pasiūlyme nurodytą TIEKĖJO komandos narį, kandidatas į jo vietą privalo turėti ne žemesnę kvalifikaciją ir patirtį nei keičiamas specialistas.. Kandidatas į TIEKĖJO komandos narius gali būti įtrauktas į TIEKĖJO komandą po to, kai UŽSAKOVAS įvertinęs kandidato atitikimą reikalavimams pagal pateiktus kandidato kvalifikaciją ir patirtį liudijančius dokumentus, TIEKĖJUI patvirtina kandidatūrą;

3.17.2. Visi TIEKĖJO komandos nariai, nurodyti TIEKĖJO pasiūlyme KONKURSUI, privalo dalyvauti vykdant SUTARTĮ. TIEKĖJAS turi teisę pakeisti savo komandą ar jos narį tik gavęs raštišką UŽSAKOVO sutikimą;

3.17.3. SUTARTIES vykdymo eigoje UŽSAKOVAS gali inicijuoti TIEKĖJO komandos nario, kuris netinkamai atlieka SUTARTYJE numatytas pareigas, pakeitimą, nurodydamas tokio prašymo motyvus;

3.17.4. TIEKĖJAS privalo savo iniciatyva siūlyti keisti pasiūlyme nurodytus TIEKĖJO komandos narius šiais atvejais:

3.17.4.1. Komandos nario mirties, ligos arba nelaimingo atsitikimo atveju;

3.17.4.2. Jei komandos narį keisti būtina dėl kitų, nuo TIEKĖJO nepriklausančių priežasčių.

3.17.5. TIEKĖJAS apie 3.17.4. punkte minimų atvejų atsiradimą privalo nedelsiant informuoti UŽSAKOVĄ;

3.17.6. TIEKĖJAS turėtų iš anksto informuoti UŽSAKOVĄ apie PROJEKTE dalyvaujančių darbuotojų atostogas ir užtikrinti, kad jų atostogų metu, PASLAUGĄ teiks kiti specialistai, turintys reikiamą kvalifikaciją (pagal Reikalavimus) būtent toms funkcijoms atlikti.

3.17.7. TIEKĖJAS turi užtikrinti, kad nurodyti ekspertai SUTARTIES įgyvendinimui bus pasiekiami visą SUTARTIES įgyvendinimo laiką. UŽSAKOVUI pareikalavus, ekspertai turės teikti PASLAUGAS UŽSAKOVO patalpose.

3.18. SUTARTIES vykdymui TIEKĖJAS gali pasitelkti subtiekėjus. Sudarius SUTARTĮ, tačiau ne vėliau negu SUTARTIS pradėdama vykdyti, TIEKĖJAS įsipareigoja UŽSAKOVUI pranešti žinomų subtiekėjų pavadinimus, kontaktinius duomenis ir jų atstovus. TIEKĖJAS privalo informuoti apie minėtos informacijos pasikeitimus visu SUTARTIES vykdymo metu, taip pat apie naujus subtiekėjus, kuriuos jis ketina pasitelkti vėliau. SUTARTIES galiojimo metu, TIEKĖJAS nurodytus subtiekėjus gali keisti tik prieš tai raštu suderinęs su UŽSAKOVU. Naujas (-i) subtiekėjas (-ai) turi turėti ne žemesnę, nei keičiamo subtiekėjo kvalifikaciją, jeigu buvo remtasi keičiamo subtiekėjo pajėgumais, siekiant atitikti KONKURSO dokumentuose keliamus kvalifikacijos reikalavimus ar pasiūlymų vertinimo kriterijus, šiuo atveju pateikiami ir subtiekėjo pašalinimo pagrindų nebuvimą patvirtinantys dokumentai, numatyti KONKURSO dokumentuose.

3.19. Visi informacijos saugumo reikalavimai, taikomi TIEKĖJUI, yra taikomi ir jo subtiekejams.

4. ŠALIŲ ATSAKOMYBĖ

4.1. ŠALYS privalo susilaikyti nuo bet kokių nepagrįstų veiksmų, kurie galėtų pakenkti kitai ŠALIAI.

4.2. Jei TIEKĖJAS neįvykdo arba netinkamai įvykdo SUTARTYJE numatytus įsipareigojimus, UŽSAKOVAS turi teisę pareikalauti atlyginti SUTARTIES sąlygų nevykdymu ar netinkamu vykdymu jam padarytus tiesioginius nuostolius, bet ne didesne nei SUTARTIES verte, išskyrus Civilinio kodekso 6.252 straipsnio 1 dalyje įtvirtintas išimtis ir pagal Civilinį kodeksą galimus regresio atvejus.

4.3. Už TIEKĖJO vėlavimą atlikti sutartinius įsipareigojimus (išskyrus PASLAUGOS TECHNINĖS SPECIFIKACIJOS Error: Reference source not found punkte nurodytus atvejus) numatyti delspinigiai – 0,06 procento nuo vėluojamų atlikti sutartinių įsipareigojimų vertės už kiekvieną pavėluotą dieną, bet ne daugiau kaip 5 procentai nuo bendros SUTARTIES vertės.

4.4. Už UŽSAKOVO vėlavimą atsiskaityti su TIEKĖJU numatomi delspinigiai – 0,06 procento nuo vėluojamos apmokėti sumos, už kiekvieną pavėluotą dieną, bet ne daugiau kaip 5 procentai nuo bendros SUTARTIES vertės. UŽSAKOVUI delspinigiai neskaičiuojami, jeigu vėlavimas atsiranda dėl nepakankamo UŽSAKOVO finansavimo.

4.5. Jeigu naudojimosi PASLAUGOS dalimi metu paaiškės, kad UŽSAKOVUI atitenkanti TIEKĖJO perduota susijusi su PASLAUGA dokumentacija yra ne visa ir jos nepakanka, kad įvykdyti kokį nors iš KONKURSO DOKUMENTUOSE numatytų REIKALAVIMŲ, su tuo susijusius UŽSAKOVO tiesioginius nuostolius padengs TIEKĖJAS.

5. SUTARTIES ĮVYKDYMO UŽTIKRINIMAS

5.1. UŽSAKOVAS reikalauja, kad SUTARTIES įvykdymas būtų užtikrinamas Lietuvos Respublikoje ar užsienyje registruoto banko garantija ar draudimo bendrovės sutartinių įsipareigojimų įvykdymo užtikrinimu.

5.2. Po SUTARTIES pasirašymo per 5 darbo dienas, TIEKĖJAS privalo pateikti SUTARTIES įvykdymo užtikrinimą, išduotą Lietuvos Respublikoje ar užsienyje įsteigtos ir veikiančios banko įstaigos arba draudimo įmonės (toliau - SUTARTIES įvykdymo užtikrinimo davėjas), pagal kurį SUTARTIES įvykdymo užtikrinimo davėjas įsipareigoja neatšaukiamai ir besąlygiškai per 10 kalendorinių dienų nuo pirmo UŽSAKOVO reikalavimo, gauto kartu su pareiškimu tvirtinančiu, kad TIEKĖJAS netinkamai vykdo SUTARTYJE numatytus įsipareigojimus, neįvykdė SUTARTIES, atsisakė vykdyti SUTARTĮ ar SUTARTIS nutraukiama dėl TIEKĖJO kaltės, sumokėti UŽSAKOVUI 100 000 Eur. su PVM. dydžio SUTARTIES įvykdymo užtikrinimo išmoką. UŽSAKOVAS pranešime SUTARTIES įvykdymo užtikrinimo davėjui turi nurodyti, dėl kurios iš aplinkybių jam priklauso SUTARTIES įvykdymo užtikrinimo suma, tačiau SUTARTIES įvykdymo užtikrinimo davėjas neturi teisės reikalauti, kad UŽSAKOVAS pagrįstų savo reikalavimą.

5.3. SUTARTIES įvykdymo užtikrinimo trukmė turi būti ne trumpesnė nei SUTARTIES trukmė. TIEKĖJAS gali pateikti 12 mėnesių galiojantį SUTARTIES įvykdymo užtikrinimą ir likus ne mažiau kaip 1 (vienam) mėnesiui iki pateikto SUTARTIES įvykdymo užtikrinimo galiojimo pabaigos pateikti naują arba pratęstą SUTARTIES įvykdymo užtikrinimą laikotarpiui, iki kol bus įvykdyti sutartiniai įsipareigojimai. Šiuo atveju TIEKĖJUI iki nurodyto termino nepateikus naujo arba pratęsto SUTARTIES įvykdymo užtikrinimo, UŽSAKOVAS pareikalauja SUTARTIES įvykdymo užtikrinimo davėjo sumokėti pagal galiojantį SUTARTIES įvykdymo užtikrinimą, kadangi TIEKĖJAS laikomas neįvykdžiusiu šiame punkte nurodyto savo įsipareigojimo.

5.4. Jei UŽSAKOVAS pasinaudoja SUTARTIES įvykdymo užtikrinimu, išskyrus atvejus, kai SUTARTIES užtikrinimu pasinaudojama dėl to, kad nutraukiama SUTARTIS, TIEKĖJAS, siekdamas toliau vykdyti SUTARTIES įsipareigojimus, privalo per 5 darbo dienas pateikti UŽSAKOVUI naują SUTARTIES įvykdymo užtikrinimą ne mažesnei nei 5.2. punkte nurodytai sumai. Jei TIEKĖJAS nepateikia naujo SUTARTIES įvykdymo užtikrinimo, UŽSAKOVAS turi teisę vienašališkai nutraukti SUTARTĮ.

6. SUTARTIES GALIOJIMAS, PAKEITIMAS IR NUTRAUKIMAS

6.1. SUTARTIS įsigalioja nuo SUTARTIES įvykdymo užtikrinimo pateikimo UŽSAKOVUI dienos ir galioja iki visiško TIEKĖJO ir UŽSAKOVO įsipareigojimų pagal SUTARTĮ įvykdymo momento.

6.2. SUTARTIS sudaroma 36 mėn. (įskaitant atsiskaitymo laikotarpį su TIEKĖJU) arba iki kol bus pasiekta 2.2 punkte nurodytos SUTARTIES vertės suma, atsiskaitant už PASLAUGOS atlikimą, priklausomai, kuri aplinkybė įvyks greičiau.

6.3. ŠALYS gali daryti PASLAUGOS TECHNINĖJE SPECIFIKACIJOJE aprašytų IS funkcionalumų realizavimo pakeitimą (-us) ir (ar) patikslinimą (-us), kurie neturėtų įtakos numatomoms sukurti ar jau teikiamoms elektroninėms paslaugoms, SUTARTIES kainai ir trukmei, bendrai paslaugų apimčiai. IS funkcionalumų realizavimo pakeitimas ir (ar) patikslinimas galimas tik esant objektyvioms ir pagrįstoms aplinkybėms, o toks pakeitimas (-ai) ir (ar) patikslinimas (-ai) turi būti įforminamas pasirašant funkcionalumo realizavimo pakeitimo ar patikslinimo protokolą (arba kitą dokumentą) tarp TIEKĖJO ir UŽSAKOVO, kuriame inter alia turėtų būti nurodomos visos objektyvios aplinkybės, bei atitinkamai įvertinta pakeitimo ir (ar) patikslinimo įtaka numatomoms sukurti ar jau teikiamoms elektroninėms paslaugoms, SUTARTIES kainai ir trukmei, bendrai PASLAUGOS apimčiai.

6.4. UŽSAKOVAS turi teisę nutraukti SUTARTĮ, jeigu TIEKĖJAS SUTARTIES galiojimo laikotarpiu pagal galiojančius teisės aktus praranda teisę užsiimti ūkine komercine ar kitokia, būtina PASLAUGOS ATLIKIMUI, veikla.

6.5. Jeigu TIEKĖJAS netinkamai vykdo SUTARTĮ, UŽSAKOVAS gali ją nutraukti raštu įspėjęs TIEKĖJĄ prieš 10 kalendorinių dienų.

6.6. SUTARTIS gali būti nutraukta anksčiau nurodyto termino:

6.6.1. TIEKĖJO ir UŽSAKOVO rašytiniu susitarimu;

6.6.2. UŽSAKOVAS gali nutraukti SUTARTĮ, ne mažiau kaip prieš 10 kalendorinių dienų įspėjęs raštu TIEKĖJĄ, jeigu jis nevykdo sutartinių įsipareigojimų ar netinkamai juos įvykdo ir tai yra esminis SUTARTIES pažeidimas. Nustatydamas esminį SUTARTIES pažeidimą UŽSAKOVAS privalo vadovautis Lietuvos Respublikos civilinio kodekso 6.217 straipsnio nuostatomis.

6.6.3. Nutraukus SUTARTĮ 6.6.2. punkte nurodytu pagrindu, UŽSAKOVAS pasinaudoja 5.3.2 punkte numatyto SUTARTIES įvykdymo užtikrinimu ir TIEKĖJAS įtraukiamas į nepatikimų tiekėjų sąrašą.

6.7. UŽSAKOVAS gali vienašališkai nutraukti SUTARTĮ Viešųjų pirkimų įstatymo 90 straipsnio 1 dalyje nurodytais pagrindais.

6.8. SUTARTIS bus nutraukiama, jei Lietuvos Respublikos Vyriausybė Nacionaliniam saugumui užtikrinti svarbių objektų apsaugos įstatymo nustatyta tvarka priims sprendimą, patvirtinantį, kad SUTARTIS neatitinka nacionalinio saugumo interesų.

6.9. UŽSAKOVAS pasilieka teisę bet kuriuo momentu vienašališkai nutraukti SUTARTĮ, apie tai prieš 14 kalendorinių dienų raštu pranešęs TIEKĖJUI. Tokio SUTARTIES nutraukimo atveju, UŽSAKOVAS apmoka TIEKĖJUI už iki nutraukimo faktiškai įvykdytą pagal SUTARTĮ PASLAUGOS dalį/rezultatą.

6.10. Jeigu TIEKĖJAS savo iniciatyva anksčiau laiko nori vienašališkai nutraukti SUTARTĮ, TIEKĖJAS gali ją nutraukti tik raštu įspėjęs UŽSAKOVĄ prieš 10 kalendorinių dienų. Šiuo atveju TIEKĖJAS per 5 darbo dienas nuo SUTARTIES nutraukimo dienos sumoka UŽSAKOVUI 100 000 eurų dydžio baudą, TIEKĖJAS taip pat įsipareigoja per 5 darbo dienas nuo UŽSAKOVO reikalavimo kompensuoti UŽSAKOVUI visus tiesioginius nuostolius, atsiradusius dėl tokio SUTARTIES nutraukimo, kurių nepadengia bauda. TIEKĖJUI įvykdžius šiame punkte nurodytas sąlygas, UŽSAKOVAS grąžina SUTARTIES 5 punkte numatytą sutartinių įsipareigojimų įvykdymo užtikrinimą.

6.11. SUTARTIES sąlygos SUTARTIES galiojimo laikotarpiu negali būti keičiamos, išskyrus Viešųjų pirkimų įstatymo 89 straipsnyje numatytus atvejus.

6.12. Visi SUTARTIES pakeitimai, papildymai ir priedai galioja, jeigu jie yra sudaryti raštu ir patvirtinti abiejų ŠALIŲ įgaliotų atstovų parašais. Visi SUTARTIES pakeitimai, papildymai ir priedai tampa sudėtinėmis ir neatskiriamomis SUTARTIES dalimis.

6.13. UŽSAKOVAS pasilieka teisę atsisakyti PASLAUGOS ar PASLAUGOS dalies pirkimo, jeigu jis neturės pakankamo, nuo jo nepriklausančio finansavimo (UŽSAKOVAS yra iš Lietuvos Respublikos biudžeto finansuojama, Lietuvos Respublikos mokesčių administratoriaus funkcijas atliekanti įstaiga), arba PASLAUGOS ar PASLAUGOS dalies pirkimo nereikės vykdant mokesčių administratoriaus funkcijas, arba dėl kitų priežasčių. Šiuo atveju jokios sankcijos numatytos SUTARTYJE UŽSAKOVUI netaikomos. Tokio atsisakymo atveju UŽSAKOVAS apmoka TIEKĖJUI už iki atsisakymo faktiškai įvykdytą pagal SUTARTĮ PASLAUGOS dalį.

7. NENUGALIMOS JĖGOS APLINKYBĖS (FORCE MAJEURE)

7.1. Nė viena iš SUTARTIES ŠALIŲ neatsako už prisiimtų įsipareigojimų visišką ar dalinį neįvykdymą, jeigu ji įrodo, kad įsipareigojimų neįvykdė dėl nenugalimos jėgos aplinkybių (Force Majeure).

7.2. ŠALIS, kuri dėl nenugalimos jėgos aplinkybių negali įvykdyti savo įsipareigojimų, privalo nedelsdama, bet ne vėliau kaip per 5 dienas nuo aplinkybių atsiradimo ar paaiškėjimo, raštu informuoti apie tai kitą ŠALĮ. Jeigu nenugalimos jėgos aplinkybės užsitęsia ilgiau kaip vieną mėnesį, bet kuri ŠALIS, pranešusi kitai ŠALIAI raštu, turi teisę nutraukti SUTARTĮ.

7.3. Nenugalimos jėgos aplinkybėmis yra laikomos aplinkybės, apibrėžtos Civilinio kodekso 6.212 straipsnyje ir Atleidimo nuo atsakomybės esant nenugalimos jėgos aplinkybėms taisyklėse, patvirtintose Lietuvos Respublikos Vyriausybės 1996 m. liepos 15 d. nutarimu Nr. 840.

8. KITOS NUOSTATOS

8.1. SUTARTIES punktų pavadinimai nustatomosios galios neturi – jų tikslas yra tik palengvinti SUTARTIES nuostatų paiešką.

8.2. SUTARTIS sudaryta Viešųjų pirkimų įstatymo ir Civilinio kodekso pagrindu. Visiems ginčams, kilusiems dėl SUTARTIES vykdymo, spręsti taikomi Lietuvos Respublikos norminiai teisės aktai.

8.3. Visi ginčai, kylantys dėl SUTARTIES tarp ŠALIŲ, sprendžiami ŠALIŲ tarpusavio sutarimu, o nesutarus – Lietuvos Respublikos teisės aktų nustatyta tvarka.

8.4. Už SUTARTIES tinkamą vykdymą iš UŽSAKOVO pusės PROJEKTO vykdymo metu atsakinga Projektų vadovė Ramunė Leleikaitė El. p. ramune.leleikaite@vmi.lt, Tel. (8 5) 2687 814, kokybės garantijos metu – atsakingas Mokestinių prievolių departamento Paslaugų administravimo skyriaus vedėja Danutė Laurinavičienė El. p. danute.laurinaviciene@vmi.lt Tel. (8 5) 2687 534. Apie pasikeitusį atsakingą asmenį TIEKĖJAS informuojamas raštu.

8.5. SUTARTIS turi priedą, PASLAUGOS TECHNINĖ SPECIFIKACIJA, kuris yra sudėtinė ir neatskiriama SUTARTIES dalis.

9. ŠALIŲ REKVIZITAI

9.1. ŠALYS privalo nedelsdamos raštu pranešti viena kitai apie SUTARTYJE nurodytųjų rekvizitų pasikeitimą.

9.2. ŠALIŲ rekvizitai yra tokie:

UŽSAKOVAS:

Valstybinė mokesčių inspekcija prie Lietuvos Respublikos finansų ministerijos
Vasario 16-sios g. 14, LT-01107 Vilnius
Telefonas: (8 5) 268 7800
Kodas: 188659752
Atsiskaitomoji sąskaita:
LT704 040 0636 1000 0158
Lietuvos Respublikos finansų ministerija
Finansų įstaigos kodas 40400
SWIFT BIC kodas: MFRLLT22XXX

Viršininko pavaduotojas

Martynas Endrijaitis

TIEKĖJAS:

UAB Elsis Pro
Gynėjų g. 14, Vilnius
Telefonas: +370 37 474 011
El. paštas: pro.elsispro@novian.lt
Juridinio asmens kodas: 300064148
Atsiskaitomoji sąskaita:
LT44 7044 0600 0454 2495
AB SEB bankas

Generalinis direktorius

Rimvydas Jančiauskas

PASLAUGOS TECHNINĖ SPECIFIKACIJA

1. SĄVOKOS

Naudojamos sąvokos ir trumpiniai:

Trumpinys	Paaikškinimas
AVKS	Administratorių veiksmų kontrolės sistema
BE	Bandomoji eksploatacija
CAS	Programinė įranga (angl. Central Authentication Service) asmenų autentifikavimui ir kt. funkcijoms
CCN2	Duomenų perdavimo tinklas ir komunikacinė jungtis
DB	Duomenų bazė
DODVS	Valstybinės mokesčių inspekcijos Darbo organizavimo ir dokumentų valdymo informacinė sistema
EK	Europos Komisija
Elektroniniai susirinkimai	Nuotoliniai susirinkimai, vykstantys elektroninėje erdvėje, kuriuos gali inicijuoti (atsiųsti prisijungimo nuorodą) UŽSAKOVAS ir/arba TIEKĖJAS, vykdant SUTARTĮ ir/arba iki SUTARTIES pasirašymo. Gali būti vykstantys ZOOM ir/arba Microsoft Teams Meeting ir/arba kitomis analogiškėmis priemonėmis
ESKIS	Mokesčių mokėtojų elektroninio švietimo, konsultavimo ir informavimo paslaugų sistema
Gamybinė aplinka	UŽSAKOVO infrastruktūroje esanti aplinka, kuria naudojasi IS galutiniai naudotojai
IS	Informacinė sistema
ITIS_EU	Pridėtinės vertės mokesčio informacijos mainams tarp Europos Sąjungos valstybių informacinė sistema
Klaida	Tai iš dalies ar visos IS funkcinė triktis arba kokybės sumažėjimas, dėl kurio IS veikimas tampa nestabilus ir (ar) nesaugus ir kliudo naudotojui vykdyti būtinas funkcijas
Kokybės garantija	TIEKĖJO įsipareigojimas VMI prie FM grąžinti PASLAUGOS kainą, pakeisti, sutaisyti ar kitaip pašalinti PASLAUGOS trūkumus, kai PASLAUGA neatitinka SUTARTYJE numatytų sąlygų ar reikalavimų, kurie nesusiję su PASLAUGOS atitiktimi SUTARČIAI pagal Lietuvos Respublikos civilinį kodeksą
Kūrimo aplinka	TIEKĖJO arba UŽSAKOVO infrastruktūroje esanti aplinka, kurioje atliekamos IS kūrimo užduotys, tokios kaip projektavimas, programavimas, vidinis TIEKĖJO testavimas ir kt.
MMR	Mokesčių mokėtojų registras
i.MAS	Išmanioji mokesčių administravimo informacinė sistema
Pakartotinis (angl. <i>re-testing</i>) testavimas	Testavimo tipas, kai aptikus ir ištaisius programinės įrangos klaidas, programinė įranga pertestuojama siekiant patvirtinti, kad klaida sėkmingai pašalinta
PASLAUGA	ITIS_EU plėtros (kūrimo, modernizavimo ir įdiegimo) paslaugos
PASLAUGOS dalis	Sudėtinis PASLAUGOS elementas
PROJEKTAS	Pasirašius SUTARTĮ, joje nurodytų REIKALAVIMŲ įgyvendinimas, dalyvaujant TIEKĖJUI IR UŽSAKOVUI
Regresinis (angl. <i>regression</i>) testavimas	Pakartotinio testavimo tipas, kurio pagrindinė paskirtis - patikrinti, ar sudiegtas naujas kodas išlaiko IS ankstesnę

Trumpinys	Paaškinimas
AVKS	Administratorių veiksmų kontrolės sistema
	versijose veikusių funkcionalumą ir elgseną, testuojant ne tik pasikeitusias sritis bei modulius, bet visą IS funkcionalumą. Gali būti vykdomas visuose testavimo lygiuose ir apima funkcinį, nefunkcinį ir struktūrinį testavimą
REIKALAVIMAI	KONKURSO DOKUMENTŲ reikalavimai
SME	ITIS_EU modulis, užtikrinantis specialios mažosioms įmonėms skirtos pridėtinės vertės mokesčio schemos veikimą
SSO	(angl. Single Sign-On) vieningo prisijungimo sąsaja
SUTARTIS	Viešojo pirkimo paslaugų sutartis
SVN	Rinkinių versijavimo saugykla
ŠALIS, ŠALYS	Pasirašius SUTARTĮ ir vykdant PROJEKTĄ, TIEKĖJAS IR UŽSAKOVAS
Testinė aplinka	UŽSAKOVO infrastruktūroje esanti aplinka, kurioje atliekami sukurtų ir / ar modernizuotų IS funkcionalumų testavimai
UŽSAKOVAS	Valstybinė mokesčių inspekcija prie Lietuvos Respublikos finansų ministerijos
VN	Valstybė narė - bet kuri ES šalis įskaitant Lietuvą
VMI	Valstybinė mokesčių inspekcija
VMI prie FM	Valstybinė mokesčių inspekcija prie Lietuvos Respublikos finansų ministerijos
XML	XML (angl. Extensible Markup Language) duomenų apsikeitimo formatas

2. PIRKIMO OBJEKTAS

2.1. Pirkimo objektas – ITIS_EU plėtra, skirta specialiosios SME schemos modulio sukūrimui, vadovaujantis EK patvirtintomis funkcinė (SS-SME Functional Specifications) ir techninė (SME-SS Technical Specifications) specifikacijomis.

2.2. PASLAUGOS funkciniai reikalavimai nurodyti 3.1. punkto 1 lentelėje, kurioje numatyti PASLAUGOS dalių įgyvendinimo terminai.

3. TECHNINĖ SPECIFIKACIJA:

3.1. Perkamų prekių, paslaugų ar darbų pavadinimai, kiekiai (apimtys), pirkimo objektui (PASLAUGAI) keliami reikalavimai

Lentelė Nr. 1

Eil. Nr.	PASLAUGOS dalis	Atlikimo terminas
1	Realizuoti galimybę asmenims ar juos atstovaujantiems asmenims (toliau - asmenys), kurie siekia pasinaudoti SME schema, išoriniame portale užpildyti ir pateikti bei atnaujinti išankstinį pranešimą arba tam tikrą išankstinio pranešimo dalį pagal EK teisės aktų ir EK funkcinėje ir techninėje specifikacijoje (pateikiama prieduose „SS-SME Functional Specifications“ ir „SME-SS Technical Specifications“) numatytus išankstinio pranešimo proceso reikalavimus, užtikrinant asmenų informavimą apie išankstinio pranešimo pateikimo / atnaujinimo rezultatus.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
2	Sukurti automatines teikiamų išankstinių pranešimų tikrinimo priemones jų teikimo / atnaujinimo metu pagal EK funkcinėje ir techninėje specifikacijoje numatytus reikalavimus ir pateiktą duomenų peržiūrą išoriniams ir vidiniams naudotojams (duomenų peržiūrose turi būti	Pagal numatytą EK projekto planą (NPP) ir

	galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus).	/ ar EK pateiktą „Master Plan“ planą
3	Realizuoti galimybę asmenims, kurie siekia nutraukti naudojimąsi SME schema arba nebetaikyti išimties konkrečioje valstybėje narėje, išoriniame portale užpildyti ir pateikti prašymus pagal EK teisės aktų, EK funkcinėje ir techninėje specifikacijose numatytus schemas nutraukimo proceso reikalavimus, užtikrinant asmenų informavimą apie schemas nutraukimo ir išimties nebetaikymo rezultatus.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
4	Sukurti automatines teikiamų naudojimosi schema nutraukimo duomenų tikrinimo priemones jų teikimo / atnaujinimo metu pagal EK funkcinėje ir techninėje specifikacijoje numatytus reikalavimus ir pateiktų duomenų peržiūrą išoriniams ir vidiniams naudotojams (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus).	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
5	Realizuoti galimybes vertinti asmens, įsisteigusio Lietuvoje, pateiktą informaciją, priimti sprendimus dėl siekiamybės pasinaudoti / nutraukti naudojimąsi SME schema pagal EK funkcinės ir techninės specifikacijos reikalavimus, užtikrinant asmenų informavimą ir sprendimų registravimą DODVS.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
6	Sukurti sprendinį, kuris leistų priskirti, anuliuoti arba patvirtinti asmens, kuriam taikoma išimtis, unikalų identifikatorių (ID) pagal EK teisės aktų ir funkcinės bei techninės specifikacijos reikalavimus.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
7	Realizuoti galimybę asmenims, kurie naudoja SME schema, išoriniame portale užpildyti ir pateikti bei patikslinti pateiktas ketvirtines ataskaitas pagal EK teisės aktų ir EK funkcinėje ir techninėje specifikacijoje numatytus ketvirtinių ataskaitų teikimo proceso reikalavimus, užtikrinant asmenų informavimą.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
8	Sukurti automatines teikiamų ketvirtinių ataskaitų duomenų tikrinimo / apdorojimo priemones jų teikimo / tikslinimo metu pagal EK funkcinėje ir techninėje specifikacijoje numatytus reikalavimus ir pateiktų duomenų peržiūrą (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus).	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
9	Realizuoti galimybę asmenims, kurie viršija EK metinės apyvartos ribą, išoriniame portale pateikti informaciją apie EK ribos viršijimą ir bendrą	Pagal numatytą EK

	teikimų / teikimų vertę pagal EK teisės aktų ir EK funkcinėje ir techninėje specifikacijoje numatytus reikalavimus, užtikrinant asmenų informavimą.	projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
10	Registravimo ir ataskaitų teikimo procesuose reikalinga sukurti automatizuotas priemones tikrinti ribos viršijimą pagal VN ribas (tais atvejais kai VN turi sektorines ribas, pagal sektorines ribas), bendrą ES ribą ir mokesčių mokėtojų pateiktus / teikiamus duomenis, užtikrinant asmenų informavimą apie bendros ES ir / ar VN ribos viršijimo rezultatus.	Pagal suderintą grafiką
11	Užtikrinti naudotojo vieningą (SSO) prisijungimą prie sistemos vadovaujantis ESKIS CAS reikalavimais bei galimybe atstovauti schemos dalyvį pagal suteiktas teises ESKIS ir kuriamame komponente, išnaudojant galimybes pagal aktualią autentifikavimo posistemės (CAS) naudojimo specifikaciją.	Pagal suderintą grafiką
12	ESKIS 39 paslaugos - „Igaliotų išorinių vartotojų VMI IS keitimas“ pagrindu turi būti realizuotas SME schemos naudotojų bei priskirtų teisių sukūrimas.	Pagal suderintą grafiką
13	Reikalinga realizuoti / modernizuoti integraciją su MMR registracijos duomenų perdavimui bei MMR esančių asmens duomenų ir kontaktų gavimui.	Pagal suderintą grafiką
14	Sukurti priemones iš EK SME kodų patikros puslapio serviso CCN2 tinklu (ar analogišku) gaunamų užklausų (vieno tipo) aptarnavimui, užtikrinant operatyvią registracijos pagal gautą informaciją patikrą ir atsakymo pateikimą. Atlikti funkcionalumo testavimo darbus su EK techniniu centru.	Pagal suderintą grafiką
15	Paruošti išankstinių pranešimų / naudojimosi schema nutraukimo duomenis kitoms VMI IS teikti.	Pagal suderintą grafiką
16	Paruošti ketvirtinių ataskaitų duomenis kitoms VMI IS teikti.	Pagal suderintą grafiką
17	Sukurti numatytų procesų ir funkcijų įgyvendinimui reikalingų žinyų struktūras bei duomenų įvedimo, modifikavimo, peržiūros ekraninės formos arba panaudoti ITIS_EU esamų žinyų rengimo ir naudojimo sprendimus.	Pagal suderintą grafiką
18	Sukurti VN klasifikatorių, kuriame būtų galima saugoti, peržiūrėti ir tvarkyti kiekvienos VN schemos naudojimo ypatumus. Šio klasifikatoriaus duomenys būtų naudojami kontrolei vykdyti.	Pagal suderintą grafiką
19	Sukurti iki 5 ataskaitų (suminių, sąrašinių) pagal UŽSAKOVO poreikį.	Pagal suderintą grafiką
20	Sukurti išorinių naudotojų informavimo priemones dėl techninių slapukų naudojimo portale, jiems pirmą kartą apsilankius portale.	Pagal suderintą grafiką
21	Realizuoti sprendinį - vidiniams vartotojams valdyti naujienas / informaciją, kurios būtų matomos išoriniame portale.	Pagal suderintą grafiką
22	Išorinio portalo ekraninės formos ir pranešimai bei dokumentų šablonai turi būti realizuoti naudojant dvikalbystės funkcionalumą.	Pagal suderintą grafiką

23	Realizuoti SME modulio naudotojų veiksmų auditavimą, naudojant i.MAS naudotojų veiksmų auditavimo komponentą ir jo specifiкуotus bei realizuotus sprendimus duomenų fiksavimui ir audituojamų duomenų struktūrai.	Pagal suderintą grafiką
24	Sukurti sprendinį duomenų mainams su kitomis VN, kad būtų galima dalintis informacija, kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos ir CCN2 tinklo reikalavimus (pateikiama prieduose „CCN2 Platform Integration Manual“), užtikrinant duomenų ir jų sąsajų peržiūrą (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus) bei vertinimą.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
25	Vadovaujantis specifikacijomis ir rekomendacijomis, kurias pateiks EK, atlikti numatytus funkcionalumų testavimo su EK techniniu centru darbus, užtikrinant SME testavimų vykdymą ne vėliau nei numatyta EK projekto ir / ar EK pateiktame „Master Plan“ plane (pateikiama prieduose „SME-SS Master Plan“).	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
26	Sukurti iš kitų VN gaunamų išankstinių pranešimų dėl siekiamybės pasinaudoti SME schema peržiūros (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus), tikrinimo (užtikrinant galimybę panaudoti EK validavimo modulį), vertinimo, papildomų dokumentų prašymo ir jų apdorojimo funkcionalumą kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos ir CCN2 tinklo reikalavimus.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
27	Sukurti iš kitų VN gaunamų naudojimosi SME schema nutraukimo duomenų peržiūros (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus), tikrinimo (užtikrinant galimybę panaudoti EK validavimo modulį), apdorojimo mechanizmą kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos reikalavimus.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
28	Realizuoti galimybes vertinti iš kitos VN gautą, įsteigusio kitoje VN asmens informaciją, priimti sprendimus dėl siekiamybės pasinaudoti / nutraukti naudojimąsi SME schema pagal EK funkcinės ir techninės specifikacijos reikalavimus, užtikrinant asmenų informavimą bei pagal poreikį sprendimų registravimą DODVS.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
29	Sukurti iš kitų VN gautų ketvirtinių ataskaitų peržiūros (duomenų peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus), tikrinimo (užtikrinant galimybę panaudoti EK validavimo modulį), apdorojimo mechanizmą kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos reikalavimus.	Pagal numatytą EK projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
30	Sukurti iš kitų VN gaunamų EK metinės apyvartos ribos viršijimo ir bendros tiekimų / teikimų vertės duomenų peržiūros (duomenų	Pagal numatytą EK

	peržiūrose turi būti galimybė vykdyti paiešką pagal atskirus duomenų laukus ar jų fragmentus), tikrinimo (užtikrinant galimybę panaudoti EK validavimo modulį), apdorojimo mechanizmą kaip tai numatyta pagal EK teisės aktų, funkcinės ir techninės specifikacijos reikalavimus.	projekto planą (NPP) ir / ar EK pateiktą „Master Plan“ planą
31	Informacijos saugumo rizikos analizė ir jos rezultatų ataskaita.	Pagal suderintą grafiką
32	ITIS_EU SME atsparumo įsilaužimams testavimas ir jo rezultatų ataskaita	Pagal suderintą grafiką

3.2. Reikalavimai ITIS_EU SME modernizavimo principams:

3.2.1. Plečiamumo (angl. „scalability“): papildomų komponentų įdiegimas neturi sumažinti patikimumo ir našumo lygių;

3.2.2. Keičiamumo (angl. „changeability“) ir papildomumo (angl. „extensibility“): komponentai turi būti įdiegti taip, kad užtikrintų galimybę lengvai modernizuoti kuriamas ITIS_EU SME funkcijas ir įtraukti į ITIS_EU SME naujas funkcijas;

3.2.3. Atsparumo (angl. „robustness“): komponentai turi būti įdiegti tokiu būdu, kuris užtikrintų atsparumą sutrikimams. Tam tikrų komponentų klaidos neturi neigiamai paveikti kito ITIS_EU SME funkcionalumo.

3.2.4. ITIS_EU SME modulis turi būti suprojektuotas ir realizuotas taip, kad realizavus funkcionalumo pakeitimus vienoje ar keliose funkcinėse srityse tai netaptų visos ITIS_EU SME perkūrimo priežastimi;

3.2.5. Sukūrus naują ITIS_EU SME modulį, prieigos prie jo turi būti sutvarkomos pagal šiuos reikalavimus:

3.2.5.1. Prieigos teisių suteikimas prie ITIS_EU SME turi būti paremtas rolių pagrindu, kai teisė naudotis konkrečia ITIS_EU SME tvarkoma informacija suteikiama konkrečiam ITIS_EU SME naudotojui ar naudotojų grupei;

3.2.5.2. Jei ITIS_EU SME modulis skirtas administruoti, jis turi būti papildytas administratoriaus role, suteikiančia teisę administruoti ITIS_EU SME be teisės tvarkyti mokesčių mokėtojų duomenis;

3.2.5.3. Visos ITIS_EU SME naudotojų rolės, įskaitant ir administratorių, ir joms priskirtos teisės turi būti suderintos su ITIS_EU duomenų valdymo įgaliotiniu;

3.2.5.4. Kiekvienas ITIS_EU SME naudotojas turi būti unikalčiai identifikuojamas ir autentifikuojamas.

3.2.6. ITIS_EU SME programinė įranga turi leisti atlikti nurodytu laiku vykdomų užduočių („scheduler“) administravimą. Turi būti funkcija, leidžianti įjungti arba išjungti egzistuojančias užduotis, pakeisti užduočių vykdymą.

3.2.7. Jei duomenų perdavimo būdas ir tikslas reikalauja, ITIS_EU SME turi užtikrinti duomenų kodavimą prieš perduodant duomenis trečioms šalims;

3.2.8. ITIS_EU SME turi būti įgyvendintos kontrolės priemonės, užtikrinančios perduodamų ar gaunamų duomenų vientisumą ir konfidencialumą, kad duomenys nebuvo iškraipyti ar neleistinai atskleisti jų perdavimo metu. Viešaisiais ryšių tinklais perduodamos ITIS_EU SME elektroninės informacijos konfidencialumas turi būti užtikrintas, naudojant šifravimą.;

3.2.9. ITIS_EU SME turi automatiškai nutraukti naudotojo darbo seansą praėjus parametrais apibrėžtam naudotojo neaktyvumo laikotarpiui ir pranešimu informuoti naudotoją apie atjungimo priežastį. Turi būti galimybė keisti neaktyvumo laikotarpio parametro reikšmę;

3.2.10. ITIS_EU SME turi būti galimybė nustatyti naudotojo neteisingų prisijungimų skaičių, po kurio naudotojui būtų laikinai neleidžiama bandyti prisijungti. Turi būti galimybė keisti prisijungimų skaičiaus parametro reikšmę;

3.2.11. Kuriama ITIS_EU SME turi patikimai veikti UŽSAKOVO turimoje techninėje platformoje, vietiniuose (LAN) ir teritoriniuose (WAN) kompiuterių tinkluose bei infrastruktūroje skirtoje ITIS_EU SME maksimaliai išnaudojant įdiegtus ir naudojamus programinius sprendimus ir technologijas, t. y. ITIS_EU SME modernizuotų ir naujų komponentų (paslaugos dalių) įdiegimas negali reikalauti iš UŽSAKOVO jokių papildomų (neįtrauktų į pasiūlymo kainą) išlaidų;

3.2.12. PASLAUGOS įgyvendinimui kuriami programiniai sprendimai turi užtikrinti pilną duomenų mainų suderinamumą ir integralumą su ITIS_EU ir susijusių informacinių sistemų sprendimais bei tvarkomų duomenų panaudojimu ITIS_EU ir susijusiose IS;

3.2.13. Jei kuriamo sprendimo funkcionalumams užtikrinti bus reikalinga licencijuojama programinė įranga (duomenų bazės ar kito programinio sprendimo), ji turi būti pateikta su gamintojo techniniu palaikymu. Licencijų kaina turi būti įtraukta į pasiūlymo kainą. Šis reikalavimas neriboja atviro kodo programinės įrangos naudojimo. Teisiniu požiūriu atvirasis kodas - tai programiniai produktai, kurių naudojimas, platinimas ir modifikavimas yra nustatytas atvirojo kodo licencijomis bei jų sąlygomis, su kuriomis sutinkantis naudotojas produktu gali disponuoti tiek, kiek jam suteikia licencija.

3.2.14. Visi kūrimo sprendimai turi būti realizuoti atsižvelgiant į kūrimui naudojamos licencinės programinės įrangos licencijavimo taisykles bei vadovaujantis Lietuvos Respublikos valstybės informacinių išteklių valdymo įstatymo 12 straipsnyje nustatytais intelektinės nuosavybės teisėmis, nereikalauti iš UŽSAKOVO papildomų investicijų ir būti pateikti su licencinės programinės įrangos gamintojo palaikymu, kuris turi būti ne trumpesnis nei kokybės garantija. Jų galiojimas neturi būti apribotas nepriklausomai nuo to, ar UŽSAKOVAS įsigyja programinės įrangos techninio aptarnavimo paslaugas ar ne.

3.2.15. ITIS_EU SME turi būti numatytos atstatymo po gedimo ir atsarginio duomenų išsaugojimo procedūros;

3.2.16. Sprendinys, suderinus su Užsakovo galimybėmis, turi būti diegiamas naudojant kontenerius, kuri būtų suderinama su VMI naudojama kontenerių valdymo platforma, sudarant galimybes perkėlimui į Valstybės IT paslaugų centrą (VITC), bei taikant mikroservisų architektūros principus.

3.3. Reikalavimai testavimui:

3.3.1. Testavimas negali būti vykdomas su realiais duomenimis, išskyrus būtinus atvejus, suderintus su UŽSAKOVU, kurių metu naudojamos organizacinės ir techninės duomenų saugumo priemonės, užtikrinančios realių duomenų saugumą. Organizacinės ir techninės duomenų saugumo priemonės turi būti nustatytos informacijos rizikos analizės ataskaitoje.

3.3.2. ITIS_EU SME kūrimo, testinė ir gamybinė aplinkos turi būti atskirtos.

3.3.3. TIEKĖJAS privalo sukurtas / modernizuotas ITIS_EU SME ar atskiras jos dalis visų pirma išbandyti testinėje aplinkoje ir tik po to pagal UŽSAKOVO patvirtintas versijų valdymo ir pakeitimų procedūras įdiegti gamybinėje aplinkoje.

3.3.4. TIEKĖJAS turi sukurtą / modernizuotą ITIS_EU SME ar atskiras jos dalis UŽSAKOVUI pateikti diegimui tik pilnai jas išbandęs testavimo aplinkoje, užtikrindamas, kad diegiama programinė įranga yra be kenksmingo programinio kodo, neautorizuotos prieigos galimybių ir /ar kitų pažeidžiamumų. Tai turi būti patvirtinta TIEKĖJO atsakingų asmenų;

3.3.5. Testavimo metu turi būti patikrintas optimalus ITIS_EU SME veikimas, apimant, tačiau neapsiribojant šiais klausimais:

- Ar yra tenkinami visi SUTARTYJE, TECHNINĖJE SPECIFIKACIJOJE ir ITIS_EU SME funkcinių reikalavimų dokumente keliami reikalavimai;
- Ar ITIS_EU SME paslaugų proceso seka atitinka numatytąją;
- Ar skirtingas teises turintys vidiniai ir išoriniai ITIS_EU SME naudotojai gali atlikti jiems pagal teises leidžiamas atlikti funkcijas;
- Ar vidiniai ir išoriniai ITIS_EU SME naudotojai negali matyti ar tvarkyti daugiau duomenų nei priklauso pagal jų turimas teises;

- Ar galimybė vidiniams ir išoriniams ITIS_EU SME naudotojams atlikti numatytas operacijas yra tinkamai dokumentuota;
- Ar vidinių ir išorinių IS naudotojų atliekamos operacijos yra tinkamai fiksuojamos;
- Ar užtikrinamas gaunamų / teikiamų duomenų tikslumas, užbaigtumas ir patikimumas.

3.3.6. Testavimo metu turi būti atlikti šie bandymai (testai):

3.3.6.1. TIEKĖJO atliekamas vidinis ITIS_EU SME testavimas, apimantis visų lygių (modulinį, sisteminių, integracinių) ir skirtingų tipų (funkcinių, nefunkcinių, struktūrinių) testavimus, įskaitant TIEKĖJO vidinį testavimą UŽSAKOVO testinėje aplinkoje;

3.3.6.2. ITIS_EU SME integracinis testavimas, apimantis integracijos su kitomis IS ir registrais testavimą (atliekamas TIEKĖJO kartu su UŽSAKOVU);

3.3.6.3. ITIS_EU SME apkrovos ir greیتaveikos testavimas (naudotojai gali būti prilyginami automatiškai generuojamoms užklausoms) bei apkrovos ir greیتaveikos rodiklių vertinimas gamybinėje aplinkoje (bandomosios eksploatacijos ir kokybės garantijos etapo metu su realiais naudotojais) (atliekamas TIEKĖJO atsižvelgiant į apkrovai ir greیتaveikai keliamus reikalavimus bei paruošiant automatines priemones ar sprendinius paskutinės PASLAUGOS dalies priėmimo testavimo metu, bet ne vėliau nei 2 mėn. iki PROJEKTO pabaigos, Testavimo plane ir metodikoje numatytoje aplinkoje bei įrankiais);

3.3.6.4. ITIS_EU SME priėmimo testavimas (atliekamas UŽSAKOVO, TIEKĖJAS turi dalyvauti priėmimo testavimo metu ir ištaisyti UŽSAKOVO identifikuotas klaidas);

3.3.6.5. ITIS_EU SME atsparumo įsilaužimams testavimas atliekamas TIEKĖJO paskutinės PASLAUGOS dalies priėmimo testavimo metu, bet ne vėliau nei 2 mėn. iki PROJEKTO pabaigos, Testavimo plane ir metodikoje numatytoje aplinkoje bei įrankiais - siekiant užtikrinti, kad TIEKĖJAS sukurtų ir įdiegtų pakankamai saugius sprendimus;s

3.3.7. TIEKĖJAS su UŽSAKOVU suderina Testavimo planą ir metodiką (pradinę Testavimo plano ir metodikos versiją pateikia UŽSAKOVAS) iki pirmos PASLAUGOS dalies vidinio testavimo pradžios.

3.3.8. Kiekvieno darbų paketo / iteracijos testavimo atveju TIEKĖJAS parengia ir su UŽSAKOVU suderina PASLAUGOS dalies vidinio, priėmimo testavimo ataskaitas, kuriose būtų nurodyta testavimo laikotarpis, testavimo apimtis, testavimo aplinka, testavimą atlikę asmenys, fiksuotų incidentų informacija (aprašas, kritiškumas, numatoma ištaisymo data);

3.3.9. TIEKĖJAS turi sukurti / sukonfigūruoti UŽSAKOVO testavimui skirtą testinę aplinką:

3.3.9.1. TIEKĖJAS dokumentuoja reikalavimus UŽSAKOVO testinei aplinkai nurodydamas reikalingas integracijas su kitomis IS bei registrais;

3.3.9.2. TIEKĖJAS pateikia testinės aplinkos paketą;

3.3.9.3. TIEKĖJAS paruošia testinius duomenis;

3.3.9.4. Esant poreikiui TIEKĖJAS atlieka konfigūracinius nustatymus ir testinėje aplinkoje bei užtikrina kitas būtinas sąlygas testavimams atlikti.

3.3.10. TIEKĖJO vidinio testavimo pabaigos ir priėmimo testavimo pradžios sąlygos:

3.3.10.1. Turi būti TIEKĖJO parengti ir su UŽSAKOVU suderinti PASLAUGOS dalių testavimo scenarijai. Testavimo scenarijai turi būti aiškūs ir išsamūs, t. y. parengti taip, kad juos galima būtų įvykdyti be papildomų dokumentų pagalbos ar veiklos specialistų konsultacijų;

3.3.10.2. Turi būti TIEKĖJO paruošti PASLAUGOS dalių testinių duomenų rinkiniai;

3.3.10.3. Turi būti parengta UŽSAKOVO testavimui skirta testinė aplinka;

3.3.10.4. Turi būti TIEKĖJO atliktas visų PASLAUGOS dalių vidinis testavimas ir ištaisytos visos jo metu identifikuotos klaidos;

3.3.10.5. Turi būti TIEKĖJO parengtos ir su UŽSAKOVU suderintos visų PASLAUGOS dalių vidinio testavimo ataskaitos.

3.3.11. Priėmimo testavimo pabaigos ir ITIS_EU SME perdavimo į bandomąją eksploataciją sąlygos:

3.3.11.1. Turi būti atlikti PASLAUGOS dalių visi nurodyti ITIS_EU SME bandymai (testai) pagal visus suderintus PASLAUGOS dalių testavimo scenarijus;

3.3.11.2. PASLAUGOS dalies priėmimo testavimas pagal atitinkamą scenarijų laikomas sėkmingai užbaigtu, jei to scenarijaus visi žingsniai įvykdyti sėkmingai ir tenkina nustatytus vertinimo kriterijus, t. y. kiekvieno atlikto scenarijaus žingsnio laukiamas rezultatas atitinka ITIS_EU SME gautą rezultatą. Kitu atveju fiksuojamos klaidos;

3.3.11.3. Visos kritinės, didelės ir vidutinės klaidos turi būti išspręstos;

3.3.11.4. Turi būti sutarta, kad likusios mažos klaidos, kurios neturi įtakos testavimo rezultatų priėmimui, bus išspręstos TIEKĖJO iki PASLAUGOS dalies bandomosios eksploatacijos etapo pabaigos;

3.3.11.5. Turi būti TIEKĖJO parengtos ir su UŽSAKOVU suderintos visų PASLAUGOS dalių testavimų ataskaitos;

3.3.11.6. Iki paskutinės PASLAUGOS dalies bandomosios eksploatacijos pabaigos, bet ne vėliau kaip 1 mėn. iki PROJEKTO pabaigos turi būti TIEKĖJO parengtos ir su UŽSAKOVU suderintos apkrovos ir greitaveikos bei atsparumo įsilaužimams testavimo (vertinimo) ataskaitos, kuriose pateiktos rekomendacijos dėl tinkamo ITIS_EU IS apkrovos ir greitaveikos lygio pasiekimo, atsparumo įsilaužimams ir saugumo reikalavimų įgyvendinimo.

3.3.12. Priėmimo testavimo metu ir bandomosios eksploatacijos identifikuotos klaidos klasifikuojamos:

- Kritinė klaida - ITIS_EU SME ar atskiros jos dalies veikimas blokuojamas arba nutrūksta, naudotojas negali vykdyti numatytų būtinų funkcijų ir nežinomas joks kitas alternatyvus funkcijos vykdymas;
- Didelė klaida - nuolat pasikartojanti ITIS_EU SME ar atskiros jos dalies veikimo klaida, dėl kurios ITIS_EU SME veikimas tampa nestabilus ir (ar) nesaugus ir kuri kliudo naudotojui vykdyti būtinas funkcijas, tačiau yra žinomas alternatyvus funkcijos vykdymas, taip pat, jei klaida yra susijusi su duomenų sauga;
- Vidutinė klaida - retai pasikartojanti ITIS_EU SME ar atskiros jos dalies veikimo klaida, kuri sukelia sunkumų naudotis ITIS_EU SME, bet neturi įtakos veiklos proceso vykdymui, arba pastebimas nedidelis trūkumas ar defektas (nedidelis poveikis atitinkamam komponentui);
- Maža klaida - nustatomi smulkūs ITIS_EU SME dokumentacijos trūkumai, nežymūs ITIS_EU SME ar atskiros jos dalies veikimo arba grafinės naudotojo sąsajos neatitikimai ITIS_EU SME dokumentacijai, netrukduojantys numatytam veiksmui atlikti.

3.3.13. UŽSAKOVO veiklos ir testavimo specialistai testavime dalyvauja pagal savo kompetencijas.

3.3.14. Testavimo principai ir procedūros turi būti apibrėžtos ir suderintos su UŽSAKOVU Projekto valdymo plane ir / arba Testavimo plane ir metodikoje.

3.3.15. Testavimo metu TIEKĖJAS privalo:

- Dalyvauti testavime;
- Pildyti klaidų registrą;
- Šalinti testavimo metu identifikuotas klaidas ir trūkumus;
- Atlikti pakartotinius (angl. *re-testing*) ir regresinius (angl. *regression*) testavimus;
- Informuoti UŽSAKOVĄ apie klaidų šalinimo planus ir eigą;
- Pildyti pakeitimų registrą bei dokumentuoti pakeitimus;
- Teikti pagalbą ir konsultuoti testavime dalyvaujančius UŽSAKOVO atstovus

testavimo klausimais.

3.4. Reikalavimai bandomajai eksploatacijai:

3.4.1. Visoms priimamoms PASLAUGOS dalims taikoma bandomoji eksploatacija, kurios trukmė yra 1 mėnuo ir kuri skaičiuojama nuo PASLAUGOS dalies ar glaudžiai susijusios

PASLAUGOS dalies įdiegimo į gamybinę aplinką. UŽSAKOVO ir TIEKĖJO sutarimu bandomosios eksploatacijos laikas gali būti pailgintas arba sutrumpintas.

3.4.2. Bandomosios eksploatacijos metu TIEKĖJAS privalo taisyti klaidas, registruotas ir neišspręstas priėmimo testavimo metu, ir klaidas, registruotas bandomosios eksploatacijos metu. Bandomoji eksploatacija negali būti laikoma baigta, jei TIEKĖJAS neištaisė visų priėmimo testavimo metu identifikuotų klaidų ir kritinių, didelių bei vidutinių klaidų, identifikuotų bandomosios eksploatacijos metu. Mažos klaidos, nustatytos ir neištaisytos bandomosios eksploatacijos metu, turi būti ištaisytos ne vėliau nei per 1 mėn. nuo kokybės garantijos pradžios.

3.4.3. Kai neįmanoma ištaisyti ITIS_EU SME klaidų iki bandomosios eksploatacijos pabaigos, UŽSAKOVO ir TIEKĖJO sutarimu bandomosios eksploatacijos laikas gali būti pratęstas iki tol, kol bus ištaisytos 3.4.2. punkte nurodytos klaidos ir ITIS_EU SME visa apimtimi atitiks nustatytus REIKALAVIMUS;

3.4.4. Atskirais atvejais, kai įdiegiamos PASLAUGOS dalys, kurios nuo jų įdiegimo momento negali būti bandomos (dėl kitų susijusių UŽSAKOVO ir / ar išorinių IS plėtros rezultatų vėlavimo ar pan.), tuomet bandomoji eksploatacija UŽSAKOVO ir TIEKĖJO sutarimu yra atidedama iki realios tokios PASLAUGOS dalies eksploatavimo pradžios;

3.4.5. Į bandomosios eksploatacijos trukmę neįskaičiuojamas laikas, kai dėl ITIS_EU SME kritinių arba didelių klaidų tokia bandomoji eksploatacija PASLAUGOS daliai negalėjo vykti;

3.4.6. Bandomosios eksploatacijos metu nustačius klaidas, kilusias dėl to, kad projektavimo ir programavimo metu TIEKĖJAS jų nenumatė, TIEKĖJAS nemokamai atlieka reikalingus taisymus;

3.4.7. TIEKĖJAS privalo prieš perduodamas ITIS_EU SME UŽSAKOVUI pateikti galutines dokumentacijos ir ITIS_EU SME išeities kodo versijas;

3.4.8. PASLAUGOS atlikimo aktas nesurašomas anksčiau negu programinė įranga yra sukurta, įdiegta, tinkamai veikia (užbaigta jos bandomoji eksploatacija), TIEKĖJAS perdavė visus PROJEKTO metu TIEKĖJO ir UŽSAKOVO suderintus ir patvirtintus galutinius rezultatus.

3.5. Reikalavimai diegimui ir diegimo aplinkai:

3.5.1. TIEKĖJAS turi pateikti visus sukurtos ar modernizuotos PASLAUGOS programinės įrangos išeities kodus arba diegimo paketus kartu su diegimo instrukcijomis, kurie turi būti struktūrizuoti ir su komentarais, patalpinant į SVN bei išlaikant UŽSAKOVO nurodytą failų struktūrą;

3.5.2. Pateikiama PASLAUGOS programinė įranga ir dokumentacija turi užtikrinti galimybę palaikyti ir modernizuoti ITIS_EU SME, nepriklausomai nuo TIEKĖJO;

3.5.3. PASLAUGOS dalis turi funkcionuoti realaus laiko režimu, tiek vykdant programinės įrangos bandomąją eksploataciją, tiek jai taikant kokybės garantiją.

3.6. Reikalavimai dokumentacijai ir programiniam kodui:

3.6.1. Jeigu, naudojantis PASLAUGA, paaiškės, kad TIEKĖJO perduota su PASLAUGA susijusi dokumentacija yra ne visa ir jos nepakanka tam, kad būtų galima įvykdyti kokį nors iš SUTARTYJE numatytų PASLAUGOS tikslų, visus su tuo susijusius UŽSAKOVO nuostolius (įskaitant dokumentacijos sutvarkymo išlaidas) padengia TIEKĖJAS;

3.6.2. PASLAUGOS teikimo ar kokybės garantijos metu modernizavus ITIS_EU SME, TIEKĖJAS, suderinęs su UŽSAKOVU pagal poreikį pateikia ir/arba atitinkamai pakeičia esamus tokius dokumentus (dokumentų privalomumas nurodytas Valstybinės mokesčių inspekcijos valstybės informacinių išteklių steigimo, kūrimo, diegimo, priežiūros ir likvidavimo taisyklės, patvirtintos Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2006 m. birželio 12 d. įsakymu Nr. V-216 „Dėl Valstybinės mokesčių inspekcijos

informacinių sistemų bei taikomosios programinės įrangos kūrimo, diegimo, ir techninės priežiūros taisyklių patvirtinimo“ 1 priede (2023 m. vasario 24 d. įsakymo Nr. V-75 redakcija)):

- 3.6.2.1. R2 Projekto valdymo planas;
 - 3.6.2.2. R7 Projekto valdymo susirinkimų protokolai;
 - 3.6.2.3. R8 Nenumatytų darbų / užsakymų / pokyčių sąvadas;
 - 3.6.2.4. R9 Reikalavimų išpildymo matrica;
 - 3.6.2.5. R14 Darbo grupių posėdžių protokolai;
 - 3.6.2.6. R24 Informacijos saugumo rizikos vertinimo ataskaita;
 - 3.6.2.7. R25 Nenumatytų darbų / užsakymų / pokyčių dokumentai;
 - 3.6.2.8. R26 Funkcinių reikalavimų dokumentas;
 - 3.6.2.9. R27 Techninė architektūra;
 - 3.6.2.10. R28 Duomenų struktūrų aprašymas (lentelių ryšių diagrama, lentelių, jų laukų, indeksų ir ryšių tarp lentelių aprašymai, lentelių vaizdų ir jų laukų aprašymai);
 - 3.6.2.11. R29 Modulių aprašymas;
 - 3.6.2.12. R30 Naudotojų teisių ir rolių aprašas;
 - 3.6.2.13. R31 Integracijų specifikacijos;
 - 3.6.2.14. R32 Duomenų tvarkymo / perkėlimo ataskaita;
 - 3.6.2.15. R33 Informacinės sistemos veiklos testavimo planas;
 - 3.6.2.16. R34 Nuostatų pakeitimo projektas;
 - 3.6.2.17. R35 Specifikacijos pakeitimo projektas;
 - 3.6.2.18. R36 Administratoriaus vadovas;
 - 3.6.2.19. R37 Naudotojo vadovas;
 - 3.6.2.20. R38 Interaktyvi pagalba („on-line help“);
 - 3.6.2.21. R39 Programų tekstai / nekodotos programinės priemonės;
 - 3.6.2.22. R40 Testavimo planas ir metodika
 - 3.6.2.23. R41 Testavimo scenarijai;
 - 3.6.2.24. R42 Vidinio testavimo ataskaita;
 - 3.6.2.25. R43 Priėmimo testavimo ataskaita;
 - 3.6.2.26. R44 Bandomosios eksploatacijos planas;
 - 3.6.2.27. R45 Bandomosios eksploatacijos ataskaita;
 - 3.6.2.28. R46 Apkrovos ir greitaveikos testavimo ataskaita;
 - 3.6.2.29. R47 Atsparumo įsilaužimams testavimo ataskaita;
 - 3.6.2.30. R49 Mokymų planas;
 - 3.6.2.31. R50 Mokymų medžiaga (naudotojams);
 - 3.6.2.32. R51 Mokymų medžiaga (administratoriams);
 - 3.6.2.33. R52 Mokymų dalyvių sąrašas;
 - 3.6.2.34. R53 Mokymų protokolai;
 - 3.6.2.35. R54 Diegimo strategija;
 - 3.6.2.36. R55 Diegimo planas;
 - 3.6.2.37. R56 Diegimų žurnalas (CO sąvadas);
 - 3.6.2.38. R57 Instaliavimo instrukcija;
 - 3.6.2.39. R58 Instaliacinis paketas;
 - 3.6.2.40. Kitus su UŽSAKOVU suderintus dokumentus.
- 3.6.3. TIEKĖJAS rengdamas dokumentus turi vadovautis aktualiomis teisės aktų redakcijomis;
- 3.6.4. Visa su ITIS_EU SME keitimu ir diegimu susijusi medžiaga ir dokumentai turi būti teikiami lietuvių kalba bei vartojant dalykinės srities terminiją. Esant poreikiui dalis medžiagos ir dokumentų turi būti pateikiami anglų kalba;
- 3.6.5. Standartinių produktų administravimo priemonių medžiaga ir dokumentai turi būti pateikiami lietuvių arba anglų kalba;

3.6.6. TIEKĖJAS su UŽSAKOVU privalo suderinti visų pateikiamų rezultatų turinį ir formą prieš pateikdamas dokumentus UŽSAKOVUI;

3.6.7. TIEKĖJAS turi pateikti parengtus dokumentų projektus UŽSAKOVO darbo grupei derinti. Projektai pristatomi ir aptariami UŽSAKOVO ir TIEKĖJO darbo grupių susitikimuose. UŽSAKOVUI išreiškus poreikį, pasitarimuose papildomai naudojama projektų medžiaga skaidrių formatu;

3.6.8. TIEKĖJAS visus su UŽSAKOVU suderintus dokumentus turi pateikti patalpindamas į UŽSAKOVO naudojamą SVN, o esant poreikiui - ir Projekto valdymo sistemoje;

3.6.9. TIEKĖJAS turi pateikti visus sukurtų ar modernizuotų ITIS_EU SME išeities kodus, kurie turi būti struktūrizuoti ir su komentarais. Pateikiama PASLAUGOS programinė įranga ir dokumentacija turi užtikrinti galimybę palaikyti ir modernizuoti ITIS_EU SME, nepriklausomai nuo TIEKĖJO.

3.6.10. Perduodamoje IS dokumentacijoje esančios teksto šaltinių nuorodos turi nukreipti arba į kitą perduodamo dokumento skyrių, arba į kitą perduodamą dokumentą, bet ne į TIEKĖJO aplinkoje valdomą dokumentaciją.

3.6.11. TIEKĖJAS visus su UŽSAKOVU suderintus dokumentus turi pateikti patalpindamas į UŽSAKOVO naudojamą SVN, panaikinus nuorodas.

3.7. REIKALAVIMAI apkrovai ir greitaveikai, veikimo sąlygoms ir paslaugų prieinamumui:

3.7.1. Atsižvelgiant, kad paslauga teikiama ūkio subjektams ir įtaką jų vykdomai veiklai, turi būti užtikrintas nepertraukiamas ITIS_EU SME veikimas 24 valandas per parą 7 dienas per savaitę. Prieinamumas ne mažiau kaip 99,85 % per metus;

3.7.2. Vienu metu ITIS_EU SME turi gebėti aptarnauti iki 30 vidinių naudotojų ir iki 100 išorinių naudotojų.

3.7.3. 80 % ITIS_EU SME naudotojų užklausų turi vidutiniškai trukti:

- Paieškos / filtravimo / grupavimo / rūšiavimo duomenyse (pagal mokesčių mokėtoją, laikotarpį ir kt.) trukmė - iki 10 sekundžių;
- Navigacijos tarp skirtingų ITIS_EU SME naudotojo sąsajos elementų trukmė - iki 5 sekundės.

3.7.4. Vertinant duomenų kiekį, duomenų paieškos / filtravimo / grupavimo / rūšiavimo ir duomenų rinkmenos naudojimo atvejus, specifinėms užklausoms detalios analizės ir projektavimo metu turi būti suderinti rodikliai ir jų reikšmės.

3.8. Atliekamų darbų pagal modernizavimo valandas užsakymas ir rezultatų pateikimas:

3.8.1. Darbus UŽSAKOVAS užsako raštu per Projekto valdymo sistemą (pvz., Confluence ar kitą pagal SUTARTIES Error: Reference source not found punktą) (kiekvieną kartą užsakant ir priimant PASLAUGOS dalies atlikimą, tai bus įforminama atskiru rašytiniu susitarimu ar kitu dokumentu (protokolu) (toliau atitinkamai - užsakymas ar užsakymo priėmimas);

3.8.2. Užsakyme privalo būti nurodytos pagrįstos ir suderintos užsakomų darbų atlikimo trukmės valandų apimtys ir priežastys jų užsakymui. Užsakyta darbų atlikimo trukmė privalo būti proporcinga užsakymo vykdymo rezultatui;

3.8.3. Užsakymo priėmime privalo būti nurodytos faktiškai sunaudotas TIEKĖJO darbo valandų skaičius ir ar jis atitinka užsakyme nustatytą darbų atlikimui skirtą laiką ir kokybę.

3.9. Teisės aktai, susiję su PROJEKTO įgyvendinimu:

- Lietuvos Respublikos informacinės visuomenės paslaugų įstatymas;
- Lietuvos Respublikos mokesčių administravimo įstatymas;

- 2021 m. lapkričio 16 d. Komisijos įgyvendinimo reglamentas (ES) 2021/2007, kuriuo nustatomos išsamios Tarybos reglamento (ES) Nr. 904/2010 taikymo taisyklės dėl specialios mažosioms įmonėms skirtos schemos;

- 2020 m. vasario 18 d. Tarybos Direktyva (ES) 2020/285 kuria iš dalies keičiami Direktyva 2006/112/EB dėl pridėtinės vertės mokesčio bendros sistemos, kiek tai susiję su specialia mažosioms įmonėms skirta schema, ir Reglamentas (ES) Nr. 904/2010, kiek tai susiję su administraciniu bendradarbiavimu ir keitimusi informacija tinkamo specialios mažosioms įmonėms skirtos schemos taikymo stebėsenos tikslais;

- Lietuvos Respublikos valstybės informacinių išteklių valdymo įstatymas;

- Bendrųjų reikalavimų valstybės ir savivaldybių institucijų ir įstaigų interneto svetainėms ir mobiliosioms programoms aprašas, patvirtintas Lietuvos Respublikos Vyriausybės 2018 m. gruodžio 12 d. nutarimu Nr. 1261 „Dėl Bendrųjų reikalavimų valstybės ir savivaldybės institucijų ir įstaigų interneto svetainėms ir mobiliosioms programoms aprašo patvirtinimo“;

- Nacionalinė kibernetinio saugumo strategija, patvirtinta Lietuvos Respublikos Vyriausybės 2018 m. rugpjūčio 13 d. nutarimu Nr. 818 „Dėl Nacionalinės kibernetinio saugumo strategijos patvirtinimo“;

- Valstybės informacinių sistemų steigimo, kūrimo, modernizavimo ir likvidavimo tvarkos aprašas, patvirtintas Lietuvos Respublikos Vyriausybės 2013 m. vasario 27 d. nutarimu Nr. 180 „Dėl valstybės informacinių sistemų steigimo, kūrimo, modernizavimo ir likvidavimo tvarkos aprašo patvirtinimo“.

- Elektroninių paslaugų kūrimo metodika, patvirtinta Lietuvos Respublikos susisiekimo ministro 2015 m. spalio 7 d. įsakymu Nr. 3-416(1.5 E) „Dėl metodinių dokumentų patvirtinimo“;

- Sudėtinių elektroninių paslaugų kūrimo ir teikimo metodika, Lietuvos Respublikos susisiekimo ministro 2015 m. spalio 7 d. įsakymu Nr. 3-416(1.5 E) „Dėl metodinių dokumentų patvirtinimo“;

- Techninių valstybės registrų (kadastrų), žinybinių registrų, valstybės informacinių sistemų ir kitų informacinių sistemų elektroninės informacijos saugos reikalavimų aprašas, patvirtintas Lietuvos Respublikos krašto apsaugos ministro 2020 m. gruodžio 4 d. įsakymu Nr. V-941 „Dėl Techninių valstybės registrų (kadastrų), žinybinių registrų, valstybės informacinių sistemų ir kitų informacinių sistemų elektroninės informacijos saugos reikalavimų aprašo ir Informacinių technologijų saugos atitikties vertinimo metodikos patvirtinimo“;

- Kuriamų viešųjų ir administracinių elektroninių paslaugų tinkamumo naudotojams užtikrinimo priemonių metodines rekomendacijas, pavirtintos Informacinės visuomenės plėtros komiteto prie Lietuvos Respublikos susisiekimo ministerijos direktoriaus 2014 m. gegužės 5 d. įsakymu Nr. T-65 „Dėl Kuriamų viešųjų ir administracinių elektroninių paslaugų tinkamumo naudotojams užtikrinimo priemonių metodines rekomendacijų patvirtinimo“. Priemonių pavyzdžiai ir Tinkamumo problemų sprendimo gairės paskelbtos Informacinės visuomenės plėtros komiteto interneto puslapyje <https://ivpk.lrv.lt/lt/ivpk-leidiniai/viesuju-ir-administraciniu-elektroniniu-paslaugu-patogumo-naudotojams-metodiniai-dokumentai>;

- Neįgaliesiems pritaikytų valstybės ir savivaldybių institucijų ir įstaigų interneto svetainių kūrimo, testavimo ir įvertinimo metodinės rekomendacijos, patvirtintos Informacinės visuomenės plėtros komiteto prie Lietuvos Respublikos susisiekimo ministerijos direktoriaus 2004 kovo 31 d. įsakymu Nr. T-40 „Dėl Neįgaliesiems pritaikytų valstybės ir savivaldybių institucijų ir įstaigų interneto svetainių kūrimo, testavimo ir įvertinimo metodinių rekomendacijų patvirtinimo“ (2013 m. gegužės 23 d. įsakymo Nr. T-72 redakcija);

- Reikalavimai Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos informacinių sistemų bei taikomosios programinės įrangos kokybės garantijai ir priežiūros paslaugoms, patvirtinti Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2008 m. gruodžio 30 d. įsakymu Nr. V-390 „Dėl Valstybinės mokesčių inspekcijos informacinių sistemų saugos reikalavimų ir reikalavimų Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos informacinių

sistemų bei taikomosios programinės įrangos kokybės garantijai ir priežiūros paslaugoms“ (2019 m. sausio 17 d. įsakymo Nr. V-20 redakcija);

- Valstybės informacinių sistemų gyvavimo ciklo valdymo metodika, patvirtinta Informacinės visuomenės plėtros komiteto prie susisiekimo ministerijos direktoriaus 2014 m. vasario 25 d. įsakymu Nr. T-29 „Dėl valstybės informacinių sistemų gyvavimo ciklo valdymo metodikos patvirtinimo“;

- Valstybinės mokesčių inspekcijos informacinių sistemų duomenų saugos nuostatai, patvirtinti Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2005 m. spalio 10 d. įsakymu Nr. V-197 „Dėl Valstybinės mokesčių inspekcijos informacinių sistemų duomenų saugos nuostatų patvirtinimo“ (2021 m. liepos 20 d. įsakymo V-281 redakcija);

- Valstybinės mokesčių inspekcijos interneto ir intraneto svetainių (e. VMI portalo) tvarkymo taisyklės, patvirtintos Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2014 m. rugpjūčio 24 d. įsakymu Nr. V-307 „Dėl Valstybinės mokesčių inspekcijos interneto ir intraneto svetainių (e. VMI portalo) tvarkymo taisyklių patvirtinimo“ (2021 m. vasario 3 d. įsakymo Nr. V-54 redakcija);

- Valstybinės mokesčių inspekcijos projektų valdymo taisyklės, patvirtintos Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2007 m. sausio 24 d. įsakymu Nr. V-48 „Dėl Valstybinės mokesčių inspekcijos projektų valdymo taisyklių patvirtinimo“ (2022 m. sausio 7 d. įsakymo Nr. V-18 redakcija);

- Valstybinės mokesčių inspekcijos valstybės informacinių išteklių steigimo, kūrimo, diegimo, priežiūros ir likvidavimo taisyklės, patvirtintos Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2006 m. birželio 12 d. įsakymu Nr. V-216 „Dėl Valstybinės mokesčių inspekcijos informacinių sistemų bei taikomosios programinės įrangos kūrimo, diegimo, ir techninės priežiūros taisyklių patvirtinimo“ (2012 m. lapkričio 29 d. įsakymo Nr. V-443 redakcija).

3.10. Reikalavimai kokybės garantijai

3.10.1. Bendri reikalavimai

3.10.1.1. TIEKĖJAS likus 20 darbo dienų iki PROJEKTO pabaigos, su UŽSAKOVU suderina garantinių įsipareigojimų vykdymą - abi ŠALYS pasitvirtina KOKYBĖS GARANTIJOS PASLAUGOS teikimo tvarką bei esant poreikiui, atnaujina VMI IT išteklių grupių ir reikalingų teisių sąrašą, pateikia kitus reikalingus dokumentus. KOKYBĖS GARANTIJOS PASLAUGOS dalys turi būti inicijuojamos, apskaitomos ir analizuojamos tik naudojant VMI prie FM Pagalbos tarnybos taikomąją programinę įrangą (VMI PT TPI) vadovaujantis Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos informacinių technologijų procesų valdymo taisyklių, patvirtintų Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2008 m. rugsėjo 23 d. įsakymu Nr. V-299 (2015 m. liepos 30 d. įsakymo Nr. V-343 redakcija), nuostatomis;

3.10.1.2. Kokybės garantijos metu TIEKĖJAS įsipareigoja išspręsti visas likusias bandomosios eksploatacijos metu identifikuotas mažas klaidas ir VMI prie FM Pagalbos tarnybos nukreiptas klaidas. Klaidos sprendžiamos pagal jų kritiškumą (pirmiausiai kritinės klaidos, po to didelės klaidos, po to kitos klaidos) ir registravimo tvarką (pirmiausia sprendžiami anksčiausiai užregistruotos klaidos). Esant būtinybei UŽSAKOVAS, suderinusi su TIEKĖJU, gali pakeisti klaidos sprendimo prioritetą;

3.10.1.3. ITIS_EU SME privalo gerai dirbti, būti patikima, greitai atstatoma po atsiradusios klaidos (nėra nustatyta 3.10.1.2. punkte aprašytų klaidų). Visi veiksmai su ITIS_EU SME bei duomenimis turi būti fiksuojami;

3.10.1.4. Visos TIEKĖJO vykdyti perduodamos diegimo instrukcijos turi būti nekodautos ir turi būti galimybė peržiūrėti jų turinį prieš vykdymą;

3.10.1.5. ITIS_EU SME nekoduoti programiniai tekstai pateikiami kartu su visomis perkompiliavimui reikalingomis bibliotekomis;

3.10.1.6. ITIS_EU SME dokumentaciją kartu su programiniu kodu bei diegimo instrukcijomis TIEKĖJAS pagal UŽSAKOVĄ ir TIEKĖJO tarpusavyje suderintoje PASLAUGOS teikimo tvarkoje nurodytas nuostatas talpina SVN, išlaikant ITIS_EU SME posistemių diegimo proceso principus;

3.10.1.7. Kartu su PASLAUGOS dalies priėmimo – perdavimo aktu turi būti pateikta atskira suvestinė, kurioje nurodoma visa SVN saugoma PASLAUGOS teikimo metu pateikta ir suderinta dokumentacija, instaliaciniai paketai, programinis kodas, diegimo instrukcijos, ataskaitos ir kita su PASLAUGOS teikimu susijusi informacija;

3.10.1.8. PASLAUGOS turi būti teikiamos taip, kad sukurta ir (ar) modernizuota programinė įranga (PASLAUGOS dalys) galėtų funkcionuoti realaus laiko režimu, tiek vykdant tokios programinės įrangos bandomąją eksploataciją, tiek jai taikant kokybės garantiją;

3.10.2. Privalomi pagrindiniai reikalavimai paslaugų kokybei:

3.10.2.1. PASLAUGOS kokybė turi atitikti PASLAUGAI keliamus REIKALAVIMUS, kurie numatyti PASLAUGOS techninėje specifikacijoje;

3.10.2.2. Jeigu PASLAUGOS sudėtyje esanti programinė įranga negalės tinkamai veikti dėl to, kad TIEKĖJAS neįtraukė į PASLAUGOS kainą visų reikalingų su taikomosios programinės įrangos eksploatacija susijusių išlaidų už laikotarpį nuo pirkimo SUTARTIES pasirašymo dienos iki PASLAUGOS dalių kokybės garantijos pabaigos, programinės įrangos veikimas bus atstatomas TIEKĖJO sąskaita;

3.10.2.3. Jei PASLAUGOS dalių, kurių kokybės garantinius įsipareigojimus pagal pirkimo SUTARTį vykdo vienas TIEKĖJAS, modernizavimą ir / ar plėtrą atliko kitas TIEKĖJAS, pastarajam pereina visi funkciškai glaudžiai tarpusavyje susijusių PASLAUGOS dalių kokybės garantiniai įsipareigojimai;

3.10.2.4. Tuo atveju, jeigu TIEKĖJAS atlieka bendrųjų ITIS_EU ir/ar kitų VMI prie FM informacinių sistemų dalių modernizavimą, TIEKĖJAS privalo perimti modernizuotų ITIS_EU ir/ar kitų VMI prie FM informacinių sistemų komponentų kokybės užtikrinimo garantiją ir klaidų taisymą bei savo sąskaita ištaisyti visas jo modernizuotų ITIS_EU ir/ar kitų VMI prie FM informacinių sistemų dalių klaidas, o jeigu dėl tokių klaidų būtų pažeistas ITIS_EU ir/ar kitų VMI prie FM informacinių sistemų saugumas, jam būtų taikomos sankcijos proporcingos patirtai žalai.

3.10.3. Privalomi pagrindiniai reikalavimai kokybės garantijai:

3.10.3.1. Visoms PASLAUGOS dalims (sudėtinėms dalims pagal Civilinį kodeksą), kurioms pagal Civilinį kodeksą būtų galimybė sutartiniu įsipareigojimu suteikti kokybės garantijos terminą, SUTARTIMI suteikiamas Civiliniame kodekse numatytas, tačiau ne trumpesnis nei 24 mėnesių kokybės garantijos terminas, kurio pradžia laikoma paskutinė bandomosios eksploatacijos diena. PASLAUGOS dalims, kurios yra priimamos anksčiau negu paskutinė PASLAUGOS dalis, nuo bandomosios eksploatacijos pabaigos iki bendros kokybės garantijos pradžios taip pat galioja kokybės garantija;

3.10.3.2. Kokybės garantijos objektas yra visos PASLAUGOS dalys, kurios yra perduotos UŽSAKOVUI, t. y. pasirašytas atitinkamos PASLAUGOS dalies priėmimo–perdavimo aktas;

3.10.3.3. Kokybės garantiniai įsipareigojimai negali būti skaidomi į atskirus garantinius įsipareigojimus atskiroms funkciškai glaudžiai tarpusavyje susijusioms PASLAUGOS dalims (pvz., programinės įrangos moduliams), tai taip pat reiškia, kad:

3.10.3.3.1. baziniam funkcionalumui (moduliams, užtikrinantiems kitų modulių sąveiką, aprūpinantiems pastaruosius reikiama informacija, leidžiantiems valdyti kitų modulių funkcionavimą ir pan.) garantiniai įsipareigojimai taikomi ne trumpiau nei vėliausiai pasibaigiantys garantiniai įsipareigojimai priklausomiems moduliams;

3.10.3.3.2. atlikus vienos susijusios PASLAUGOS dalies modernizavimą ar sukūrus naują glaudžiai susijusią PASLAUGOS dalį, kokybės garantija pratęsiama visoms glaudžiai susijusioms PASLAUGOS dalims.

3.10.3.4. Jeigu naudojimosi PASLAUGOS dalimi metu paaiškės, kad UŽSAKOVUI atitenkanti TIEKĖJO perduota PASLAUGOS dalis neatitinka PASLAUGOS dokumentacijoje ar

SUTARTYJE pateiktų REIKALAVIMŲ, kurie būtini tokiai PASLAUGOS daliai, TIEKĖJAS tokią PASLAUGOS dalį taiso savo lėšomis ir resursais;

3.10.3.5. Jei TIEKĖJAS nesilaiko PASLAUGOS atlikimo terminų, kokybės garantijos terminas pratęsiamas laikotarpiui nuo pranešimo per VMI prie FM Pagalbos tarnybą nukreipimo TIEKĖJUI apie PASLAUGOS dalies klaidą iki tokios PASLAUGOS dalies klaidos pašalinimo momento, kai UŽSAKOVAS patvirtina tokios klaidos pašalinimą;

3.10.3.6. Sugadintų bei prarastų ITIS_EU SME duomenų atstatymą, kai gedimo priežastis yra TIEKĖJO pateiktos (įdiegtos) priemonės (programinė įranga, sukurta duomenų bazė, įdiegta technologija ir pan.) netinkamas veikimas arba jos neveikimas, TIEKĖJAS atlieka savo lėšomis arba iš savo lėšų padengia su duomenų atstatymu susijusias išlaidas. Be to, kompensuoja UŽSAKOVO patirtus nuostolius, atsiradusius dėl šių sugadintų arba prarastų duomenų.

3.10.4. *Privalomi pagrindiniai reikalavimai kokybės garantijos PASLAUGOS atlikimo terminams:*

3.10.4.1. Teikdamas kokybės garantiją, TIEKĖJAS privalo kaip įmanoma greičiau patikslinti informaciją apie klaidos rimtumą bei apie preliminarų numatomą klaidos pašalinimo terminą;

3.10.4.2. Klaidos klasifikuojamos:

3.10.4.2.1. kritinė klaida (VMI prie FM Pagalbos tarnyboje registruoto incidento nukreiptos išorės užduoties prioritetas – 1) – kai nustatyta klaida, dėl kurios ITIS_EU SME naudotojas negali vykdyti numatytų būtinų funkcijų ir nežinomas joks kitas alternatyvus šios funkcijos vykdymas;

3.10.4.2.2. didelė klaida (VMI prie FM Pagalbos tarnyboje registruoto incidento nukreiptos išorės užduoties prioritetas – 2) – tai nuolat pasikartojanti IS veikimo klaida, dėl kurios IS veikimas tampa nestabilus ir (ar) nesaugus ir kuri kliudo IS naudotojui vykdyti būtinas funkcijas, tačiau yra žinomas alternatyvus funkcijos vykdymas;

3.10.4.2.3. kita klaida (VMI prie FM Pagalbos tarnyboje registruoto incidento nukreiptos išorės užduoties prioritetas – 3) – IS veikimo klaida, dėl kurios IS naudotojas funkcijų vykdymą atlieka, tačiau jos atliekamos kitokiu nei įprastas nuoseklumu arba gautas rezultatas yra nevisas, arba gautas rezultatas nesutampa su rezultatu, gautu kitais būdais, arba galimi kai kurių parametrų reikšmių nukrypimai nuo nurodytų IS dokumentuose, arba pastebėti dokumentacijos netikslumai, arba sulėtėja IS veikimas, arba gali susidaryti grėsmė elektroninės informacijos saugai.

3.10.4.3. Klaidos / konsultacijos atvejams numatomi tokie įvykdymo terminai, skaičiuojant nuo klaidos nukreipimo / konsultacijos užsakymo per VMI prie FM Pagalbos tarnybą TIEKĖJUI momento iki klaidos pašalinimo / konsultacijos suteikimo (bei pakeičiant VMI prie FM Pagalbos tarnyboje incidento statusą į „Išspręstas“):

- kritinės klaidos atveju – ne daugiau kaip 3 valandos. Jei per 3 valandas kritinės klaidos atvejo pašalinti nepavyksta, TIEKĖJAS UŽSAKOVUI padeda įvykdyti reikiamas funkcijas alternatyviomis priemonėmis. Tokiu atveju TIEKĖJAS kritinę klaidą įsipareigoja pašalinti per 8 darbo valandas, skaičiuojant nuo kritinės klaidos pirminio nukreipimo per VMI prie FM Pagalbos tarnybą TIEKĖJUI momento;

- didelės klaidos atveju – ne daugiau kaip 16 darbo valandų. Jei per 16 darbo valandų didelės klaidos atvejo pašalinti nepavyksta, TIEKĖJAS UŽSAKOVUI padeda įvykdyti reikiamą funkciją alternatyviomis priemonėmis. Tokiu atveju TIEKĖJAS didelės klaidos atvejį įsipareigoja pašalinti per 40 darbo valandų, skaičiuojant nuo didelės klaidos pirminio nukreipimo per VMI prie FM Pagalbos tarnybą TIEKĖJUI momento;

- kitos klaidos atveju – ne daugiau kaip 40 darbo valandų. Jei per 40 darbo valandų klaidos atvejo pašalinti nepavyksta, TIEKĖJAS UŽSAKOVUI padeda įvykdyti reikiamą funkciją alternatyviomis priemonėmis. Tokiu atveju TIEKĖJAS klaidos atvejį įsipareigoja pašalinti per 80 darbo valandų, skaičiuojant nuo kitos klaidos pirminio nukreipimo per VMI prie FM Pagalbos tarnybą TIEKĖJUI momento;

- konsultacijos atveju – TIEKĖJAS labai skubios konsultacijos atveju (VMI prie FM Pagalbos tarnyboje registruoto incidento nukreiptos išorės užduoties prioritetas – 1)) įsipareigoja suteikti konsultaciją per 8 darbo valandas, skubios konsultacijos atveju ((VMI prie FM Pagalbos tarnyboje registruoto incidento nukreiptos išorės užduoties prioritetas – 2)) įsipareigoja konsultaciją suteikti per 40 darbo valandų. Konkretų konsultacijos suteikimo laiką nustato UŽSAKOVAS.

3.10.4.4. Konkretūs terminai, apibrėžti 3.10.4.3. punkte, nustatomi sutartiniu įsipareigojimu pagal IS eksploatavimo poreikius ir sprendimo galimybes. Šie terminai skaičiuojami pagal oficialiai nustatytas IS darbo valandas;

3.10.4.5. TIEKĖJAS už kiekvieną pavėluotą valandą, suėjusią pasibaigus 3.10.4.3. punkte nurodytam TIEKĖJO įsipareigojimų terminui, šalinant klaidą ar suteikiant konsultaciją, moka UŽSAKOVUI 0,0006 proc., o kritinės klaidos atveju už kiekvieną pavėluotą valandą – 0,005 proc. SUTARTIES kainos be PVM dydžio baudą. Bauda negali būti mažesnė nei 4 Eurų už darbo valandą, kritinės klaidos atveju – mažesnė nei 30 Eurų už darbo valandą. Baudų suma negali viršyti 5 procentų visos SUTARTIES kainos be PVM. Klaidos sprendimo vėlavimo terminai fiksuojami akte, kurį pasirašo TIEKĖJO ir UŽSAKOVO atstovai. Jeigu TIEKĖJO atstovas nepagrįstai atsisako pasirašyti aktą, TIEKĖJAS pripažįsta, kad UŽSAKOVO užfiksuotas klaidos sprendimo vėlavimo terminas yra teisingas;

3.10.4.6. Jei klaida nepašalinama per 3.10.4.3. punkte nurodytą terminą, baudą TIEKĖJAS sumoka UŽSAKOVUI mokėjimo pavedimu ne vėliau kaip per 5 darbo dienas nuo UŽSAKOVO raštu pateikto reikalavimo gavimo dienos;

3.10.4.7. TIEKĖJUI pagal pirkimo SUTARTĮ pritaikytų sankcijų sumos negali būti dengiamos iš TIEKĖJUI pagal pirkimo SUTARTĮ priklausančių gauti sumų;

3.10.4.8. Baudos sumokėjimas neatleidžia TIEKĖJO nuo pareigos pašalinti klaidą;

3.10.4.9. TIEKĖJAS privalo nedelsdamas atstatyti IS veikimą, įvykus klaidoms, susijusioms su naujai diegiamais funkcionalumais. Tokios klaidos klasifikuojamos kaip kritinės klaidos.

3.11. Duomenų saugos ir informacijos konfidencialumo reikalavimai (ši informacija užpildoma tuo atveju, jeigu, vykdam SUTARTĮ, tiekėjui bus prieinama / perduodama konfidenciali ar su duomenų apsauga susijusi informacija):

3.11.1. Jeigu PASLAUGOS vykdymo metu TIEKĖJUI bus būtina tvarkyti realius duomenis, TIEKĖJAS ir UŽSAKOVAS turės pasirašyti UŽSAKOVO Duomenų tvarkymo sutartį. TIEKĖJUI bus sudarytos sąlygos susipažinti su Duomenų tvarkymo sutarties tekstu ir teikti pasiūlymus dėl šios sutarties sąlygų. TIEKĖJAS turės teisę tvarkyti realius duomenis tik po duomenų tvarkymo sutarties pasirašymo;

3.11.2. ITIS_EU SME turi būti įgyvendintos kontrolės priemonės, užtikrinančios perduodamų ar gaunamų duomenų vientisumą ir konfidencialumą, kad duomenys nebuvo iškraipyti ar neleistinai atskleisti jų perdavimo metu;

3.11.3. Visus su PASLAUGA susijusius darbus TIEKĖJAS turės atlikti ITIS_EU SME kūrimo aplinkoje, kuri savo infrastruktūra turi atitikti realią ITIS_EU SME aplinką;

3.11.4. Visi sukurti ar modernizuoti programiniai moduliai, susiję su ITIS_EU kūrimu, plėtra ir/ ar technine priežiūra, į realią ITIS_EU SME aplinką turės būti diegiami vadovaujantis UŽSAKOVO patvirtinta versijų ir pakeitimų valdymo procedūromis;

3.11.5. Tuo atveju, jeigu TIEKĖJAS atlieka bendrųjų ITIS_EU ir/ar kitų VMI informacinių sistemų dalių modernizavimą, TIEKĖJAS privalo perimti modernizuotų ITIS_EU ir/ar kitų VMI informacinių sistemų komponentų kokybės užtikrinimo garantiją ir klaidų taisymą bei savo sąskaita ištaisyti visas jo modernizuotų ITIS_EU ir/ar kitų VMI informacinių sistemų dalių klaidas, o jeigu dėl tokių klaidų būtų pažeistas ITIS_EU ir/ar kitų VMI informacinių sistemų saugumas, jam būtų taikomos sankcijos, proporcingos patirtai žalai;

3.11.6. ITIS_EU SME turi būti apsaugotas nuo pagrindinių per tinklą vykdomų atakų: SQL įskverbties (angl. SQL injection), įterptinių instrukcijų atakų (angl. Cross-site scripting),

atkirtimo nuo PASLAUGOS (angl. DOS). Pagrindinių per tinklą vykdomų atakų sąrašas skelbiamas Atviro tinklo programų saugumo projekto (angl. The Open Web Application Security Project (OWASP)) interneto svetainėje www.owasp.org;

3.11.7. Sukūrus naują ITIS_EU SME komponentą ar atlikus esminį esamų ITIS_EU SME komponentų keitimą, po kurio šių komponentų kokybės garantija pereina TIEKĖJUI, TIEKĖJAS turi užtikrinti ITIS_EU SME komponentų atsparumą įsilaužimui. Tiekėjas tokiu atveju privalo atlikti atsparumo įsilaužimui vertinimą ir jo rezultatų ataskaitą pateikti UŽSAKOVUI. TIEKĖJAS privalo pašalinti visus trūkumus, kuriuos nustatė pats, taip pat, kuriuos nustatė UŽSAKOVAS ar nepriklausomas atsparumo įsilaužimui vertinimo paslaugų tiekėjas;

3.11.8. TECHNINĖJE SPECIFIKACIJOJE nustatyto darbo režimu turi būti užtikrintas nustatytas prieinamumo prie ITIS_EU SME lygis visu SUTARTIES galiojimo laikotarpiu;

3.11.9. TIEKĖJAS teikdamas ITIS_EU SME PASLAUGĄ turi atlikti informacijos saugumo rizikos analizę, siekdamas apibrėžti aplinką, kurioje ITIS_EU SME veikia ar veiks, išsiaiškinti galimas grėsmes ir pažeidžiamumus, nustatyti informacijos saugumo rizikas. Informacijos saugumo rizikos analizė turi būti atliekama ir po ITIS_EU SME modernizavimo. Informacijos saugumo rizikos analizės rezultatai turi būti pateikti informacijos saugumo rizikos analizės ataskaitoje;

3.11.10. TIEKĖJAS galės vykdyti SUTARTĮ tik TIEKĖJO specialistams (komandos nariams) pasirašius Konfidencialumo pasižadėjimo formą, patvirtintą Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2019 m. sausio 7 d. įsakymu Nr. V-4 „Dėl duomenų tvarkymo sutarties ir konfidencialumo pasižadėjimo“;

3.11.11. IS duomenų praradimo masto rodiklis (RPO) turi būti užtikrintas - 0 (nulinis).

3.11.12. TIEKĖJAS privalo:

3.11.12.1. neskleisti ir neperduoti kitiems fiziniams ar juridiniams asmenims iš UŽSAKOVO gautos informacijos, užtikrinti tinkamą jos saugą, laikyti ją paslapyje net pasibaigus pirkimo SUTARTIES galiojimui;

3.11.12.2. apie informacijos paskleidimo ar perdavimo kitiems fiziniams ar juridiniams asmenims faktą nedelsiant, ir jei įmanoma, praėjus ne daugiau kaip 24 valandoms nuo galimo informacijos saugumo incidento nustatymo, informuoti UŽSAKOVĄ el. p. duomeni_sauga@vmi.lt ir imtis visų būtinų veiksmų užkirsti kelią tolesniam informacijos paskleidimui;

3.11.12.3. atlyginti informacijos neteisėto pavišinimo nuostolius.

3.11.13. TIEKĖJAS turi užtikrinti ir garantuoti, kad TIEKĖJO darbuotojai, kurie atliks PASLAUGĄ, saugos paslapyje viešai neskelbtiną informaciją tiek PASLAUGOS teikimo metu, tiek pasibaigus SUTARČIAI, tiek pasibaigus TIEKĖJO darbuotojų darbo ar kitokiems santykiams su TIEKĖJU;

3.11.14. TIEKĖJUI ir jo darbuotojams, pažeidusiems informacijos saugumo (konfidencialumo, vientisumo ir prieinamumo) reikalavimus, gali būti taikoma Lietuvos Respublikos baudžiamajame kodekse, Lietuvos Respublikos administracinių nusižengimų kodekse ir kituose Lietuvos Respublikos teisės aktuose numatyta atsakomybė;

3.11.15. PASLAUGOS atlikimo metu turi būti vadovaujamasi 2016 m. balandžio 27 d. Europos Parlamento ir Tarybos reglamento (ES) 2016/679 dėl fizinių asmenų apsaugos tvarkant asmens duomenis ir dėl laisvo tokių duomenų judėjimo ir kuriuo panaikinama Direktyva 95/46/EB (Bendrasis duomenų apsaugos reglamentas), Lietuvos Respublikos kibernetinio saugumo įstatymo, Organizacinių ir techninių kibernetinio saugumo reikalavimų, taikomų kibernetinio saugumo subjektams, aprašo, patvirtinto Lietuvos Respublikos Vyriausybės 2018 m. rugpjūčio 13 d. nutarimu Nr. 818 „Dėl Lietuvos Respublikos kibernetinio saugumo įstatymo įgyvendinimo“ ir kitų teisės aktų nuostatomis.

3.11.16. ITIS_EU SME turi būti įgyvendintos įvestos elektroninės informacijos tikslumo, užbaigtumo ir patikimumo tikrinimo priemonės.

3.11.17. TIEKĖJUI viešai neskelbtina informacija teikiama tik tokios apimties, kuri būtina PASLAUGAI atlikti. TIEKĖJAS turi imtis visų teisinių, techninių ir organizacinių priemonių gautai informacijai apsaugoti.

3.11.18. IS kūrimas ir priežiūra, įskaitant ir patį kuriamą posistemį, turi nustatytus valstybės IS kūrimo, plėtros, techninės priežiūros informacijos saugos reikalavimus, kurie taikomi pirmos kategorijos valstybės IS.

3.11.19. Pirmos kategorijos valstybės IS apibrėžimas yra nurodytas Elektroninės informacijos, sudarančios valstybės informacinius išteklius, svarbos įvertinimo ir valstybės informacinių sistemų, registrų ir kitų informacinių sistemų klasifikavimo gairių apraše, patvirtintame Lietuvos Respublikos Vyriausybės 2013 m. liepos 24 d. nutarimu Nr. 716, o šiai kategorijai keliami reikalavimai yra nurodyti Techninių valstybės registrų (kadastrų), žinybinių registrų, valstybės informacinių sistemų ir kitų informacinių sistemų elektroninės informacijos saugos reikalavimų apraše, patvirtintame Lietuvos Respublikos krašto apsaugos ministro 2020 m. gruodžio 4 d. įsakymu Nr. V-941 „Dėl Techninių valstybės registrų (kadastrų), žinybinių registrų, valstybės informacinių sistemų ir kitų informacinių sistemų elektroninės informacijos saugos reikalavimų aprašo ir Informacinių technologijų saugos atitikties vertinimo metodikos patvirtinimo“, Organizacinių ir techninių kibernetinio saugumo reikalavimų, taikomų kibernetinio saugumo subjektams, apraše, patvirtintame Lietuvos Respublikos Vyriausybės 2018 m. rugpjūčio 13 d. nutarimu Nr. 818 „Dėl Nacionalinės kibernetinio saugumo strategijos patvirtinimo“ ir kituose Lietuvos Respublikos teisės aktuose.

3.11.20. PASLAUGOS vykdymui TIEKĖJO darbuotojams prieiga suteikiama tik iš UŽSAKOVO tam tikslui paruoštų darbo vietų per VMI įdiegtą AVKS, vadovaujantis Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos informacinių sistemų naudotojų administravimo taisyklių, patvirtintų Valstybinės mokesčių inspekcijos prie Lietuvos Respublikos finansų ministerijos viršininko 2007 m. gruodžio 29 d. įsakymu Nr. V-455 (2018 m. rugpjūčio 16 d. įsakymo Nr. V-403 redakcija), nuostatomis (toliau – Naudotojų administravimo taisyklės). Nuotoliniai prisijungimai gali būti leidžiami tik atitinkamais teisės aktais bei Naudotojų administravimo taisyklėmis nustatyta tvarka.

3.11.21. TIEKĖJAS turi užtikrinti ir garantuoti, kad TIEKĖJO darbuotojai, kurie atliks PASLAUGĄ, bus supažindinti su Informaciniu pranešimu apie paslaugų / prekių teikėjų darbuotojų asmens duomenų tvarkymą (su pranešimo forma galima susipažinti <https://www.vmi.lt/evmi/documents/20142/837401/PASLAUGU+PREKIU+TEIKEJU+DARBUOTOJU+ASMENS+DUOMENU+TVARKYMAS.pdf>). Supažindinimas privalo būti atliktas iki PASLAUGOS teikimo pradžios.

3.11.22. TIEKĖJO pasitelktas informacijos saugumo ekspertas (-ai) privalo vertinti, ar SUTARTIES vykdymo metu TIEKĖJO priimami sprendimai atitinka informacijos saugumo reikalavimus.

3.11.23. TIEKĖJAS, atlikęs PASLAUGĄ, privalo pateikti galutinę saugumo būklės analizę, kurioje turi būti nurodyta, kokiomis konkrečiais priemonėmis įgyvendinti vsiešojo pirkimo metu kelti informacijos saugumo reikalavimai, kokie pažeidžiamumai nustatyti ir kaip jie buvo pašalinti, ar buvo PASLAUGOS teikimo metu užfiksuota informacijos saugumo incidentų, jeigu taip, tai kokie konkrečiai incidentai buvo užfiksuoti ir kokios priemonės buvo parinktos jiems suvaldyti bei kita su informacijos sauga susijusi informacija.

3.11.24. Praplėstuose/modifikuotuose ar naujai sukurtuose ITIS_EU SME moduluose ar jos dalyse turi būti fiksuojami ir perduodami centralizuotam VMI informacinių sistemų auditavimo sprendiniui tinkamu formatu šie įrašai:

- sistemos ir/ ar jos elementų, įskaitant audito funkcijos, įjungimas ir išjungimas ar perkrovimas;
- sėkmingi ir nesėkmingi bandymai prisijungti ir atsijungti;

- visi naudotojų vykdomi veiksmai, apimant veiksmus su duomenimis, naudotojų ar jų grupių bei administratorių teisių naudotis sistemos ištekliais pakeitimus, sistemos parametrų, laiko ir / ar datos pakeitimus ir kitus veiksmus;

- kiti VMI prie FM nurodyti įrašai apie elektroninės informacijos saugai svarbius įvykius.

3.11.25. Fiksuojamų įrašų laiko žymos turi būti sinchronizuotos ne mažiau kaip vienos sekundės tikslumu ir turi būti naudojami mažiausiai 2 laiko sinchronizavimo šaltiniai.

3.11.26. Kiekvienas fiksuojamas įrašas turi apimti šiuos duomenis: veiksmą atlikusio naudotojo vardą (prisijungimo identifikatorių), atliktą veiksmą (turi būti fiksuojamas naudotojo sąsajoje atliktas veiksmas), su kokio asmens (-ų) duomenimis atliktas veiksmas, objekto, su kuriuo atliktas veiksmas, identifikatorių, naudotojo įvestą asmens duomenų naudojimo tikslą, įrenginio, susijusio su įvykiu, vardą (identifikatorių), įvykio rūšį / pobūdį, veiksmo arba įvykio datą ir tikslų laiką, įvykio rezultatą ir kitą informacijos saugai svarbią informaciją (suderintą su VMI).

3.11.27. ITIS_EU SME naudotojų veiksmai turi būti fiksuojami naudotojo sąsajoje konkretų atliktą veiksmą atspindinčiais pavadinimais. Be to, turi būti pateikiamas detalus fiksuojamų veiksmų žinynas.

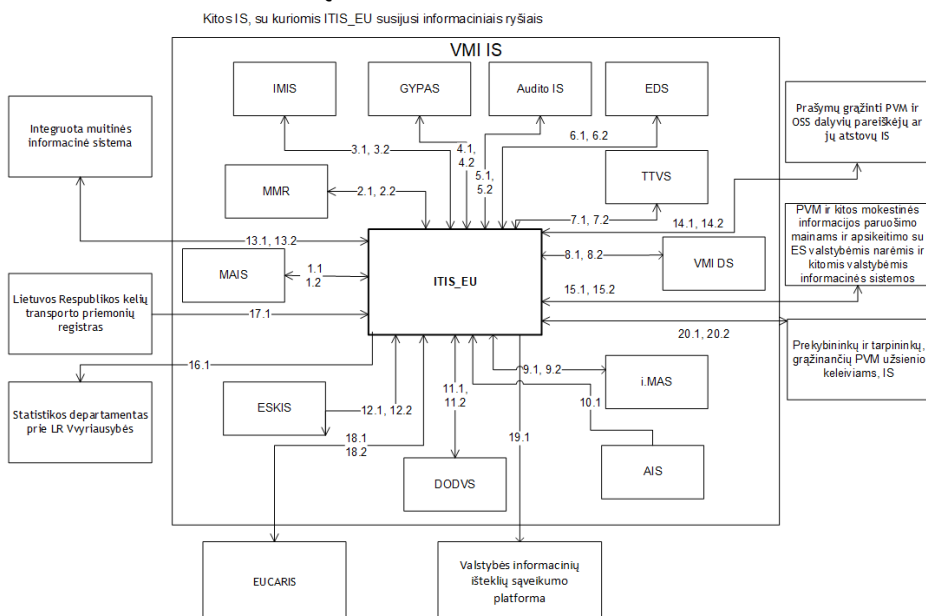
3.11.28. TIEKĖJO darbuotojams draudžiama savavališkai atlikti diegimus bei kitokius konfigūravimo darbus.

3.11.29. Turi būti užtikrinamas saugių protokolų ir (arba) slaptažodžių naudojimas, kai duomenys perduodami išoriniais duomenų perdavimo tinklais, užtikrinant ITIS_EU SME taikomų sprendimų integralumą ir vientisumą.

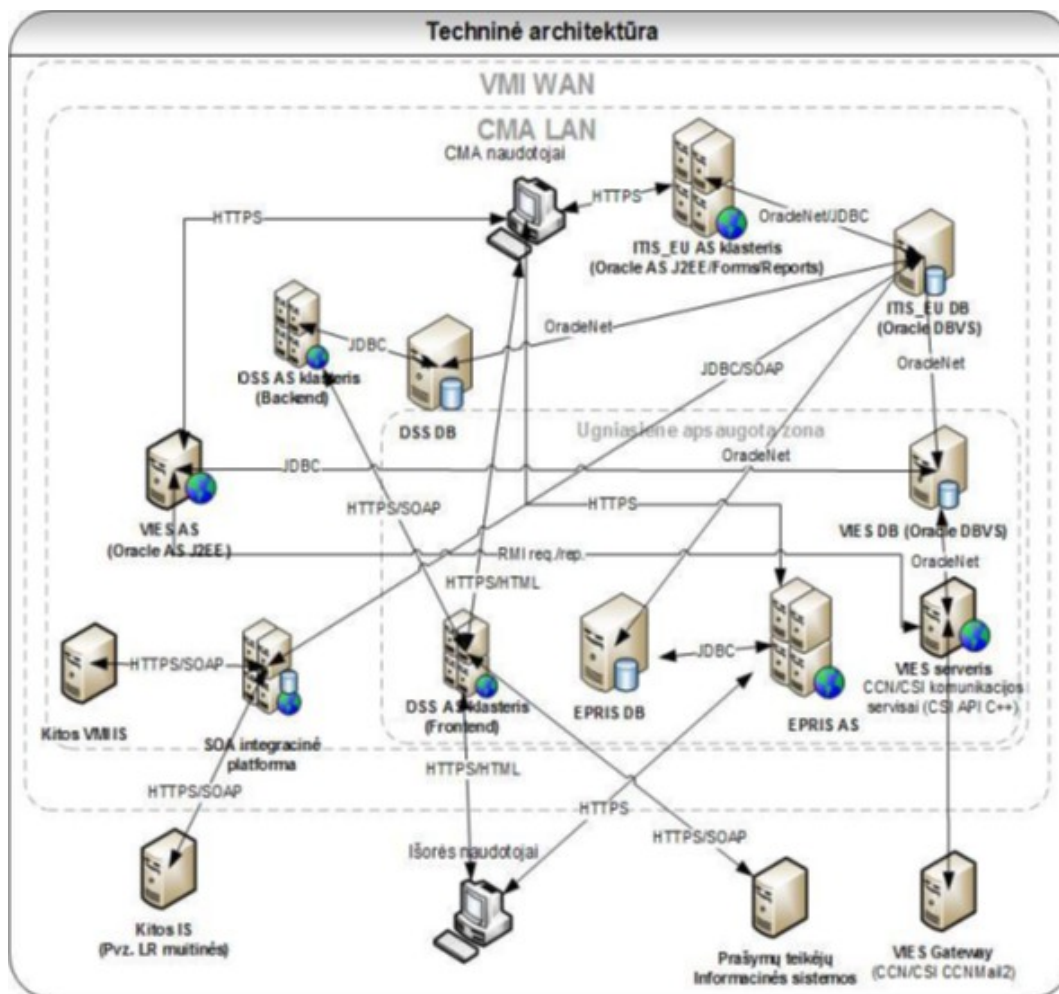
3.11.30.

3.12. Informacija apie pirkimo objektui galimai reikalingus duomenis ir sąryšius su kitomis VMI prie FM paslaugomis ar IS, būtinus integracijai vertinti (ši informacija užpildoma tuo atveju, jeigu tai susiję su pirkimo objektu):

3.12.1. ITIS_EU duomenų srautai:



3.12.2. ITIS_EU techninės įrangos infrastruktūra:



3.12.3. Kita VMI prie FM ir AVMI IT techninė infrastruktūra:

3.12.3.1. VMI prie FM ir AVMI sistemoje yra apie 3500 kompiuterių, 300 serverių, 1000 spausdintuvų, iš jų VMI prie FM 300 kompiuterių, 140 serverių, 70 spausdintuvų, 7 SAN diskinės saugyklos;

3.12.3.2. Personaliniuose kompiuteriuose naudojama tokia sisteminė programinė įranga:

3.12.3.2.1. Microsoft Windows XP; Microsoft Windows 7, Microsoft Windows 7 x64; Windows 8, Windows 10;

3.12.3.2.2. Microsoft Office arba ekvivalentiška programinė įranga suderinama su Microsoft Office programinėmis priemonėmis sukurtais duomenų failais ir galinti juos apdoroti;

3.12.3.2.3. Microsoft Edge aktuali versija ir aukštesnės;

3.12.3.2.4. Chrome 47 versija ir aukštesnės;

3.12.3.2.5. FireFox 38.4.0 versija ir aukštesnė;

3.12.3.2.6. Kita sisteminė programinė įranga reikalinga VMI prie FM funkcijoms vykdyti.

3.12.3.3. VMI prie FM ir AVMI funkcijoms vykdyti reikalingų informacinių sistemų funkcionavimo užtikrinimui naudojami tokie kompiuterių tinklai:

3.12.3.3.1. Vietiniai (lokalūs) kompiuterių tinklai (LAN);

3.12.3.3.2. Valstybinės mokesčių inspekcijos teritorinis kompiuterių tinklas (WAN);

3.12.3.3.3. Žiniatinklis (Internet).

3.12.3.3.4. Tinklo naudotojų aprašymo ir valdymo katalogai- Microsoft Active directory;

3.12.3.3.5. LAN diegiami VMI prie FM ir AVMI priklausančiose ar nuomojamose patalpose. Tinklai diegiami laidinio - UTP (Unshielded Twisted Pair) tinklo pagrindu. Skirtingų pastatų sujungimui naudojamos optinės linijos. Kompiuterinis radijo tinklas pastate diegiamas, jei tai būtina VMI prie FM funkcijų vykdymui;

3.12.3.3.6. Personaliniai kompiuteriai prie LAN jungiami per 100 Mbps ir 1Gbps prieigas.

3.12.4. TIEKĖJUI bus suteikta galimybė susipažinti su esamais sprendimais, apibrėžiančiais ITIS_EU architektūrą ir ITIS_EU sprendinius, kurie nėra viešai platinami, taip pat su kitų VMI prie FM informacinių sistemų, su kuriomis ITIS_EU realizuota integracija, infrastruktūra, tiek kiek tai reikalinga PASLAUGOS vykdymui.

OWNER: DG-TAXUD	ISSUE DATE: 22/02/2022	VERSION: 16.00
TAXATION AND CUSTOMS UNION DG SUBJECT: CCN2 Platform Integration Manual REF: CCN2-CIMA		
FRAMEWORK CONTRACT # TAXUD/2020/CC/161 SPECIFIC CONTRACT SC04		
STATUS: SfA		

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

Table of Contents

1.	MANAGEMENT SUMMARY	13
2.	INTRODUCTION	14
2.1	DOCUMENT PURPOSE	14
2.2	TARGET AUDIENCE	14
2.3	ASSUMPTIONS AND CONSTRAINTS	14
2.3.1	<i>Assumptions</i>	14
2.3.2	<i>Constraints</i>	14
2.4	STRUCTURE	15
3.	SYSTEM OVERVIEW	17
4.	GUIDANCE	18
4.1	HOW TO READ THIS DOCUMENT	18
4.1.1	<i>Architects</i>	18
4.1.2	<i>Project Managers</i>	18
4.1.3	<i>Developers</i>	18
4.1.4	<i>Security Experts</i>	19
4.1.5	<i>Partner Operators</i>	19
4.1.6	<i>CCN2 Business Users</i>	19
4.2	THE ROLE OF THE CCN2 PLATFORM	20
4.3	LIST OF OFFERED FEATURES	22
4.3.1	<i>Managed Interoperability</i>	22
4.3.2	<i>Security Enforcement</i>	23
4.3.3	<i>Federated Governance Facilities</i>	25
4.4	USE OF STANDARDS	25
4.4.1	<i>Namespaces</i>	28
4.4.2	<i>HTTP</i>	29
4.4.3	<i>URI, URL & URN</i>	30
4.4.4	<i>Web Service Description Language (WSDL 1.1)</i>	31
4.4.5	<i>SOAP 1.2</i>	31
4.4.6	<i>WS-Policy 1.5</i>	32
4.4.7	<i>WS-Addressing 1.0</i>	32
4.4.8	<i>WS-Security 1.1</i>	34
4.4.9	<i>WS-SecurityPolicy 1.2</i>	34

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

4.4.10	<i>SAML 2.0</i>	34
4.5	CCN2 PLATFORM ACTORS	35
4.5.1	<i>Partners And Organisations</i>	35
4.5.2	<i>Business System Owner</i>	35
4.5.3	<i>Service Provider</i>	35
4.5.4	<i>Service Consumer</i>	35
4.5.5	<i>Partner Development Team</i>	36
4.5.6	<i>Partner Operations Team</i>	36
4.6	CCN2 PLATFORM GOVERNANCE	36
4.7	CCN2 SECURITY MODEL	36
4.7.1	<i>CCN2 User Accounts Administration Model</i>	36
4.7.2	<i>Role-Based Access Control Model (RBAC)</i>	39
4.7.3	<i>Oracle Identity Management (OIM) Artefacts</i>	40
4.7.4	<i>CCN2 User Account Management Process</i>	43
4.7.5	<i>CCN2 Authorisation Management Process</i>	45
4.7.6	<i>Web Service Lifecycle Process</i>	45
4.7.7	<i>CCN2 Default Roles Per CCN2 Actor</i>	45
4.8	CCN2 SECURITY ENFORCEMENT	49
4.8.1	<i>Authentication Enforcement</i>	49
4.8.2	<i>CCN2 Identity Propagation</i>	49
4.8.3	<i>CCN2 Security Token and SAML Assertion</i>	50
4.8.4	<i>Authorisation Enforcement</i>	51
4.8.5	<i>Certificate Management</i>	51
4.8.6	<i>Confidentiality Enforcement</i>	52
4.8.7	<i>Integrity Enforcement</i>	53
4.9	CCN2 SERVICE CONNECTIVITY SERVICES	55
4.9.1	<i>Interconnectivity Capabilities</i>	55
4.9.2	<i>Mediation Capabilities</i>	56
4.9.3	<i>Service Endpoint Definitions</i>	58
4.9.4	<i>Supported Message Exchange Patterns (MEP)</i>	65
4.9.5	<i>Message Delivery Assurances</i>	78
4.9.6	<i>Service Endpoint Security Enforcement</i>	83
4.9.7	<i>Data-related Capabilities</i>	88
4.10	CCN2 MONITORING FACILITIES	88
4.10.1	<i>Service Monitoring</i>	88
4.11	ORACLE ACCESS MANAGER (OAM)	90
4.11.1	<i>Proxy Mechanism</i>	90

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

4.11.2	<i>Single Sign-On Mechanism</i>	91
4.11.3	<i>OAM Authorisation Enforcement</i>	92
4.11.4	<i>U2S Identity Propagation Mechanisms</i>	93
5.	DESIGN-TIME	99
5.1	INTRODUCTION	99
5.2	PLANNING THE USAGE OF CCN2	99
5.2.1	<i>Registering CCN2 Partners</i>	100
5.2.2	<i>Identifying CCN2 Interactions Requirements</i>	100
5.2.3	<i>Specifying Web Applications</i>	100
5.2.4	<i>Identifying Security Requirements</i>	100
5.3	DESIGNING SERVICE-ORIENTED SYSTEM-TO-SYSTEM INTERACTIONS	102
5.3.1	<i>Contract-First Approach</i>	102
5.3.2	<i>Specifying Services</i>	103
5.3.3	<i>Designing Services</i>	104
5.4	DESIGNING WEB-BASED USER-TO-SYSTEM INTERACTIONS	106
5.4.1	<i>Designing Web Applications</i>	106
6.	IMPLEMENTATION-TIME	108
6.1	INTRODUCTION	108
6.2	IMPLEMENTING WEB SERVICES	108
6.2.1	<i>Obtaining the Target Service Contract (WSDL)</i>	108
6.2.2	<i>Consuming a Service Exposed by the CCN2 Platform</i>	108
6.2.3	<i>Accepting Asynchronous Acknowledgement</i>	111
6.2.4	<i>Accepting Asynchronous Service Callback</i>	112
6.2.5	<i>Providing a service through the CCN2 Platform</i>	113
6.3	IMPLEMENTING WEB APPLICATIONS	116
6.4	INTEGRATING CCN2 SECURITY	116
6.4.1	<i>Applying User Authentication</i>	116
6.4.2	<i>Implementing Fine-Grained Authorisation</i>	119
6.4.3	<i>Applying Encryption and Decryption</i>	119
6.4.4	<i>Applying Digital Signatures</i>	121
7.	DEPLOYMENT-TIME	123
7.1	INTRODUCTION	123
7.2	CCN2 ENVIRONMENTS	123
7.3	EXPOSING A WEB SERVICE THROUGH THE CCN2 PLATFORM	123
7.3.1	<i>Deployment of CCN2 Endpoints</i>	123

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

7.3.2	<i>Deployment of Partner's Endpoints by the Service Providers</i>	124
7.3.3	<i>Requesting a Service Endpoint Deployment</i>	126
7.4	EXPOSING A WEB APPLICATION THROUGH THE CCN2 PLATFORM	127
7.5	FINAL SUBMISSION CHECK LIST	130
7.5.1	<i>Request Creation of Partner, Organisation and Users</i>	131
7.5.2	<i>Request Creation of Roles and Permissions</i>	131
7.5.3	<i>Request Deployment of a Service Endpoint</i>	131
7.5.4	<i>Request Deployment of a Web Application</i>	131
8.	RUNTIME	132
8.1	INTRODUCTION	132
8.2	ACCESSING WEB APPLICATIONS THROUGH THE CCN2 PLATFORM	132
8.2.1	<i>CCN2 Oracle Access Manager Authentication</i>	132
8.2.2	<i>Generation of Passwords at User Creation Time</i>	133
8.2.3	<i>Changing Password</i>	133
8.2.4	<i>Resetting Password</i>	135
8.3	ACCESSING CCN2 PLATFORM GOVERNANCE FACILITIES	135
8.3.1	<i>Managing CCN2 User Accounts</i>	135
8.4	CONNECTING TO THE CCN2 PLATFORM	148
8.4.1	<i>Member States access</i>	148
8.4.2	<i>X-DEV access</i>	150
9.	REFERENCES	152
9.1	GLOSSARY OF TERMS	152
9.2	ACRONYMS AND ABBREVIATIONS	155
9.3	REFERENCE DOCUMENTS	155
9.4	APPLICABLE DOCUMENTS	155
9.5	DOCUMENT CONVENTIONS	156
9.5.1	<i>Graphical Notations</i>	156
9.5.2	<i>XML InfoSet Notation</i>	156
10.	DOCUMENT HISTORY	157
ANNEXES		160
ANNEX A.	CCN2 PREDEFINED POLICIES	161
A.1	<i>CCN2 Web Service Policies</i>	161
A.2	<i>CCN2 Platform Configuration Policies</i>	163
ANNEX B.	CCN2 ERROR CODES	175
ANNEX C.	CCN2 NAMING CONVENTIONS	176

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

<i>C.1</i>	<i>Naming Conventions</i>	<i>176</i>
<i>C.2</i>	<i>Service Registration Artefact Naming Convention</i>	<i>180</i>
ANNEX D.	IMA ZIP PACKAGE CONTENT	181
ANNEX E.	ENDPOINT REFERENCE METADATA	183
<i>E.1</i>	<i>Partner Metadata</i>	<i>183</i>
<i>E.2</i>	<i>Organisation Metadata</i>	<i>183</i>
<i>E.3</i>	<i>Endpoint Reference (EPR) Metadata</i>	<i>183</i>
<i>E.4</i>	<i>IAM Metadata</i>	<i>184</i>
<i>E.5</i>	<i>Outbound KPS Metadata</i>	<i>184</i>
ANNEX F.	DOCUMENT TEMPLATES	187
<i>F.1</i>	<i>Bulk utility templates</i>	<i>187</i>
<i>F.1</i>	<i>Web Application Metadata</i>	<i>187</i>
ANNEX G.	CCN2 PLATFORM - CONNECTIVITY TESTS	188
<i>G.1</i>	<i>Test steps</i>	<i>188</i>
ANNEX H.	CCN2 PLATFORM - STANDARDS DEVIATIONS	191
<i>H.1</i>	<i>Third party identity propagation</i>	<i>191</i>

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

Table of Tables

Table 1: CCN2 Platform Features - Managed Interoperability.....	23
Table 2: CCN2 Platform Features – Security Enforcement.....	24
Table 3: CCN2 Platform Features – Federated Governance Facilities.....	25
Table 4: CCN2 Industry Standards.....	28
Table 5: Namespaces defined by the CCN2 Platform.....	28
Table 6: Namespaces defined by the standards used in the CCN2 Platform.....	29
Table 7: HTTP Status Codes.....	30
Table 8: WS-Addressing Endpoint Reference Information Model.....	32
Table 9: WS-Addressing Message Properties.....	33
Table 10: Delegated Administration Levels.....	38
Table 11: Business System Owner’s Default Roles.....	45
Table 12: Service Provider’s Default Roles.....	46
Table 13: Service Consumer’s Default Roles.....	46
Table 14: Partner Development Team Roles.....	47
Table 15: Partner Operations Team Roles.....	48
Table 16: CCN2 Message Header Attributes.....	70
Table 17: Activity Monitoring Header Attributes.....	71
Table 18: SAML specifications for user-to-system interactions.....	94
Table 19: Flow – SAML (User-To-System).....	98
Table 20: CCN2 Platform – connectivity details.....	150
Table 21: Glossary of Terms.....	155
Table 22: Reference Documents.....	155
Table 23: Applicable Documents.....	156
Table 24: Document Conventions.....	156
Table 25: Document History.....	159
Table 26: CCN2 Predefined Security Policies.....	163
Table 27: Configuration Entity Policies.....	165
Table 28: Identity and Access Management Policies.....	167
Table 29: Service Lifecycle Policies.....	172

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

Table 30: Connectivity between the Partner Workstation and OIM.....	189
Table 31: Connectivity between the Partner Workstation and AAG.....	190
Table 32: Third Party Identity Propagation and SOAP Role.....	191

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

Table of Figures

Figure 1-1: CCN2 Functional Capabilities - Overview.....	13
Figure 4-2: CCN2 Managed Interactions.....	20
Figure 4-3: CCN2 Delegated Administration Model.....	37
Figure 4-4: CCN2 User Accounts Administration Model.....	38
Figure 4-5: CCN2 Delegated Administration Model - Scenarios.....	39
Figure 4-6: CCN2 Authorisation Model.....	40
Figure 4-7: CCN2 User Accounts Lifecycle.....	43
Figure 4-8: CCN2 User Accounts Management Process.....	44
Figure 4-9: The CCN2 Platform security Layers.....	52
Figure 4-10: Digital Signature Creation Process.....	54
Figure 4-11: Digital signature structure.....	54
Figure 4-12: Digital Signature Verification Process.....	55
Figure 4-13: CCN2 Service Connectivity Service.....	55
Figure 4-14: CCN2 Mediation Capabilities.....	56
Figure 4-15: Service Contract Artefacts.....	58
Figure 4-16: Logical Destination Principle.....	60
Figure 4-17: Synchronous Request-Response Web Service Interactions.....	71
Figure 4-18: Synchronous Request-Response (CCN2 Endpoint Exceptions).....	72
Figure 4-19: Synchronous Request-Response (Partner's Endpoint Exceptions).....	73
Figure 4-20: Asynchronous One-Way Web Service Interactions.....	73
Figure 4-21: Asynchronous One-Way (CCN2 Endpoint Exceptions).....	75
Figure 4-22: Asynchronous One-Way (Asynchronous CCN2 Exceptions).....	75
Figure 4-23: Asynchronous One-Way (Asynchronous Partner's Exceptions).....	76
Figure 4-24: Asynchronous Request-Callback Web Service Interactions.....	76
Figure 4-25: No Message Lost Assurance - Asynchronous Queuing.....	82
Figure 4-26: CCN2 Endpoint Authentication.....	84
Figure 4-27: CCN2 Identity Propagation in Service Interactions.....	85
Figure 4-28: CCN2 Endpoint Authorisation.....	86
Figure 4-29: CCN2 Point-to-Point Message-Level Encryption.....	87
Figure 4-30: CCN2 Point-to-Point Message-Level Digital Signature.....	87

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

Figure 4-31: CCN2 Business Activity Monitoring.....	89
Figure 4-32: CCN2 Oracle Access Manager.....	90
Figure 4-33: CCN2 Single Sign-On Mechanism.....	91
Figure 4-34: CCN2 OAM Authorisation Enforcement.....	92
Figure 4-35: Operation Flow – SAML (User-To-System).....	95
Figure 5-36: Design-time.....	99
Figure 6-37: Implementation-time.....	108
Figure 6-38: Invoking a Synchronous Service.....	109
Figure 6-39: Invoking an Asynchronous.....	111
Figure 6-40: Accepting an Asynchronous Acknowledgement.....	111
Figure 6-41: Accepting an Asynchronous Service Callback.....	113
Figure 6-42: Replying to a Synchronous Service Request.....	114
Figure 6-43: Replying to an Asynchronous Service Request.....	115
Figure 6-44: Send an Asynchronous Service Response.....	115
Figure 7-45: Deployment-time.....	123
Figure 7-46: BPMN swimlane diagram of the process.....	127
Figure 8-47: Service Lifecycle - Runtime.....	132
Figure 8-48: CCN2 U2S Authentication Interface.....	133
Figure 8-49: CCN2 OIM Change password interface.....	134
Figure 8-50: CCN2 OIM Password management interface, displayed to the user at first log-in	134
Figure 8-51: CCN2 OIM Create User interface.....	136
Figure 8-52: CCN2 OIM Users interface.....	137
Figure 8-53: CCN2 OIM User account interface.....	138
Figure 8-54: CCN2 OIM Modify user interface.....	138
Figure 8-55: CCN2 OIM User account interface with success notification.....	139
Figure 8-56: CCN2 OIM User accounts interface.....	139
Figure 8-57: CCN2 OIM User-Roles interface.....	140
Figure 8-58: CCN2 OIM Search for Role.....	141
Figure 8-59: CCN2 OIM Roles search results.....	141
Figure 8-60: CCN2 OIM Assigned roles.....	142
Figure 8-61: CCN2 OIM Submit role assignment request interface.....	142
Figure 8-62: CCN2 OIM User-Roles interface.....	143

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

Figure 8-63: CCN2 OIM Role to be removed.....	144
Figure 8-64: CCN2 OIM Confirmation of role assignment removal.....	144
Figure 8-65: Connectivity Overview.....	149
Figure 10-66: Windows run application.....	188

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Table of Figures	Issue Date: 22/02/2022

Table of Examples

Example 4-1: Message Level Security Assertion.....	65
Example 4-2: Message Level Encryption Assertion.....	65
Example 4-3: Message Level Digital Signature Assertion.....	65
Example 4-4: Message ID.....	83
Example 5-5: Describing Exposed Resources.....	101
Example 5-6: Describing Permissions.....	101
Example 5-7: Describing Roles.....	102
Example 5-8: CCN2 Endpoint Description.....	106
Example 5-9: CCN2 Web Application Front-end Description.....	107
Example 6-10: Submitted Synchronous Service Request.....	109
Example 6-11: Received Synchronous Service Response.....	110
Example 6-12: Submitted Asynchronous Service Request.....	111
Example 6-13: Received Asynchronous Acknowledgment.....	112
Example 6-14: Received Asynchronous Service Response.....	113
Example 6-15: Received Synchronous Service Request.....	114
Example 6-16: Submitted Synchronous Service Response.....	114
Example 6-17: Received Asynchronous Service Request.....	115
Example 6-18: Submitted Asynchronous Service Response.....	116
Example 6-19: WS-Security Plain Text Username Token.....	117
Example 6-20: WS-Security Signed and Encrypted Username Token.....	118
Example 6-21: SAML Assertion.....	119
Example 6-22: WS-Security Encrypted Key.....	120
Example 6-23: WS-Security Encrypted Data.....	121
Example 6-24: WS-Security Digital Signature.....	121
Example 7-25: Partner's Endpoint Description.....	125

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

1. Management Summary

The CCN2 Platform offers a set of functional capabilities (as depicted in Figure 1 -1) to support the governed interoperability between Partners in the Common Domain.

This integration guide helps the CCN2 Partners' teams (including Member State Administrations (MSA) and DG TAXUD), involved in the development of Trans-European Systems, to understand the offered capabilities, their positioning in a typical information system architecture and the way they can be concretely used.

It is by nature an educational material guiding the readers through different points of view according to their specific interests, demonstrating the implementation of the adopted standards and COTS, and their usage by the CCN2 Platform. Nevertheless, it describes in detail all steps the CCN2 Partner's developers, administrators and users need to respectively follow to integrate successfully the CCN2 Platform to their environment. The governance aspects are taken as a basis to guide the readers, considering the application of the CCN2 Platform features as an enabler for a modernised, service-oriented and collaborative trans-European IT environment, adopting new practices and technologies.

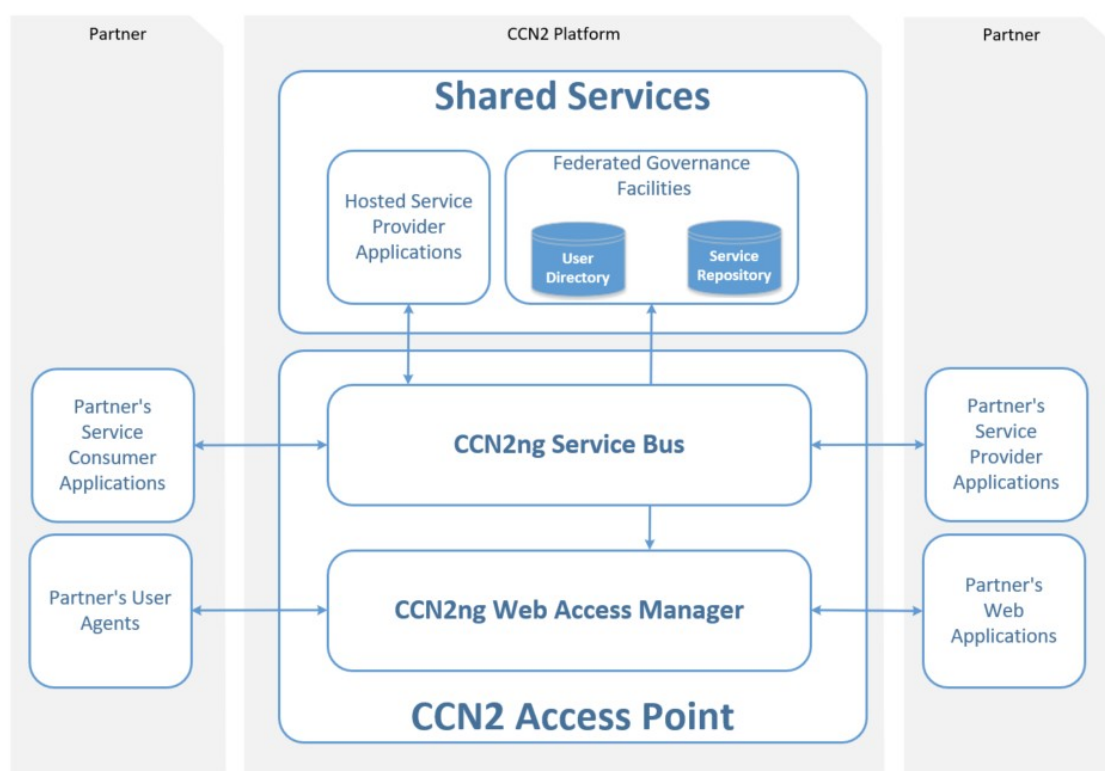


Figure 1-1: CCN2 Functional Capabilities - Overview

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

2. Introduction

This is the deliverable DLV-7.2-1 “CCN2 Platform – Integration Manual” identified in Specific Contract SC04 (RFA004) to Framework Contract TAXUD/2020/CC/161, Work Package WP.7.2;

It serves for the CCN2 Partners as a technical guidance to software design, development and deployment.

2.1 Document Purpose

This document provides a technical guidance to CCN2 Partners (i.e. MSA and DG TAXUD development teams) involved in the development of Trans-European Systems (TES) relying on the CCN2 Platform.

It describes how the various capabilities exposed by the CCN2 Platform can be technically integrated at key stages of the TES development lifecycle by the various involved actors (i.e. Development Teams, Operations Teams and business users). It furthermore provides insight in how to use the CCN2 Platform and the operational implications.

2.2 Target Audience

This document is intended for all parties involved in the technical integration of the CCN2 Platform.

The target audience should have a minimum knowledge of the SOA principles and related technologies (i.e. Web Services Framework) as well as of the exposed Oracle COTS:

- OAM (OAM Login Page)
- OIM (OIM First Login Page, Oracle Identity Self-Service).

Please refer to §4.1 for a guidance.

2.3 Assumptions and Constraints

2.3.1 Assumptions

The technical capabilities of CCN2 Platform as described and illustrated in this document cover all what is required by the CCN2 Partners to integrate the CCN2 Platform with their development, in conformance with the CCN2 Platform Functional Specifications.

The communication between CCN2 Partners and the CCN2 Operations Team is by default supported by the existing communication processes between CCN2 Partners and ITSM3 Operations when no other means are mentioned. Hence the definition of this process is outside the scope of this document.

2.3.2 Constraints

This document provides practical descriptions relating to the integration of the CCN2 Platform to Partners’ developments. The interface to the exposed CCN2 Platform capabilities has stayed as stable as possible with previous releases.

Because the offered interface is based on open industry standards independently from any underlying technology, there is not a unique way to achieve such integration. Indeed, a number of development tools exist to achieve it, all of them delivering different techniques that cannot be considered exhaustively in this document. Therefore, the provided examples illustrate only the resulting information exchanges (e.g. the generated SOAP constructs) in adherence with the adopted open

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

industry standards.

2.4 Structure

The present document is structured as follows:

- **Chapter 1.....Management Summary**

This chapter provides readers with an overview of this integration manual and the specific capabilities of the CCN2 Platform covered in it.

- **Chapter 2.....Introduction**

This chapter describes the purpose, scope and structure of the document. The assumptions and constraints for this document are highlighted and deviations from TEMPO are listed.

- **Chapter 3.....System Overview**

This chapter provides an overview of the history and capabilities of the CCN/CSI system and describes the functionalities of the CCN2 system.

- **Chapter 4.....Guidance**

This chapter provides the readers with the key elements that drive the integration of the CCN2 Platform. It lists the offered features and links them to sections that provide guidance. It summarises the normative parts of the technical specifications that are relevant exclusively from a CCN2 Partner's point of view.

- **Chapter 5.....Design-Time**

This chapter provides the readers with the key aspects of the CCN2 Platform integration at TES design-time.

- **Chapter 6.....Implementation-Time**

This chapter provides the readers with the key aspects of the CCN2 Platform integration at TES implementation-time.

- **Chapter 7.....Deployment-Time**

This chapter provides the readers with the key aspects of the CCN2 Platform integration at TES deployment-time.

- **Chapter 8.....Runtime**

This chapter provides the readers with the key aspects of the CCN2 Platform integration at TES runtime.

- **Chapter 9.....References**

This chapter provides the readers a glossary of terms, acronyms and abbreviations, along with reference documents and other applicable documents and conventions.

- **Chapter 10.....Document History**

This chapter contains the version history of the present document.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- **Annex A.....CCN2 Predefined Policies**

This chapter provides the readers with the description of the predefined policies.

- **Annex B. CCN2 Error Codes**

This chapter refers to the list of errors defined by the CCN2 Platform.

- **Annex C. CCN2 Naming Conventions**

This chapter provides the readers with the description of the applicable naming conventions.

- **Annex D. IMA Zip Package content**

This chapter refers to technical annexes relating to CCN2 Web Service Contract artefacts.

- **Annex E. Endpoint Reference Metadata**

This chapter describes the Endpoint Reference Metadata attached to a WebService.

- **Annex F.....Document templates**

This chapter contains the templates for some of the artefacts that need be submitted during the stages of a Service's lifecycle.

- **Annex G.....CCN2 Platform - Connectivity Tests**

This Chapter provides details on the connectivity Tests.

- **Annex H.....CCN2 Platform - Standards Deviations**

This Chapter provides details on standards deviations.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

3. System Overview

The Common Communication Network/Common System Interface (CCN/CSI) allowed a first-generation interoperability between Member States using a single communication backbone.

The CCN2 Platform, as an evolution, introduces a number of new functional capabilities to the Common Domain IT environment, including additional interoperability paradigms and governance facilities. Those value-added capabilities are offered with the objectives to improve Trans-European interoperability, in order to anticipate future business changes by increasing flexibility and scalability and to foster collaboration to reduce redundancy. The expected benefits relate to the reduced Total Cost of Ownership and the increased Speed-to-Value of Trans-European Systems by optimising TES development and operational costs as well as by making the delivery of IT solutions more agile when answering new or changed business needs.

The approach to support such an evolution includes the adoption of the service orientation. Other capabilities, that relate to other specific aspects of an information system architecture such as data management and human interfaces, are also addressed.

Another key objective of the CCN2 Platform is to allow the seamless introduction of cross-cutting processing logics whilst minimising the impact on the business application development projects. This allows independent and progressive introduction of additional capabilities in time without impacting the structural aspect of the intrinsic interoperability between Partners. This is achieved as per below

- AAG/OSB allows seamless introduction of cross-cutting system to system integration logics and the introduction of new integration patterns as CCN2 Platform is decoupled from Partners systems
- OAM/OIM enables change in the User Management and Access Management process without having a knock-on effect on systems deployed at Partners premises

Whilst Partners focus on the realisation of business-related IT capabilities, they can plan to expose those capabilities through a federating interoperability layer offered by the CCN2 Platform in the Common Domain, fostering discoverability, reusability and re-composition at a corporate level, and as well as providing additional support to secure, manage, monitor and govern those capabilities.

This document describes the integration between Partner systems and the CCN2 Platform in accordance with the functional and technical specification of the CCN2 Platform.

The CCN2 Platform offers functional capabilities to allow this integration. The following functional capabilities are offered across the Common Domain:

- Managed Service Interactions: This provides the capabilities required for a secure and controlled message exchange between systems.
- Managed Access to Web Applications Interactions: This provides the capabilities required for a secure and controlled access to the Web Applications by Partner Users;
- Security Enforcement: This provides the capabilities to enforce security (e.g. authentication, authorization) for the managed interactions;
- Federated Governance Facilities: This provides the capabilities to govern the platform (e.g. service lifecycle)
- Federated IAM: enable circles of trust among multiple enterprises letting subscribers use the same identification data to obtain access to protected resources and services by exchanging identity assertions.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4. Guidance

4.1 How to read this document

This document addresses various aspects of the CCN2 Platform that are relevant for different CCN2 Partners' representatives according to their roles and responsibilities inside their organisations, including:

- **Architects** who need to address the architectural positioning of the CCN2 Platform (see §4.1.1);
- **Project Managers** who need to plan the usage of the CCN2 Platform according to the development lifecycle of Trans-European Systems (see §4.1.2);
- **Developers** who need to design and implement applications interacting with the CCN2 Platform (see §4.1.3);
- **Security Experts** who need to address the security aspects of the CCN2 Platform at various levels;
- **Partner Operators** involved in the activities of the Operations Team in relation with the CCN2 Platform (see §4.1.5);
- **Business Users** who are intended to use features of the CCN2 Platform (see §4.1.6);

4.1.1 Architects

Architects involved in the developments of Trans-European Systems relying on the CCN2 Platform must know:

- The role of the CCN2 Platform (see §4.2);
- The list of the offered features (see §4.3);
- How the CCN2 service enablement is offered (see §4.9);
- How web applications are exposed (see §4.11);
- The specific role of the CCN2 Platform relating to security.

As far as Service-Oriented Architecture (SOA) is concerned, specific considerations are typically addressed by architects, including:

- The standards adopted by the CCN2 Platform (see §4.4);
- The principles driving the elaboration of service contracts (see §4.9.3.1);
- The principles driving the service interactions through the CCN2 Platform (see §4.9.3.4) and the applicable Message Exchange Patterns (MEP, see §4.9.4).

4.1.2 Project Managers

Project Managers involved in the developments of Trans-European Systems relying on the CCN2 Platform must know:

- The list of the offered features (see §4.3);
- The elements that need to be addressed when planning the usage of the CCN2 Platform (see §5.2), and in particular how to create CCN2 Partner (see 5.2.1)

4.1.3 Developers

Developers involved in the design and the implementation of applications that need to interact with the

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

CCN2 Platform must know:

- Which technical standards are applied in the CCN2 Platform (see §4.4);

As far as system-to-system interactions are concerned, developers need to know:

- How the design of service-oriented solutions is impacted by the CCN2 Platform (see §5.3);
- How the service interactions through the CCN2 Platform are implemented (see §6.2).

As far as the user-to-system (U2S) interactions are concerned, developers need to know:

- How the design of web applications is impacted by the CCN2 Platform (see §5.4);
- How the implementation of web applications is impacted by the CCN2 Platform (see §6.3).

4.1.4 Security Experts

Security Experts involved in the design, the implementation, the deployment and the operations of Trans-European System need to know:

- Which security model is adopted by the CCN2 Platform
- How security can be enforced by the CCN2 Platform (see §4.1.4);
- How security requirements are impacted by the CCN2 Platform at design-time, and in particular how user roles and permissions are defined and communicated;
- How the security enforcement offered by the CCN2 Platform is implemented (see §6.4);
- How user accounts are managed at runtime (see §8.3.1).

4.1.5 Partner Operators

Partner Operators involved in the operations of Trans-European Systems, and who need to communicate with the Operations contractor of DG TAXUD¹ that will be responsible for the CCN2 Platform, need to know:

- How to connect their environment to the CCN2 Platform
- How to create and manage user accounts (see §8.3.1);
- How the incidents relating to the CCN2 Platform are managed (see §8.4).

4.1.6 CCN2 Business Users

CCN2 Business Users of Trans-European Systems relying on the CCN2 Platform need to know:

- The role of the CCN2 Platform (see §4.2);
- Their roles as consumers of the CCN2 Platform capabilities (see §4.5.4);
- The impact of the CCN2 Platform when accessing web applications (see §8.2);
- How to get access to the CCN2 Platform (see §8.3);
- How to securely access the CCN2 Platform (see §8.2);
- How to change their password (see §8.2.3) or reset it (see §8.2.4);
- In case of Authentication or Authorization issues, contact the corresponding CCN2 Partner's Operations Teams. The CCN2 Partner's Operations Teams will use the facilities described in section §8.3. The CCN2 Partner's Operations Teams are internal to each Partner, so it is not in the scope of this document to detail the communication process internal to each Member state

¹ I.e. I30PS at the time of writing this document.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.2 The role of the CCN2 Platform

The CCN2 Platform is developed with the major goal of providing:

- **Managed interoperability** between CCN2 Partners in the Common Domain. This includes the technical capabilities, agnostic to any specific business domain, needed to enable any-to-any, secure, reliable, scalable, manageable and high-performance communication across Trans-European Systems (TES) in a technologically heterogeneous environment.

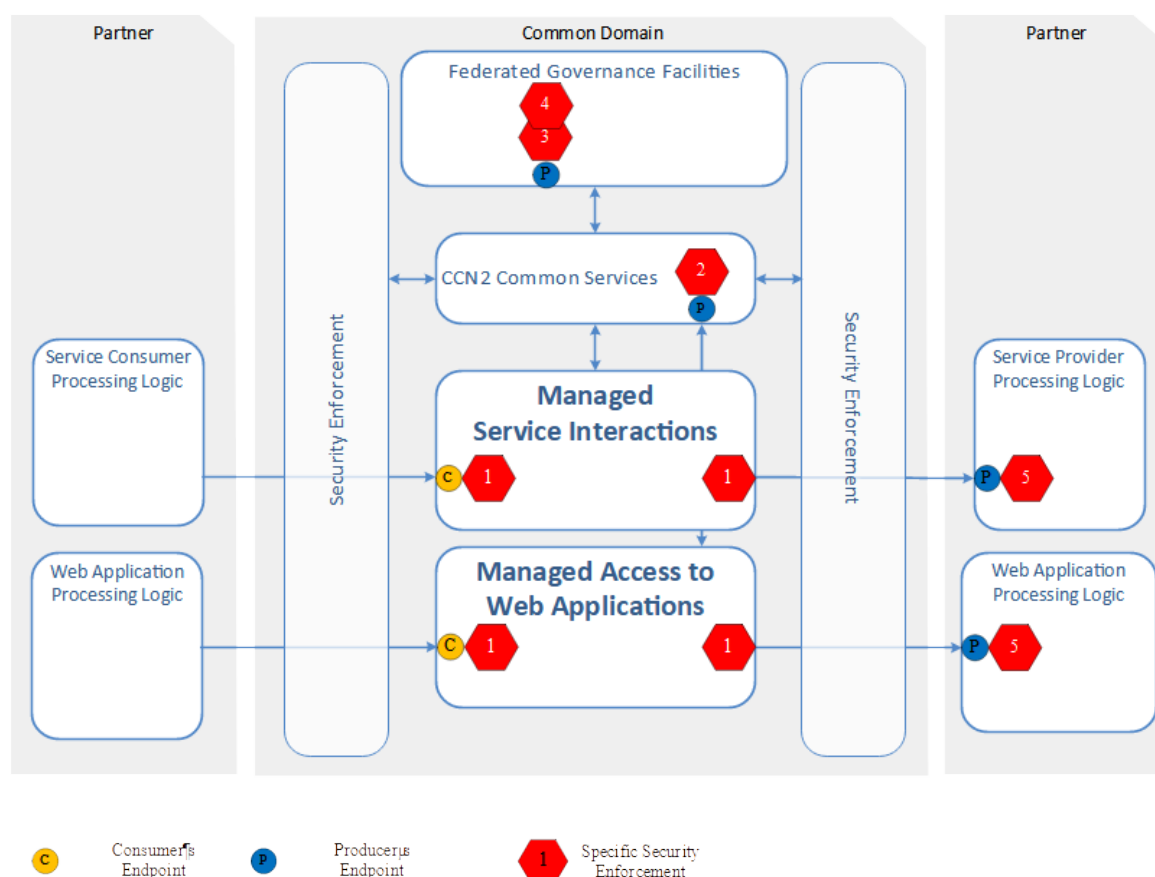


Figure 4-2: CCN2 Managed Interactions

Interactions between CCN2 Partners through the CCN2 Platform can occur:

- Between systems, when exchanges are automated and are executed without human intervention. The CCN2 Platform relies on the Web Service Framework (i.e. WSDL, SOAP and WS-* specifications) as the technical industry standard to be used. Moreover, it acts as an intermediary between service consumers and service providers to establish official endpoints and cross-cutting mediation capabilities (see §4.9, CCN2 Service Connectivity Services);
- Between humans and systems (see §4.11, Oracle Access Manager (OAM)), when users of web applications rely on their web browser to access the related capabilities. The CCN2 Platform offers a Single Sign-On (SSO, see §4.11.2) mechanism to federate all web applications exposed in the Common Domain. Moreover, because modern web applications should offer a rich user experience, AJAX (Asynchronous JavaScript and XML) programming techniques are commonly used to create asynchronous logic on the client-side. Such applications can send data to and retrieve from a server in the background without interfering with the display. AJAX applications commonly follow REST design principles to achieve such behaviour. As

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

far as JavaScript and REST services are concerned, the CCN2 Platform refers to them as any other web resources to protect.

- **Security Enforcement** ensuring the controlled access to resources across the Common Domain. It prevents unauthorised access to the CCN2 Platform and to the exposed resources, and shall guarantee integrity and confidentiality of the exchanged data. Such enforcement is defined at various levels (as depicted in Figure 4-2 CCN2 Managed Interactions above by the red hexagon symbol) according to the degree of responsibility as follows:
 1. CCN2 coarse-grained authorisation of all access requests passing through the CCN2 Platform. This precedes any form of fine-grained authorisation;
 2. CCN2 fine-grained authorisation of access requests for resources hosted on the CCN2 Platform;
 3. CCN2 fine-grained authorisation of access requests for graphical administration consoles deployed in the CCN2 Platform;
 4. CCN2 fine-grained authorisation of access requests to data visible in graphical administration consoles according to data segregation enforcement;
 5. Partner's fine-grained authorisation of access requests towards resources hosted on Partner's systems.
- **Federated governance facilities** to support the development, the deployment and the operations of Trans-European Systems (TES) in the Common Domain. For all types of interactions, the communicating parties (i.e. both humans and systems) and the exposed resources (e.g. services or web applications) must be identified in the CCN2 Platform.
- **A set of hosted common services** highly reusable, reducing redundant development across the CCN2 ecosystem. They provide business-agnostic and cross-cutting capabilities. Some of them are directly exposed to CCN2 Partners for consumption at runtime whilst others are composed by the CCN2 Service Connectivity Services (see §4.9) as defined at deployment-time.

CCN2 Partners can integrate those CCN2 features during the major steps in the TES development lifecycle, according to their roles.

4.3 List of Offered Features

4.3.1 Managed Interoperability

Features	Description
Managed Service Interactions	The CCN2 Platform includes SOA capabilities and in particular an Enterprise Service Bus (ESB) that mediates and enriches service interactions (either synchronous or asynchronous) between Partners' service consumers and providers. From a Partner's point of view, it is required to know: • How a service is exposed through the CCN2 Platform (§7.3); • How a service exposed by the CCN2 Platform can be consumed (see §6.2.2); • How a service provider needs to answer a request coming from CCN2 (see §6.2.5); • How a service and its related interactions can be monitored (see §4.10).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Features	Description
Service Connectivity Services	CCN2 Service Connectivity Services (see §4.9) support interconnectivity and host the mediation logic. From a Partner's point of view, it is required to know how mediation capabilities can be activated (see §5.3.3.2).
Routing	Header-based Routing – the ability to route a message to a virtual (or logical) destination according to SOAP Header conventions supported by the WS-Addressing standard and specific to CCN2 From a Partner's point of view, it is required to know how the supported Message Exchange Patterns are applied (see §4.9.4).
Security	The ability to enforce security policies according to the offered features (see §4.3.2, Security Enforcement). From a Partner's point of view, it is required to know how such security policies can be specified and the consequences of their usage (see §4.9.6).
Reliability	No Message Lost Assurance² – the way to guarantee the delivery of messages and to accommodate isolated failures (see §4.9.5.2). When failures occur during the transmission of messages and after retries are exhausted, the mediation capabilities safely store the messages in dedicated dead letter queues³. Those messages can be retrieved by the CCN2 Operations Team. Asynchronous Acknowledgement – the ability to integrate specific CCN2 service callback about the state of asynchronous delivery of messages (i.e. Confirmation of Delivery and Exception Report). From a Partner's point of view, it is required to know how such acknowledgments must be integrated (see §4.9.5.1). “Exactly Once” Delivery Support– the way to support that the service messages will be handled once and only once by the Partner's endpoints (see §4.9.5.3).
Data Validation	The ability to syntactically validate XML data exchanged between service consumers and providers and to report detected syntactic errors (see §4.9.7.1).
Monitoring	Data Capture for Service Monitoring – the ability to track service interactions and to be notified about related events such as transmission failures. Data Capture for Business Activity Monitoring – the ability to capture business events and to route them to the BAM tool offered by the CCN2 Platform.

² The general "No Message Lost Assurance" principle is specifically addressed here in the context of the service connectivity services.

³ The management of the dead letter queues is done by the CCN2 Operations Team.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Features	Description
Managed Access to Web Applications	The CCN2 Platform includes Oracle Access Manager for controlling the access to Web resources exposed through the CCN2 Platform. It offers a common front-end acting as a secure proxy (see §4.11.1) in front of all identified Web Applications exposed by the CCN2 Partners. It allows the implementation of a SSO mechanism, trusted by all Partners in the Common Domain. From a Partner's point of view, it is required to know how a web application is exposed and consumed through the CCN2 Platform (see §4.11).

Table 1: CCN2 Platform Features - Managed Interoperability

4.3.2 Security Enforcement

Features	Description
Authentication	Any service interaction managed by the CCN2 Platform is subject to the authentication of the consuming Partner (see §4.8.1). From a Partner's point of view, it is required to know • How a user (human or system) is registered in the CCN2 Platform; • How a user's authentication is applied when invoking a service exposed by the CCN2 Platform (see §6.4.1); • How to obtain additional information about a user's identity (see §6.4.2). See also Identity Propagation below.
Authorisation	Any service interaction managed by the CCN2 Platform is subjected to authorisation (see §4.8.4). From a Partner's point of view, it is required to know: • How permissions to access resources exposed by the CCN2 Platform are defined; • How a user is authorised to access a resource exposed by the CCN2 Platform.
Identity Propagation	The identity of the communicating Partner is propagated through the service interaction towards the target service. From a Partner's point of view, it is required to know: • How a CCN2 user's identity is communicated to the CCN2 Platform and propagated (see §4.8.2). • How a third-party user identity is propagated in service interactions through the CCN2 Platform (see §4.9.6.4).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Features	Description
Encryption and Decryption	This feature relates to data confidentiality and the ability to encrypt messages exchanged between the Partners and the CCN2 Platform. From a Partner's point of view, it is required to know: • How encryption is applied when invoking a service exposed by the CCN2 Platform (see §6.4.3); • How decryption is applied when receiving a service message from the CCN2 Platform (see §6.4.3).
Digital Signatures	This feature relates to data integrity and the ability to check digital signatures of the messages exchanged between the Partner and the CCN2 Platform. From a Partner's point of view, it is required to know: • How digital signature is applied when invoking a service exposed by the CCN2 Platform (see §6.4.4); • How digital signature is verified when receiving a service message from the CCN2 Platform (see §6.4.4).

Table 2: CCN2 Platform Features – Security Enforcement

4.3.3 Federated Governance Facilities

Features	Description
Identity and Access Management Tool	The CCN2 Platform offers an environment to support Security Governance. It includes facilities to manage user identities and their access to the exposed resources according to policies and permission to execute operations on them. From a Partner's point of view, it is required to know: • How to manage CCN2 user registrations; • How to import or export user identities; • How permissions to access resources exposed by the CCN2 Platform are defined according to defined roles; • How to grant permissions.
Identity Data Loader	The CCN2 Platform offers the ability to perform bulk load of identities. From a Partner's point of view, it is required to know: • There are 4 modes of operations: user creation, roles creation, roles hierarchy and roles assignment operations. (See 8.3.1.6)
Service Monitoring	The CCN2 Platform offers the ability to track interactions and the usage of services.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Features	Description
Reporting	The CCN2 Platform provides reporting capabilities which allows users⁴ to run a predefined list of reports that pull back data from OIM, OAM and AUDIT_EVENT database schemas. From a Partner's point of view, it is required to know: - How to run BAM reports, user filter capabilities and the use of the export option to PDF, RTF, Excel etc. - The predefined reports under the folders OAM, OIF, Oracle Identity Manager and Oracle_Fusion_Middleware_Audit.

Table 3: CCN2 Platform Features – Federated Governance Facilities

4.4 Use of Standards

This document refers to the technical industry standards used in the specifications of the CCN2 Platform. A minimum knowledge of them is required to fully understand the provided descriptions and examples. This especially applies to the following topics:

- Web Service Description Language (WSDL 1.1) used by the CCN2 Platform (see §4.4.4) to describe the endpoints of services exposed and consumed by the CCN2 Platform. When communicating service contracts for publication on the CCN2 Platform, the CCN2 Partners must follow the defined conventions in line with the basic structure of a WSDL artefact as explained in §4.9.3.1;
- SOAP 1.2 used by the CCN2 Platform to specify the way exchanged messages must be structured. Such a standard structure is depicted in §4.4.5;
- WS-Addressing 1.0 used by the CCN2 Platform to support its header-based routing capability. Section 4.4.7 provides the description of the basic constructs of this specification required to understand how the CCN2 Platform uses it (see §4.9.4.1);
- WS-Security 1.1 (see §4.4.8) used by the CCN2 Platform to enforce security relating to service interactions at runtime (see §4.9.6.1);
- WS-SecurityPolicy 1.2 (see §4.4.9) used by the CCN2 Platform to describe policies in the service contracts (i.e. WSDLs), including and WS-SecurityPolicy Assertions (see §4.9.3.8);
- SAML 2.0 (see §4.4.10) used by the CCN2 Platform to implement the identity propagation mechanism (see §4.8.3).

Table 4 lists the industry standards adopted for the CCN2 Platform. Some of them are described in the subsequent sections. Please note that the related namespace prefixes are defined in §4.4.1.

Standard	Version	Usage
HTTP(S)	1.1	A W3C/IETF specification that defines an application (transport) protocol. It is used by the CCN2 Platform as the primary transport protocol (see §4.4.2). Reference: https://tools.ietf.org/html/rfc7230

⁴ Limited by roles.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Standard	Version	Usage
URI	1.0	A W3C/IETF specification that is used to identify the name of a resource. It is used by the CCN2 Platform to support some naming convention (see §4.4.3). Reference: http://tools.ietf.org/html/rfc3986
XML Framework		
XML	1.0	A W3C specification that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. Reference: http://www.w3.org/TR/REC-xml/ The CCN2 Platform makes extensive use of XML, especially in the way configuration metadata is described and exchanged during the deployment of resources.
XML Infoset	N/A	A W3C specification that provides a set of definitions for use in other specifications those need to refer to the information in an XML document. Reference: http://www.w3.org/TR/xml-infoset/ This document uses this specification when XML constructs need to be specified.
XSD	1.0	A W3C specification that defines how to formally describe XML elements. XSD is used by the CCN2 Platform to formally define various XML constructs. Reference: http://www.w3.org/TR/xmlschema-1/
XPath	2.0	A W3C specification that defines a query language for selecting nodes from an XML document. Reference: http://www.w3.org/TR/xpath20/
XML Encryption	1.1	A W3C specification that defines how to encrypt the contents of an XML element (see §4.8.6.1). Reference: http://www.w3.org/TR/xmlenc-core/
XML Signature	2.0	A W3C specification that defines XML syntax for digital signatures (see §4.8.7.1). Reference: http://www.w3.org/TR/xmldsig-core2/
Web Service Framework		
WS-I Basic Profile	2.0	Service contract guidance & conformance relating to the usage of WSDL 1.1, SOAP 1.2 and WS-Addressing 1.0 specifications. Reference: http://ws-i.org/profiles/basicprofile-2.0-2010-11-09.html
WSDL	1.1	A W3C specification that defines a model and a XML format for describing Web services. It is the primary specification for the definition of service contracts and endpoints exposed by the CCN2 Platform (see §4.4.4). Reference: http://www.w3.org/TR/wsdl

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Standard	Version	Usage
SOAP	1.2	An XML-based messaging protocol (see §4.4.5). It is the technical basis of the capabilities relating to the CCN2 managed service interactions. Reference: http://www.w3.org/TR/soap12-part1/ and http://www.w3.org/TR/soap12-part2/
WS-Addressing	1.0	Secure end-to-end endpoint identification in messages (see §4.4.7). It is used by the CCN2 Platform as the basis for the header-based routing capabilities (see §4.9.4.1). Reference: http://www.w3.org/TR/ws-addr-core/
WS-Policy	1.5	Service policy assertion. It is used by the CCN2 Platform to express Web service policies in the WSDLs (see §4.4.6). It is used by the CCN2 Platform to describe policies attached to service contracts (i.e. WSDLs, see §4.4.6). Reference: http://www.w3.org/TR/ws-policy/
WS-Security	1.1	Quality of messaging protection (see §4.4.8). It is used by the CCN2 Platform to enforce security relating to service interactions at runtime (see §4.9.6.1). Reference: http://docs.oasis-open.org/wss/v1.1/wss-v1.1-spec-os-SOAPMessageSecurity.pdf
WS-SecurityPolicy	1.2	Web Service Security Policy assertions (see §4.4.9). It is used by the CCN2 Platform to define security enforcement relating to service integrations (see §4.9.3.8). Reference: http://docs.oasis-open.org/ws-sx/ws-securitypolicy/200702/ws-securitypolicy-1.2-spec-os.html
WS-BasicSecurity Profile	1.0	Web Services Basic Security Profile defines a set of non-proprietary Web services specifications, along with clarifications and amendments to those specifications, which promote interoperability in the area of Security. Reference: http://www.ws-i.org/Profiles/BasicSecurityProfile-1.0.html
SAML	2.0	Security assertion (see §4.4.10). It is used by the CCN2 Platform to propagate identities through security tokens (see §4.8.2). Reference: http://docs.oasis-open.org/security/saml/v2.0/saml-core-2.0-os.pdf

Table 4: CCN2 Industry Standards

4.4.1 Namespaces

This document uses a number of namespace prefixes in relation with some adopted industry standards and CCN2 Platform conventions referring to XML constructs. Note that the choice of any namespace prefix is arbitrary and not semantically significant.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Prefix	Namespace	Description
ccn2	http://ccn2.ec.eu/	Namespace for CCN2 Platform XML constructs.
ccn2int	http://ccn2.ec.eu/internal.Schema	Namespace for CCN2 Platform internal XML constructs.
ccn2cs	http://ccn2.ec.eu/ CCN2.Service.Platform.Common.Schema	Namespace for the CCN2 Platform Service Connectivity Services capabilities.
ccn2am	http://ccn2.ec.eu/ CCN2.Service.Platform.ActivityMonitoring .Schema	Namespace for the CCN2 Platform Audit Services capabilities.
ccn2ack	http://ccn2.ec.eu/ CCN2.Service.Platform.Acknowledgement. Schema	Namespace for CCN2 Platform Acknowledgement constructs

Table 5: Namespaces⁵ defined by the CCN2 Platform

Prefix	Namespace	Description
ds	http://www.w3.org/2000/09/xmldsig	Namespace for the digital signature
xsd	http://www.w3.org/2000/10/XMLSchema	Schema namespace as defined by XSD 1.0 specification.
soap12	http://schemas.xmlsoap.org/wsdl/soap12/	WSDL namespace for SOAP 1.2 binding.
wsdl	http://schemas.xmlsoap.org/wsdl	Namespace for WSDL 1.1 specification.
soap-env	http://www.w3.org/2003/05/soap-envelope	Envelope namespace as defined by SOAP 1.2 specification.
wsu	http://docs.oasis-open.org/wss/2004/01/ oasis-200401-wss-wssecurity-utility-1.0.xsd	Namespace for WS-Security specification.
wss	http://docs.oasis-open.org/wss/2004/01/ oasis-200401-wss-wssecurity-secext- 1.0.xsd	Namespace for WS-Security extension.
wsse	http://docs.oasis-open.org/wss/2004/01/ oasis-200401-wss-soap-message-security- 1.0.pdf	Namespace for SOAP WS-Security.
wsa	http://www.w3.org/2004/12/addressing	Namespace for WS-Addressing 1.0 specification
sp	http://docs.oasis-open.org/ws-sx/ws- securitypolicy/200702	Namespace for WS-SecurityPolicy specification.
saml	urn:oasis:names:tc:SAML:2.0:assertion	Namespace for SAML 2.0 specification

Table 6: Namespaces defined by the standards used in the CCN2 Platform

⁵ This document uses a number of namespace prefixes. Note that the choice of any namespace prefix is arbitrary and not semantically significant.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.4.2 HTTP

The Hypertext Transfer Protocol (HTTP) is an application protocol for distributed, collaborative, hypermedia information systems. HTTP is the foundation of data communication for the World Wide Web. HTTP functions as a (synchronous) request-response protocol in the client-server computing model.

The CCN2 Platform relies on HTTP as the canonical transport protocol for Web service bindings, and specifically SOAP binding (see §4.4.5). Table 7 is a full list of HTTP response status codes applicable to the CCN2 Platform.

Status	Meaning	Usage
200	OK	Standard response for successful HTTP requests.
202	Accepted	The request has been accepted for processing, but the processing has not been completed. The request might or might not eventually be acted upon, as it might be disallowed when processing actually takes place. This code is used in particular by the CCN2 Service Connectivity Services in the support of asynchronous interactions (see §4.9.4).
303	See Other	The status code indicates that the server is redirecting the user agent to a different resource, as indicated by a URI in the Location header field, which is intended to provide an indirect response to the original request.
400	Bad Request	The server cannot or will not process the request due to something that is perceived to be a client error (e.g., malformed request syntax, invalid request message framing, or deceptive request routing).
401	Unauthorized	The authentication is required and has failed or has not yet been provided.
403	Forbidden	The request was a valid request, but the server is refusing to respond to it.
404	Not Found	The requested resource could not be found but may be available again in the future. Subsequent requests by the client are permitted.
500	Internal Server Error	A generic error message, given when an unexpected condition was encountered and an unspecific message is suitable.
501	Not Implemented	The server either does not recognize the request method, or it lacks the ability to fulfil the request.
502	Bad Gateway	The server (e.g. the CCN2 Platform) was acting as a gateway or proxy and received an invalid response from the upstream server.
503	Service Unavailable	The server is currently unavailable (because it is overloaded or down for maintenance). Generally, this is a temporary state.
504	Gateway Timeout	The server (e.g. the CCN2 Platform) was acting as a gateway or proxy and did not receive a timely response from the upstream server.

Table 7: HTTP Status Codes

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.4.3 URI, URL & URN

HTTP resources are identified and located on the network by Uniform Resource Identifiers (URIs). Such identification enables interaction with representations of the resource over a network, typically the World Wide Web using HTTP (see §4.4.2).

Schemes specifying a concrete syntax and associated protocols define each URI:

- **URL** (Uniform Resource Locator): the most common form of URI, frequently referred to informally as a web address. It specifies both its primary access mechanism and network location;
- **URN** (Uniform Resource Name): a URI that identifies a resource by name in a particular namespace. A URN can be used to talk about a resource without implying its location or how to access it.

An URN defines an item's identity, while a URL provides a method for finding it.

An URI is defined (in RFC3986) as a sequence of characters chosen from a limited subset of the of US-ASCII [ASCII] character set.

4.4.4 Web Service Description Language (WSDL 1.1)

A Web service is a body of solution logic that provides a physically decoupled & vendor-neutral technical contract. A Web service contract exposes public capabilities as “operations”, establishing a technical interface but without any ties to a proprietary communications framework.

Web Service Description Language (WSDL) provides a model and an XML format for describing Web service contracts. It enables one to separate the description of the abstract functionality offered by a service from concrete details of a service description such as “how” and “where” that functionality is offered.

The basic WSDL structure defines a clear separation between:

- The **Abstract Description** including the functional capabilities exposed through interfaces and their related (transactional) data structures;
- The **Concrete Description** including details about the communication technology and protocols that can be used to interact with the service endpoint;
- The **Policy Description** including capabilities and requirements that can be associated to other descriptions.

The CCN2 Platform relies on the WSDL 1.1 specification to establish a convention of how exposed services are described (see §4.9.3.1). Therefore, Partner’s services must comply with this specification as far as the related services must be exposed through the CCN2 Platform. Moreover, this applies also to all services provided by the CCN2 Platform itself.

4.4.5 SOAP 1.2

SOAP provides the definition of the XML-based information which can be used for exchanging structured and typed information between peers in a decentralised, distributed environment.

A SOAP message is composed as follows:

- **Envelope** (*soap12:Envelope*) defining the scope of the message. It describes the message as a container of information;
- **Header** (*soap12:Header*) provides a placeholder in which supplementary data about the message (metadata) can be stored. The CCN2 Platform relies on the SOAP Header to specify metadata relating to routing, monitoring and security capabilities at runtime.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- It is a collection of zero or more SOAP header blocks each of which might be targeted at any SOAP receiver within the SOAP message path.
- **SOAP header block** is an element information item used to delimit data that logically constitutes a single computational unit within the SOAP header. A SOAP header block may carry a *role* attribute information item that is used to target the header block at SOAP nodes operating in the specified role.
- The CCN2 Platform defines a specific role (i.e. “CCN2.Platform”) used to support Third Party Identity propagation (see §4.9.6.4).
- **Body** (*soap12:Body*) represents a part of the message reserved for the (business) data or the document being transported. It is defined by the abstract part of a service contract (i.e. WSDL, see §4.9.3.1);
- **Fault** (*soap12:Fault*) is solely intended as a notification to a consumer program that an error has occurred and it is therefore optionally present in the message.

4.4.6 WS-Policy 1.5

In SOA, policies are not hard coded into a specific application, but are coupled to services. A SOA policy defines configurable rules and conditions that affect services during both design time and runtime.

WS-Policy defines a base set of constructs that can be used and extended by other Web services specifications to describe a broad range of service requirements, preferences, and capabilities. WS-Policies are typically used by development tools to generate code with certain capabilities, or used at runtime to negotiate the security aspects of web service communication.

The CCN2 Platform uses the WS-Policy specifications to describe policies in the service contracts (i.e. WSDLs, see §4.9.3.1) that are associated by the service providers to their endpoint references, applicable by the service consumers when invoking services and enforced by the CCN2 Service Connectivity Services (see §4.9).

The CCN2 Platform specification predefines a set of WS-Policy expressions relating to:

- WS-Addressing assertions;
- WS-SecurityPolicy assertions (see §4.9.3.8).

4.4.7 WS-Addressing 1.0

Web Services Addressing (WS-Addressing) provides transport-neutral mechanisms to address Web services and messages. It defines XML elements to identify Web service endpoints and to support end-to-end endpoint identification in messages through networks of processing nodes. It also is essential for the other WS specifications.

WS-Addressing defines two constructs that normalise the information typically provided by transport protocols and messaging systems in a way that is independent of any particular transport or messaging system:

- **Endpoint References**, (reference-able) entity, processor, or resource to which Web service messages can be addressed. An endpoint reference is defined by a collection of properties.

Property	XML Infoset	Description
Address (1..1)	/wsa:Address	An absolute URI representing the address of the endpoint.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Property	XML Infoset	Description
Reference Parameters (0..*)	/wsa:ReferenceParameters	A reference may contain a number of individual parameters that are associated with the endpoint to facilitate a particular interaction.
Metadata (0..*)	/wsa:Metadata	A reference may contain metadata that describes the behaviour, policies and capabilities of the endpoint.

Table 8: WS-Addressing Endpoint Reference Information Model

The CCN2 Platform uses this construct to support the management of the various service endpoints involved in the logic of the CCN2 Service Connectivity Services (see §4.9).

- **Message Addressing Properties**, which convey end-to-end message characteristics including references for source & destination endpoints and message identity.

Message addressing properties collectively augment a message with the following abstract properties to support one-way, request-response, and other interaction patterns (see also §4.9.4):

Property	XML Infoset	Description
Destination (1..1)	/wsa:To	An absolute URI representing the address of the intended receiver of this message.
Action (1..1)	/wsa:Action	An absolute URI that uniquely identifies the semantics implied by this message.
Message ID ⁶ (1..1)	/wsa:MessageID	An absolute URI that uniquely identifies the message. It is the responsibility of the sender to ensure that each message is uniquely identified.
Source Endpoint (0..1)	/wsa:From	Reference to the endpoint from which the message originated.
Reply Endpoint ⁷ (1..1)	/wsa:ReplyTo	An endpoint reference for the intended receiver for replies to this message.
Fault Endpoint (0..1)	/wsa:FaultTo	An endpoint reference for the intended receiver for faults related to this message.
Relationship (0..*)	/wsa:RelatesTo	A pair of values that indicate how this message relates to another message.
Reference Parameters (0..*)	/xs:any	Corresponds to the value of the <i>Reference parameters</i> property of the endpoint reference to which the message is addressed.

Table 9: WS-Addressing Message Properties

The CCN2 Platform uses those properties to support the routing mechanism (see §4.9.4.1) of the CCN2 Service Connectivity Services (see §4.9).

⁶ Although optional in the WS-Addressing specification, MessageID is required for the CCN2 Platform.

⁷ Although optional in the WS-Addressing specification, ReplyTo is required for the CCN2 Platform.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Both of these constructs are designed to be extensible and reusable so that other specifications, such as CCN2 Specifications, can build on and leverage endpoint references and message addressing properties.

The CCN2 Platform relies on SOAP and HTTP, Web Services Addressing 1.0 - SOAP Binding⁸

Note that in the rest of this document, when referring to “WS-Addressing” we include WS-Addressing 1.0 specification and complementary specifications such as WS-Addressing 1.0 - SOAP Binding.

4.4.8 WS-Security 1.1

WS-Security describes enhancements to SOAP messaging to provide message-level security measures including integrity, confidentiality and authentication. It also provides a general purpose, but extensible, mechanism for associating security tokens with messages. Additionally, it describes how to encode binary security tokens, specifically X.509 certificates and Kerberos⁹ tickets, as well as how to include opaque encrypted keys. The CCN2 Platform uses this specification to enforce security relating to service interactions at runtime (see §4.9.6.1).

4.4.9 WS-SecurityPolicy 1.2

WS-SecurityPolicy is a web services specification extending the security protocols specified by the WS-Security (see §4.4.8). It offers mechanisms to represent the capabilities and requirements of web services as policies, based on the WS-Policy framework (see §4.4.6). The CCN2 Platform uses this specification to reference policies in service contracts (i.e. WSDLs, see §4.9.3.1).

4.4.10 SAML 2.0

Security Assertion Markup Language (SAML) defines the syntax and processing semantics of assertions made about a subject by a system entity. In the course of making, or relying upon such assertions, SAML system entities may use other protocols to communicate either regarding an assertion itself, or the subject of an assertion.

The CCN2 Platform uses this specification to support the definition of propagated security tokens (see §4.8.3).

⁸ <https://www.w3.org/TR/ws-addr-soap/>

⁹ Kerberos is currently not supported on the CCN2 Platform.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.5 CCN2 Platform Actors

4.5.1 Partners And Organisations

A CCN2 Partner entity participating in the CCN2 Platform by offering services to the CCN2 Platform and/or by consuming services offered by the CCN2 Platform.

CCN2 Partners can define one or more organisational unit, each one addressing specific business domains or responsibilities. Each defined organisation must refer to a specific CCN2 Partner.

4.5.2 Business System Owner

A Business System Owner is any CCN2 Partner's team responsible for the definition and the specifications of a specific Trans-European System, and its related services, relying on the CCN2 Platform. The responsibilities of a Business System Owner are:

- To plan the usage the CCN2 Platform (see §5.2);
- To identify the service candidates;
- To specify the service contracts (see §5.3.2) and the related policies;
- To define the roles and permissions driving the security enforcement of the exposed services ;
- To design the CCN2 Endpoints that will be used by all consumers of the related services (see §5.3.3), and request their deployment;
- To monitor and measure the execution of the deployed services.

4.5.3 Service Provider

A Service Provider is any CCN2 Partner's team that implements services defined by a Business System Owner and exposed through the CCN2 Platform. His roles are:

- To implement the business service logic and the technical interactions (see §6.2.5) according to the applicable Message Exchange Patterns and policies;
- To define the endpoints exposing its service implementations and request their registration. They are used only by the CCN2 Platform to forward the mediated service consumers' requests, according to the Service Connectivity Services principles (see §4.9);
- To test and certify its service implementations;
- To operate its service implementations and report detected incidents to the CCN2 Operations Team.

The members of such a team must be authorised to access CCN2 Platform capabilities according to their specific roles in the organisation.

4.5.4 Service Consumer

A Service Consumer is any CCN2 Partner representing users that require access to resources exposed by the CCN2 Platform. Note that it could also refer to any other actor who has other specific roles.

The specific responsibilities of a service consumer includes:

- The implementation of applications invoking services exposed through the CCN2 Platform (see §6.2.2);
- The management of CCN2 user accounts relating to his organisation and their assignments to defined roles;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- The reporting of detected incidents to the CCN2 Operations Team.
- The testing and certification of its service consumption implementations.

4.5.5 Partner Development Team

A Partner Development Team is an organisation acting as:

- Business System Owner, mainly involved at design-time (see Chapter 5.) in the production of the business system specifications;
- Service Provider, mainly involved at implementation-time (see Chapter 6.) in the production of applications (i.e. web services or web applications);
- Service Consumer, as any user who needs to design, compose or use a service exposed by the CCN2 Platform.

4.5.6 Partner Operations Team

A CCN2 Partner's Operations Team supports other users of his organisation in the integration and usage of the CCN2 Platform. It acts in close collaboration with the CCN2 Operations Team in order to assist other users of its organisation in the integration and use of the CCN2 Platform, in particular at deployment-time (see Chapter 7.) and runtime (see Chapter 8.).

4.6 CCN2 Platform Governance

CCN2 Platform Governance is currently being reworked. This chapter will be restored once the reworked governance model has been approved by all stakeholders.

Alternatively, a separate document might be created focussing on Governance, and this chapter removed.

4.7 CCN2 Security Model

As far as consumption of resources exposed through the CCN2 Platform is concerned, the required security enforcement must be put in place in a controlled manner by all actors involved. This requires the definition of a security model to ensure conformance with the security policies commonly agreed.

As far as the CCN2 Platform is concerned, an administration model is adopted to cope with the distributed nature of Trans-European Systems. It based on the adopted Role-Based Access Control model that allows a granular and flexible management of roles and permissions. It is the basis for maintaining the set of CCN2 user accounts according to a well-defined process to grant the required permissions to access resources exposed by the CCN2 Platform and enforce security at runtime (see §4.8).

The CCN2 Platform relies on the OIM tool to support such administration model, offering the required functionality to the CCN2 Partners through a web-based administration console.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.7.1 CCN2 User Accounts Administration Model

The CCN2 Platform defines the CCN2 Delegated Administration Model, which is built on 3 levels of administration. This is highlighted in the figure below.

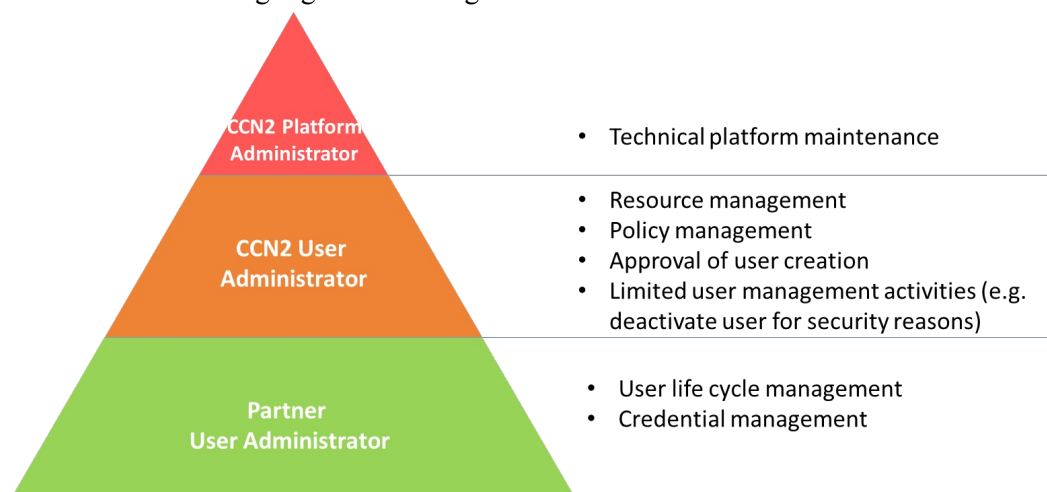


Figure 4-3: CCN2 Delegated Administration Model

The following table defines the administrator levels and illustrates their responsibilities.

Level	Definition	OIM Responsibilities	Mapping with FS Role
CCN2 Platform System Administrator	An Administrator to cover the technical platform administration of the OIM Product. This administrator is not assigned any roles relating to the management of CCN2 Platform Users. This is linked to the default “xelsysadm” account. (however, additional users with identical capabilities can be created if needed).	- Technical Platform Maintenance; - Creation and management of CCN2 Platform User Administrators.	CCN2 Operation Component Administrator Role
CCN2 Platform User Administrator	An administrator to manage the IAM Platform in terms of policies, resources and user management.	- User lifecycle management; - Profile management; - Credential management; - Resource Management;	CCN2 Operation User Administrator Role and the CCN2 System Owner Auditor Role

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

		- Policy Management; - Creation and management of Partner User Administrators.	
Partner User Administrator	An administrator to manage the daily administration activities relating to Partner end-users.	- User lifecycle management; - Profile management; - Credential management.	Partner User Administrator

Table 10: Delegated Administration Levels

The above model translates to the following User's Accounts Administration Model as illustrated

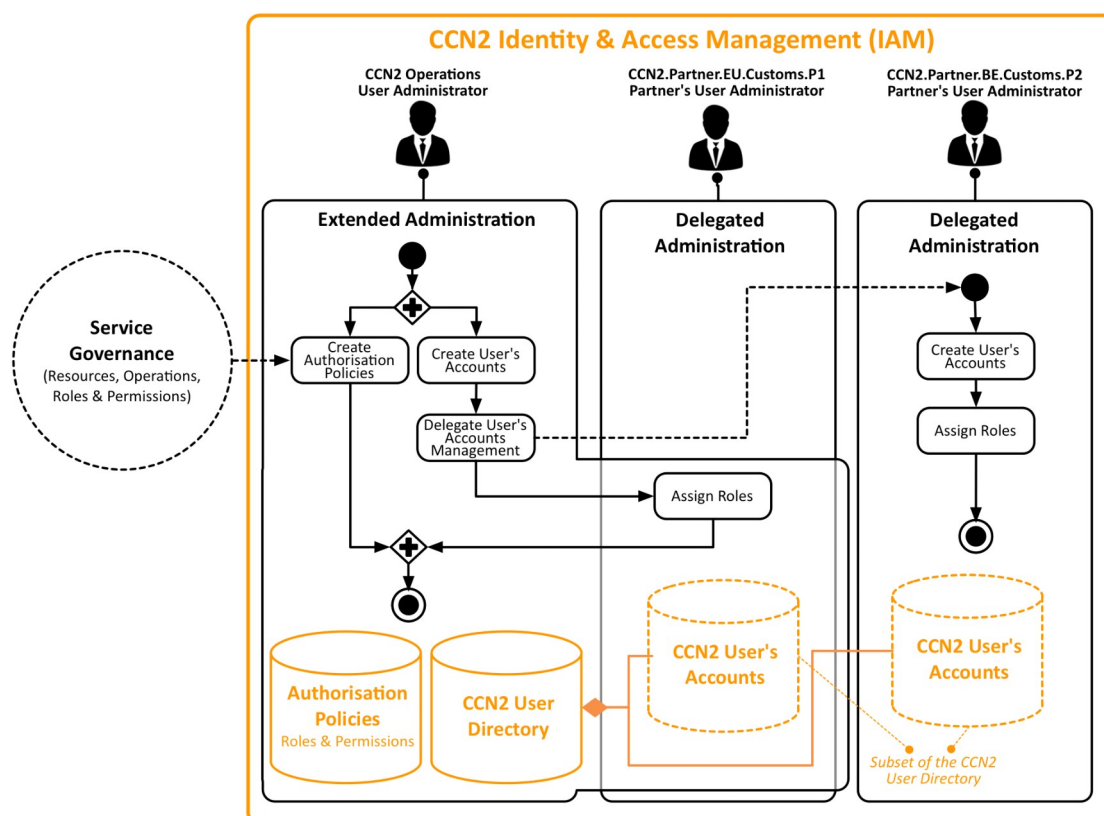


Figure 4-4: CCN2 User Accounts Administration Model

Please note that in the Figure 4-4 above, both sets of CCN2 User Accounts are subsets of the same CCN2 User Directory; they were split to show that every CCN2 Partner Administrator will administer only their CCN2 User Accounts.

The administration model supporting the organisation of CCN2 user accounts management includes two levels¹⁰:

¹⁰ A third level is defined relating to CCN2 Platform administrators in charge of the internal administration of governance facilities, out of scope of this document.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- **Extended Administration:** This model reflects the situation whereby a CCN2 Platform User Administrator endorses OIM administration responsibility on another organisation than the one he pertains to. This may typically appear when no Partner User Administrator would be appointed to an organisation (e.g. at the start). The usage of this model is exceptional or temporary;
- **Delegated Administration:** This model reflects the situation where by the CCN2 Platform User Administrator would delegate OIM responsibilities to a Partner User Administrator appointed to one (or multiple) organisation(s).

To implement such delegation, the CCN2 Platform relies on a combination of internal OIM Admin Roles and a specific hierarchical scope assigned to these admin roles. The hierarchical scope is configured during admin role assignments

The following permissions¹¹ are associated to the CCN2 Role ID “**ROLE-ADM-PUR-14**” that must be associated to CCN2 Partner User Administrator:

- Create and modify other users’ account attributes, manage organisations and set or reset passwords
- Manage role assignments

The above models are illustrated in the figure below (CUA denotes CCN2 User Administrator):

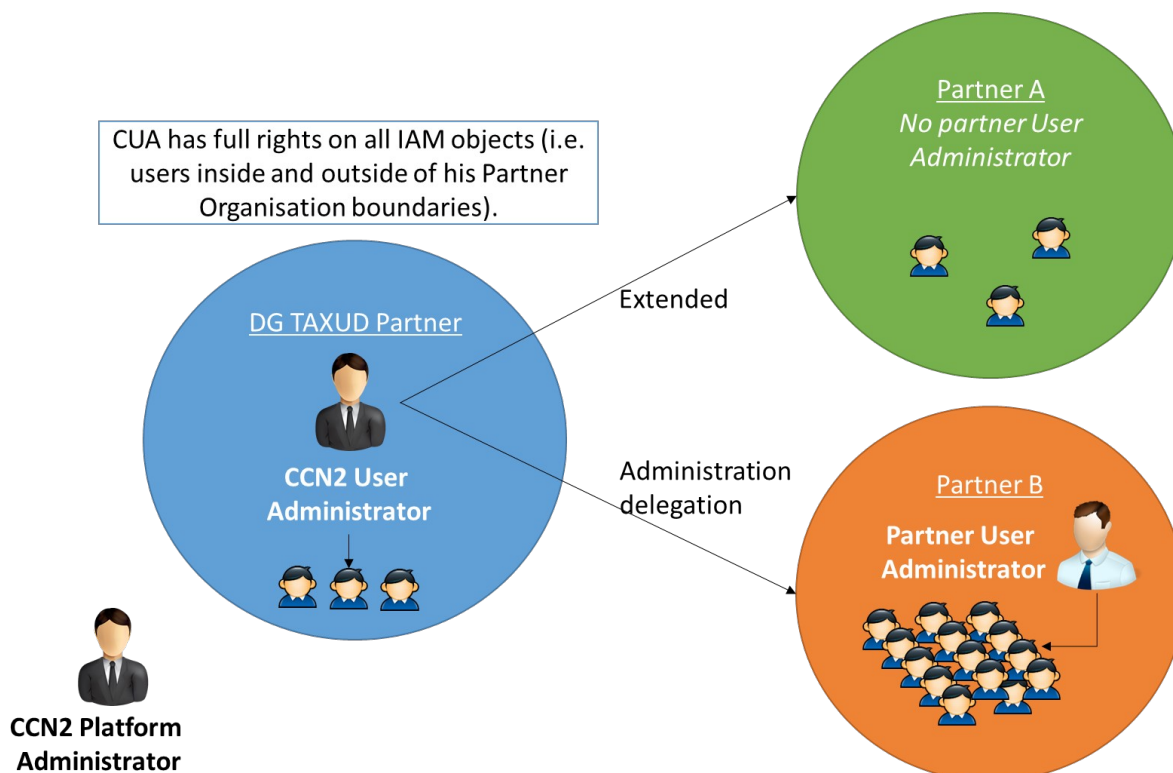


Figure 4-5: CCN2 Delegated Administration Model - Scenarios

4.7.2 Role-Based Access Control Model (RBAC)

The CCN2 Platform relies on the widely accepted Role-Based Access Control model. RBAC uses the

¹¹ Other permissions could be assigned to CCN2 Partner User Administrators in future releases of the CCN2 Platform.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

concept of roles. Roles provide access to resources and the users are granted access to resources through a user-to-role assignment. Rather than to assign roles directly to resources, it is possible to provide them indirectly through a role-to-permission and a permission-to-resource assignment. In the context of CCN2, permissions are only used in S2S (in U2S, only roles are used). The following figure depicts the RBAC model:

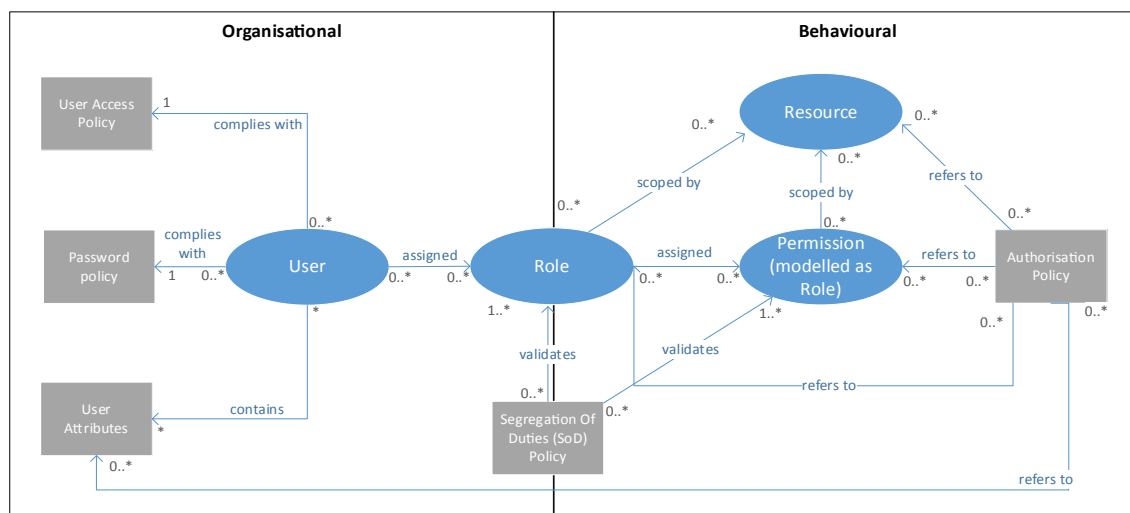


Figure 4-6: CCN2 Authorisation Model

A major advantage of the RBAC model is that it simplifies authorisation administration in large organisations such as the CCN2 ecosystem. RBAC model is policy-neutral, in that they can be used to represent a variety of security policies. It addresses two architectural dimensions:

- **Organisational** – The active structure of an organisation is defined through the identities of individual actors (or users) assigned to specific roles. As the responsibilities relating to a role in the organisation evolve, the assigned actors acquire new permitted business functions;
- **Behavioural** – a role assigned to an actor relates to the business functions he is able to execute. In the context of security enforcement, this addresses the permissions a user has, to execute operations on specific resources (e.g. services).

The entities composing the RBAC model adopted by the CCN2 Platform include:

- **User** – An account recorded through a defined process for an individual (human or system) described through a set of attributes;
- **Role** - The right to perform an operation on one or several resources;
- **Permission** - An optional additional hierarchical authorisation level (used only in S2S, not in U2S) to perform an operation on a resource;
- **Resource** – Object for which the access must be authorised. A resource can be a web resource associated to a web application available via a URL or a web service that can hold several web service operations;
- **Operation** – An action that can be performed on a resource. These actions can be browsing a web application using various protocol methods or consuming a web service by invoking its operation.

Those entities are subjected to descriptions through artefacts supporting the communication of the required information and the definition of authorisation policies.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.7.3 Oracle Identity Management (OIM) Artefacts

The processes driving the CCN2 Platform security governance require the communication of information relating to the following entities:

- **User Declaration** – When registering or updating a user’s identity (see §8.3.1), a set of profile attributes must be provided, including:
 - **Effective Date:** Optional: Note that this field must *not* be set currently (use **Start Date** and **End Date** for future-dated operations, see below);
 - **Justification:** Optional justification for creating the User;
 - **User Login:** A mandatory unique identifier to illustrate one single account. This shall be unique by construction.
 - **Description:** An optional general description of the User;
 - **Role in Organisation:** The optional role that the user has within its organisation (e.g. National CCN administrator);
 - **Subject DN:** Optional. Relevant in the context of certificate authentication. Currently not used;
 - **Partner Name:** The mandatory name of the Partner that the User represents;
 - **CCN2 User Type:** The mandatory type of user account (i.e. “U2S” for a physical person or “S2S” for technical system);
 - **First Name:** The mandatory first name of the User;
 - **Middle Name:** Optional middle name of the User;
 - **Last Name:** The mandatory last name of the User;
 - **E-Mail:** The E-mail address, used for notifications;
 - **Superior:** The optional Username ID of the User’s superior;
 - **CCN2 Partner:** The mandatory organisation to which the User belongs (e.g. DG TAXUD). The value of this field must be identical to the value of field Partner Name;
 - **Display Name:** Optional display name of the User. Autogenerated by OIM if not explicitly specified;
 - **Password:** A valid password, compliant with the Password Policy. The password is securely stored using a hashing algorithm in order to reduce the consequences of hacking or un-intended divulgation;
 - **Start Date:** An optional start date when the user is enabled (for future-dated user creations);
 - **End Date:** An optional end date when the user is deleted (for future-dated user creations);
 - **Provisioning Date:** Optional; Currently not used;
 - **Deprovisioning Date:** Optional; Currently not used;
 - **Telephone Number:** Optional;
 - **Home Phone:** The optional phone number linked to the User;
 - **Fax:** The optional fax number linked to the User;
 - **Mobile:** The optional mobile phone number linked to the User;
 - **Pager:** The optional pager number linked to the User;
 - **Home Postal Address:** The optional mail address of the User;
 - **Postal Address:** The optional residence address of the User;
 - **Postal Code:** The optional postal code of the User;
 - **PO Box:** The optional Post Office box linked to the User;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- **State:** Optional; State of the User;
- **Street:** The street name in the User's address;
- **Country:** The mandatory country of the User;
- **Locale:** The optional locale (e.g. Italian (Italy)) linked to the User;
- **Common Name:** The optional common name of the User. For S2S, this attribute is mandatory and must be set to the same value as the User Login;
- **Department Number:** Optional department number;
- **Department Number:** Optional employee number;
- **Generation Qualifier:** Optional qualifier;
- **Hire Date:** Optional hire date;
- **Locality Name:** The optional locality where the User resides;
- **Title:** Optional title of the User.
- **Resource** – “Resource”¹² can represent one of the followings:
 - Web Service as identified by the related service EPR metadata (see §4.9.3.3);
 - Web Resource as identified by the related web application metadata (see §4.11.1).

The following table shows the Resource information to be provided:

Name	The resource name. It is mandatory and must uniquely identify the resource. It is specified according to the CCN2 naming convention (see §C.1.2).
Description	The optional description of the resource.
Operations	An optional set of references of operations that can be executed on the resource.

- **Operations** – An “operation” refers to what can be executed on a resource. The following table shows the Operation information to be provided:

Name	The operation name. It is mandatory and must uniquely identify the operation. According to the type of resource, it can represent either a Web Service operation as defined in the corresponding WSDL or an HTTP verb used by a Web Application when exposing a web resource.
Description	The optional description of the operation.

- **Permission** – Permissions associate resources exposed by the CCN2 Platform with corresponding operations. The following table shows the Permission information to be provided:

Name	The permission name. It is mandatory and must uniquely identify the permission. It is specified according to the CCN2 naming convention (see §C.1.6).
Description	The optional description of the permission.
Resource name	A mandatory value uniquely identifying a resource.
Operation name	An absolute URI uniquely identifying an operation on the resource identified by the resource name. The operation name may refer to a specific operation as identified by the corresponding resource reference, or be the "any" predefined

¹² Other types of resources could be introduced in future releases.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

	value that means "any operation".
Disjoint permissions	The optional list of disjoint permissions. According to the Segregation of Duty (SoD), it guarantees that this permission cannot be simultaneously granted with other permission(s).

- **Role** – According to the RBAC model the CCN2 Platform relies on the definition of roles to grant permissions to a user. The following table shows the role information to be provided:

Name	The role name. It is mandatory and must uniquely identify the role. It is specified according to the CCN2 naming convention (see §C.1.5).
Description	The optional description of the role.
Disjoint roles	The optional list of disjoint role names. According to the Segregation of Duty (SoD), it guarantees that a CCN2 user that has the defined role cannot simultaneously have the incompatible role(s).
Permission names	The list of permission names (see below) associated to the role.

4.7.4 CCN2 User Account Management Process

The CCN2 Platform offers administrators a provisioning service to perform lifecycle management (i.e. create, manage and remove) of CCN2 User Accounts referring to their organisation's consumers of resources exposed through the CCN2 Platform depicts the various state transitions subjected to a CCN2 User Account management.

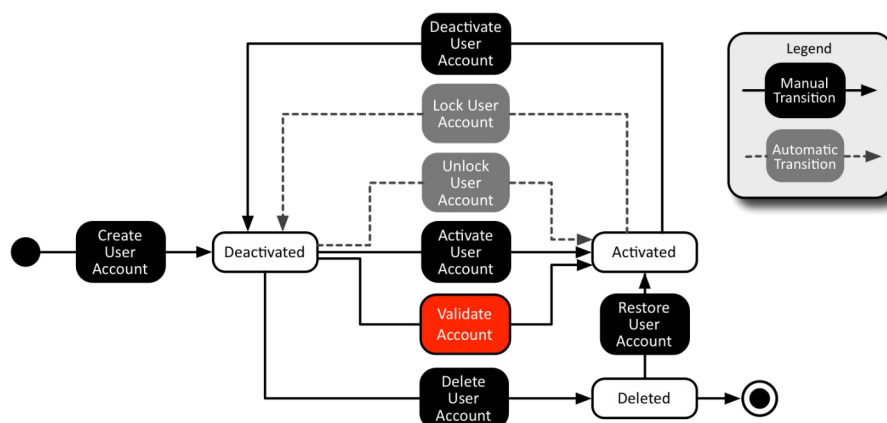


Figure 4-7: CCN2 User Accounts Lifecycle

- **Enabled:** The user account is in use. The user is able to log on to the CCN2 Platform using his credentials and gain access to exposed applications and services based on his access rights;
- **Disabled:** The user account is disabled and cannot be used. This can result from:
 - The user account expiration;
 - A manual disabling by an administrator for security reasons;
- **Locked:** The user account is locked and the user cannot log-in. This happens when a CCN2 Platform component handling the runtime security enforcement that locked the user account according to applied security policies (e.g. after the set number of failed authentication attempts was exceeded).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- **Unlocked:** The user account can be used normally, provided it is neither *Disabled* nor *Deleted*. This state can result from:
 - the *Must Reset Password* state, after the User has successfully reset his password.
 - the *Locked* state, after the User has successfully used the “Forgot password” feature
- **Must Reset Password:** The user account will be accessible to the user only after the latter creates a new password. This state can result:
 - upon user account creation;
 - after a manual set by an administrator for security reasons; in that case, the user will receive an e-mail notification for changing their password;
 - if the password has expired. The user is warned about password expiry 30 calendar days before the the password actually expires. This is applicable for both S2S and U2S accounts.
- **Deleted:** The user account can neither be used nor is it visible in the console any more.

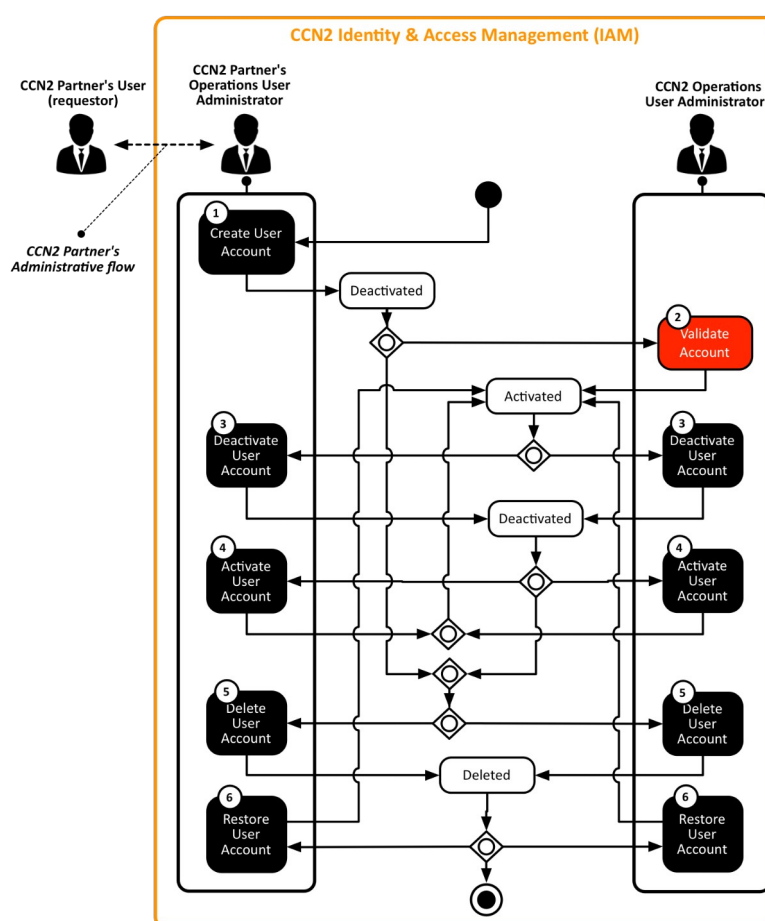


Figure 4-8: CCN2 User Accounts Management Process

1. The CCN2 Partner User Administrator creates a new user account via the user interface of the Oracle Identity Manager (see §8.3.1). Alternatively, this step can be executed through “Inbound Provisioning” (see §8.3.1.6).
2. An E-mail is sent to the CCN2 user with temporary credentials. At this time, the user can start using his account and access the CCN2 Oracle self-service to define his password.
3. The state of the user account can change for various reasons including the intentional deactivation of it by the CCN2 Partner User Administrators or by the CCN2 Operations User Administrators;
4. A disabled user account can be enabled again;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

5. A disabled user account can be deleted;

4.7.5 CCN2 Authorisation Management Process

The CCN2 Platform offers administrators with facilities to manage authorisation according to the applicable RBAC model

The prerequisite of this process is the availability of definitions of roles and, optionally, permissions (S2S only) supporting the description of authorisation policies. Those roles and permissions relate to operations on resources exposed through the CCN2 Platform.

Once the list of roles and permissions for a specific TES are registered in the CCN2 OIM tool by the CCN2 Operations Team, can be assigned to the CCN2 Users by the CCN2 Partner User Administrators.

According to the delegated administration model the CCN2 Partner User Administrator modifies the user account via the user interface of the Oracle Identity Manager (see §8.3.1). He can add (or remove) roles in the list and submit the modified user information for validation.

4.7.6 Web Service Lifecycle Process

The CCN2 Partners need to exchange information relating to user accounts in order to:

- Be able to Assert Identities in CCN2 Platform. (see §9.3);
- Apply fine-grained authorisations (see §6.4.2).

4.7.7 CCN2 Default Roles Per CCN2 Actor

Important note: the roles identified below are indicative to better illustrate the management of the platform. please contact your help desk if you have governance questions.

4.7.7.1 Business System Owner Default Roles

The following table lists the predefined roles that can be assigned to development team's members of a CCN2 Partner's organisation through the CCN2 Authorisation Management Process.

Role	Description	ID ¹³
CCN2 Partner Service Manager role	This role is for the CCN2 Partner responsible of a service of the CCN2 Platform.	ROLE-SMA-UR-5
CCN2 Partner Service Owner role	This role is for the Business owner of a service of the CCN2 Platform.	ROLE-SMA-UR-4

Table 11: Business System Owner's Default Roles

4.7.7.2 Service Provider Default Roles

The following table lists the predefined roles that can be assigned to development team's members of a CCN2 Partner's organisation through the CCN2 Authorisation Management Process.

¹³ As defined in the CCN2 Platform Functional Specification. See also §Error: Reference source not found.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Role	Description	ID¹⁴
CCN2 Partner Service Manager role	This role is for the CCN2 Partner responsible of a service of the CCN2 Platform.	ROLE-SMA-UR-5
CCN2 Partner Service Owner role	This role is for the Business owner of a service of the CCN2 Platform.	ROLE-SMA-UR-4
CCN2 Partner Standard User	This role is for a CCN2 Partner with no specific responsibility. This is considered a default role, complemented by Domain limitations and other roles.	ROLE-ADM-PUR-12

Table 12: Service Provider's Default Roles

4.7.7.3 Service Consumer Default Roles

The following table lists the predefined roles that can be assigned to development team's members of a CCN2 Partner's organisation through the CCN2 Authorisation Management Process.

Role	Description	ID¹⁵
CCN2 Partner Standard User	This role is for a CCN2 Partner with no specific responsibility. This is considered a default role, complemented by Domain limitations and other roles.	ROLE-ADM-PUR-12

Table 13: Service Consumer's Default Roles

4.7.7.4 Partner Development Team Roles

The members of such a Partner Development Team must be authorised to access CCN2 Platform capabilities according to their specific roles in the organisation.

Role	Description	ID
CCN2 Partner Service Manager	This role is for the CCN2 Partner responsible of a service of the CCN2 Platform.	ROLE-SMA-UR-5
CCN2 Partner Hosted Developer	This role is for the CCN2 Partner hosted developer responsible for the development of the service of the Partner Application exposed on the CCN2 Platform.	ROLE-SMA-UR-6
CCN2 Partner Service Developer	This role is for the CCN2 Partner developer responsible for the development of the service of the Partner Application.	ROLE-SMA-UR-7

Table 14: Partner Development Team Roles

4.7.7.5 Partner Operations Team Roles

The members of a Partner Operations Team must be authorised to access CCN2 Platform capabilities according to their specific roles in the organisation.

¹⁴ As defined in the CCN2 Platform Functional Specification. See also §Error: Reference source not found.

¹⁵ As defined in the CCN2 Platform Functional Specification. See also §Error: Reference source not found.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Role	Description	ID
CCN2 Partner Administrator	This role has full access to all components of the CCN2 Platform that are exposed to Partners.	ROLE-ADM-PUR-13
CCN2 Partner User Administrator	This role has full access to define/update/delete all artefacts in the OIM domain of the Partner. This role has full access to all identity management services of the CCN2 Platform for that Partner.	ROLE-ADM-PUR-14
CCN2 Partner Service Administrator	This role has access to manage the hosted services of the CCN2 Platform by the Partner.	ROLE-ADM-PUR-15
CCN2 Partner Security Administrator	This role has access to all items related to security on the CCN2 Platform exposed to Partners.	ROLE-ADM-PUR-16
CCN2 Partner Infrastructure Administrator	This role has administrative permissions to all items related to infrastructure on the CCN2 Platform scoped by a specific Partner.	ROLE-ADM-PUR-17
CCN2 Partner Component Administrator ¹⁶	This role has full access permission to a specific component, on artefacts managed by the specific Partner.	ROLE-ADM-PUR-18
CCN2 Partner Domain Component Administrator ¹⁶	This role has full access permission to a specific component, scoped by a specific Domain, on artefacts managed by the specific Partner.	ROLE-ADM-PUR-19
CCN2 Partner Domain Component Access ¹⁶	This role has read permission to access to a specific component, on a specific Domain, only allowing viewing the artefacts managed by the specific Partner.	ROLE-ADM-PUR-20
CCN2 Partner Public Component Access ¹⁶	This role has read permission to access to a specific component allowing viewing the artefacts managed in the Public space of that component.	ROLE-ADM-PUR-21

Table 15: Partner Operations Team Roles

Table above lists the predefined roles that can be assigned to Operations Team's members of a CCN2 Partner's organisation through the CCN2 Authorisation Management Process.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.8 CCN2 Security Enforcement

The CCN2 Platform security enforcement addresses the following aspects:

- **Authentication** – Ensures that resources are only accessible by identified and authenticated users of the CCN2 Platform. Identities are managed at the Security Governance level and controlled at runtime by the CCN2 Platform according to the type of interactions (see §4.8.1);
- **Authorisation** – Ensures that resources are only accessible by authorised users. It is supported by a flexible access control model which is implemented at the Security Governance level and enforced at runtime by the CCN2 Platform according to the type of interactions (see §4.8.4);
- **Integrity** – Ensures that exchanged data is not altered in an unauthorised or undetected manner. It is supported by the cryptography capabilities relating to digital signatures (see §4.8.7.1);
- **Confidentiality** – Ensures that exchanged data is only readable to those authorised. It is supported by cryptography capabilities relating to the encryption mechanisms (see §4.8.5);
- **Non-repudiation** – Provides evidences that actions or events have taken place, so that the events or actions cannot be repudiated later. This is supported by the internal CCN2 audit services (only accessible by the CCN2 Operations Administrators) and the use of digital signatures (see §4.8.7.1);
- **Accountability** – Guarantees that all information linked to operations carried out by Partners, Users or systems on resources can be identified. The author of the operation and the usage of operations is persisted by the internal CCN2 audit services.
- **Authenticity** – Ensures that the identity of a subject or resource is the identity claimed. It applies to individuals (users) and systems. This is supported by the CCN2 authentication enforcement and the use of digital signatures (see §4.8.7.1).

Note that all CCN2 administrative tasks are also secured according to the principles above.

4.8.1 Authentication Enforcement

Any communicating party that wants to access a resource exposed by the CCN2 Platform (i.e. a service or a web application) must be authenticated. Such authentication is enforced by:

- The CCN2 Oracle Access Manager (see §4.11) when the user-to-system interactions address web applications;
- The CCN2 Service Connectivity Services (see §4.9) as far as system-to-system service interactions are concerned. The CCN2 service endpoints are configured in order to require and authenticate the CCN2 user credentials (see §4.9.6).

Subsequently, the asserted user identity is propagated to the target CCN2 Partner's application (see §4.8.2).

Moreover, in order to be authenticated by the CCN2 Platform, any user must be duly registered in the CCN2 User Directory. OUD registration occurs automatically when the user is created in OIM, either manually as described in §8.3.1.1 or through the oimLoader as described in §8.3.1.6.

4.8.2 CCN2 Identity Propagation

The CCN2 Identity Propagation offers the ability for CCN2 Partner to identify the origin of a request coming from the CCN2 Platform and to apply fine-grained authorisation mechanism inside the service logic. Such request can refer to operations on an exposed resource relating to:

- Web Applications managed through the CCN2 Oracle Access Manager (see §4.11) that enforce authentication and authorisation measures, and propagate the user's identity (see §4.11.4);

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- Services managed through the CCN2 Service Connectivity Services (see §4.9), mediating interactions between service consumers and providers (see §4.9.6.3).

The identity propagated by the CCN2 Platform takes the form of a security token defined according to an SAML Assertion (see §4.8.3).

4.8.3 CCN2 Security Token and SAML Assertion

The CCN2 Security Token, used to propagate a CCN2 User identity (see §4.8.2), is defined according to the SAML specification¹⁶ through an assertion as follows:

```
<saml:Assertion ID="..." IssueInstant="xs:dateTime" Version="2.0">
  <saml:Issuer>xs:string</saml:Issuer>
  <saml:Subject>
    <saml:NameID>xs:string</saml:NameID>
    <saml:SubjectConfirmation method="..."></saml:SubjectConfirmation>
  </saml:Subject>
  <saml:Conditions>...</saml:Conditions>
  <saml:AuthnStatement>...</saml:AuthnStatement>
  <saml:AttributeStatement>
    ( <saml:Attribute Name="xs:string">
      <saml:AttributeValue>xs:string</saml:AttributeValue>
    </saml:Attribute> ) *
  </saml:AttributeStatement>
</saml:Assertion>
```

The elements of such an assertion relevant to a CCN2 Partner's application and enabling the implementation of fine-grained permission are:

- **/saml:Assertion/saml:Issuer:** A mandatory element (of format X509 Subject Name) which contains the unique identifier of the identity provider;
- **/saml:Assertion/saml:Subject/saml:NameID:** A mandatory element (of type saml:NameIDType) identifying the subject (i.e. CCN2 User);
- **/saml:Assertion/saml:SubjectConfirmation@Method:** A mandatory element identifying the subject confirmation method, which in our case is constant and equal to "sender-vouches". This is due to fact that the CCN2 Platform signs SAML tokens. Please note that in the future it is expected that the generated SAML Tokens will meet Sender-Vouches requirements, i.e. the message Body and the SAML Token will be signed by the same signature;
- **/saml:Assertion/saml:AttributeStatement:** A mandatory element (of type saml:AttributeStatementType) identifying CCN2 user profile attributes associated to the related subject;
- **/saml:Assertion/saml:AttributeStatement/saml:Attribute@Name:** The name (of type xs:string) identifying the type of CCN2 user profile attribute that can be:
 - "uid", referring to the CCN2 userId;
 - "partnername", referring to the CCN2 Partner to which the user belongs to;
 - "c", referring to a user's country;
 - "role", referring to a user's role;
- **/saml:Assertion/saml:AttributeStatement/saml:Attribute/saml:AttributeValue:** The element that supplies the value of specified attribute.

4.8.4 Authorisation Enforcement

Any authenticated user that wants to access a resource exposed by the CCN2 Platform (i.e. a service or

¹⁶ Please refer to the SAML documentation for detailed information:
<http://docs.oasis-open.org/security/saml/v2.0/saml-core-2.0-os.pdf>

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

a web application) must be authorised according to established permissions (only U2S) or roles. Such authorisation is enforced by:

- The CCN2 Oracle Access Manager (see §4.11) when the user-to-system interactions address web applications (see §4.11.3);
- The CCN2 Service Connectivity Services (see §4.9) as far as system-to-system service interactions are concerned. The CCN2 service endpoints are configured to control the access to the exposed resources (see §4.9.6.5) according to the permissions or roles of the authenticated CCN2 user.

In order to be authorised to access resources via the CCN2 Platform, any identified user must be granted permissions maintained in the CCN2 User Directory through the CCN2 Authorisation Management Process

Moreover, with regard to U2S and S2S services hosted at partner premises, the CCN2 Platform only applies coarse-grained authorisation policies since it is by nature business-agnostic. It is based only on the identification of requested operations on resources and the role(s) of the concerned user (as per the RBAC model), whatever the content of the message payload. To enforce fine-grained authorisations (e.g. based on business logic), the CCN2 Partner's applications can rely on the propagated user identity (see §4.8.2).

4.8.5 Certificate Management

For certain security enforcements digital certificates are necessary:

- Confidentiality Enforcement
- Integrity Enforcement

The certificates that are provided on a service endpoint, must be provided throughout the Service Registration process. The process to register certificates follows the existing ITSM procedures for certificate management.

The following characteristics need to be used for the certificates:

- Certification type: X.509 v3.
- Cipher: RSA / AES algorithm.
- Hash: SHA-2.
- Key length: 2048 bits.

In case of developing and testing environments both self-signed certificates and certificates that were issued by the certificate authorities trusted by the DG TAXUD are permitted.

However, in case of production environments only certificates that were issued by the certificate authorities trusted by the DG TAXUD are permitted.

4.8.6 Confidentiality Enforcement

4.8.6.1 CCN2 Encryption

The CCN2 Platform supports confidentiality requirements through encryption technologies leveraging X.509 v3 certificates and using a Public Key Infrastructure (PKI). Encryption typically prevents risks associated with eavesdropping, alteration or unauthorized access to protected resources.

Encryption is implemented on three layers and designed to be independent from the security level of

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

the underlying transport networks:

- **Network layer encryption** (mandatory) where any communication that traverses the CCN2 Network is transparently encrypted via a (secured) VPN tunnel set up
- **Transport / Session layer encryption** (mandatory) in two possible communication channels:
 - External communications between Partner and Access Point (and vice-versa) that use the TLS v1.2 protocol
 - Internal communications between CCN2 Components.
- **Message / Payload Layer Encryption** (optional) applicable to service interactions through the CCN2 Service Connectivity Services (see §4.9). It can occur in two possible ways, based on the level of trust:
 - Point-to-point encryption managed by the CCN2 Platform (see §4.9.6.6);
 - Payload encryption managed by the CCN2 Partners without any intervention by the CCN2 Platform. Such confidentiality enforcement prevents any intermediary processing on the encrypted payload by the CCN2 Platform.

The following figures depict the different layers between all parties.

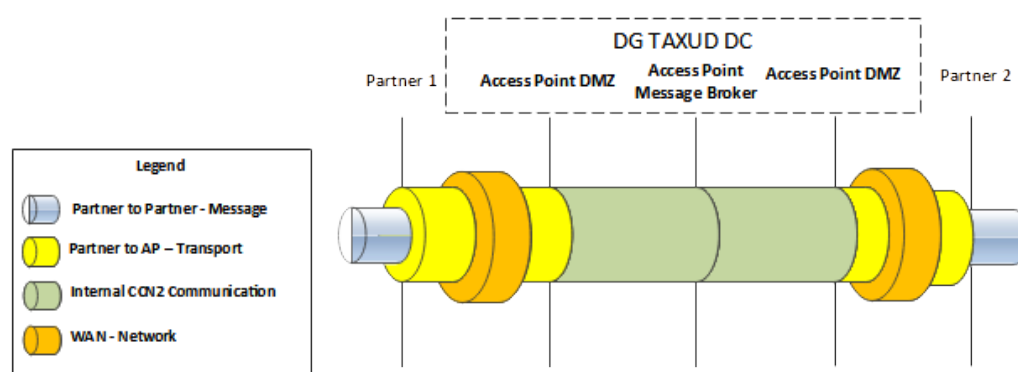


Figure 4-9: The CCN2 Platform security Layers

4.8.6.2 Key Encapsulation Mechanism (KEM)

The CCN2 Platform relies on the WS-Security and XML Encryption specifications to enforce confidentiality of the service interactions. Those specifications define how to encrypt XML documents according to two basic mechanisms:

- **Symmetric Key (or Secret Key) Encryption**, where the sender and the receiver share the same secret key that is used to both encrypt and decrypt messages. The main advantage of symmetric key encryption is that it is fast. Its main drawback is that both participants (sender and receiver) first need to agree on a secret key, which can be difficult in practice;
- **Asymmetric Key (or Public Key) Encryption**, where the receiver publishes his public key that allows any sender to encrypt a message. Only the receiver can decrypt the message using its private key. The great advantage of public key algorithms is that they solve the key distribution problem by using a Public Key Infrastructure (PKI). Its big practical default is that it is slow.

The CCN2 Platform applies the Key Encapsulation Mechanism (KEM) that uses the best of both mechanisms depicted above as follows:

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

1. The sender generates a random session key of length 256 bits;
2. The sender encrypts the message using the generated session key according to the “AES-256” symmetric encryption algorithm;
3. The sender encrypts the session key with the public key of the receiver using the **KwRsaOaep** asymmetric key wrap algorithm. It is part of the “Basic256Sha256” algorithm suite of the applied security policy (i.e. *wss11_saml20_sendervouches_token_mutual_authn_sign_encrypt*);
4. The sender submits the message according to the WS-Security specifications:
 - By replacing the concerned message element (in SOAP Header and/or SOAP Body) by a *xenc:EncryptedData* element, which is the result of the encryption in step 2 above. It includes information about the key (*ds:KeyInfo*) and the algorithm (*xenc:EncryptionMethod*) used to encrypt the message data, as well as the cipher data (*xenc:CipherData*) itself;
 - By inserting a *xenc:EncryptedKey* element, which is the result of the session key encryption in step 3 above, in the *wsse:Security* SOAP Header. It includes information about the key (*ds:KeyInfo*) and the algorithm (*xenc:EncryptionMethod*) used to encrypt the session key, as well as the cipher session key (*xenc:CipherData*) itself. It also refers to the list of encrypted data references (*xenc:ReferenceList/xenc:DataReference*), i.e. *xenc:EncryptedData* elements, to which the session encryption key is applied;
5. The receiver decrypts the session key (i.e. *xenc:EncryptedKey*) by using his private key;
6. The receiver uses the session key to decrypt the message data (i.e. *xenc:EncryptedData*).

4.8.7 Integrity Enforcement

4.8.7.1 CCN2 Digital Signature

The CCN2 Platform supports integrity requirements through a standard hashing algorithm and digital signatures. It is optionally applicable to service interactions through the CCN2 Service Connectivity Services (see §4.9).

It can occur in two possible ways, based on the level of trust:

- Point-to-point digital signature managed by the CCN2 Platform (see §4.9.6.7);
- Payload digital signature managed by the CCN2 Partners without any intervention by the CCN2 Platform. Such integrity enforcement prevents any transformation processing on the signed payload by the CCN2 Platform. In this case the CCN2 Partners must endorse the following responsibilities with respect to:
 - Securely exchanging root CA(s) and/or client-certificates to the CCN2 Platform;
 - Setting up and maintaining a PKI;
 - Certificate management process.

4.8.7.2 Digital Signature Creation Process

The CCN2 Platform implements the SHA-2 Hashing Algorithm and the RSA Encryption Algorithm (with 2048 bits key length) to create digital signatures, as depicted in Figure 4 -10. The calculated message digest by the hashing algorithm is encrypted using the private key of the message sender to produce the digital signature.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

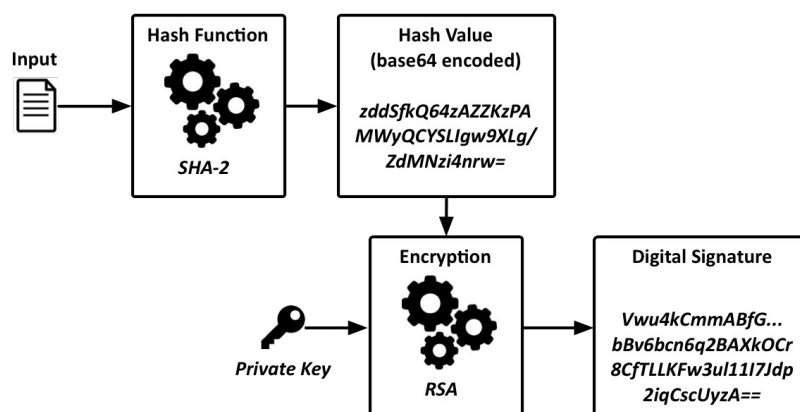


Figure 4-10: Digital Signature Creation Process

According to the WS-Security and XML Signature specifications, the digital signature is inserted in a *wsse:Security* SOAP Header element through a *ds:Signature* element (see figure below):

```

<soap12:Envelope>
  <soap12:Header>
    ...
    <wsse:Security soap12:mustUnderstand="true" soap12:role="CCN2.Platform">
      ...
      <ds:Signature [...] Id="...">
        <ds:SignedInfo [...]>
          <ds:CanonicalizationMethod Algorithm="..." />
          <ds:SignatureMethod Algorithm="..." />
          <ds:Reference URI="...">
            <ds:Transforms><ds:Transform Algorithm="..." /></ds:Transforms>
            <ds:DigestMethod Algorithm="..." />
            <ds:DigestValue>...</ds:DigestValue>
          </ds:Reference>
          (<ds:Reference URI="...">...</ds:Reference>)*
        </ds:SignedInfo>
        <ds:SignatureValue>...</ds:SignatureValue>
        <ds:KeyInfo [...] Id="...">
          <wsse:SecurityTokenReference [...] wsu:Id="...">
            <wsse:Reference URI="..." [...] />
          </wsse:SecurityTokenReference>
        </ds:KeyInfo>
      </ds:Signature>
    </wsse:Security>
    ...
  </soap12:Header>
  <soap12:Body [...]>...</soap12:Body>
</soap12:Envelope>
  
```

Figure 4-11: Digital signature structure

The *ds:Signature* element includes a *ds:SignedInfo* element containing the reference to the signed data (*ds:Reference*) and to the applied methods (i.e. *ds:SignatureMethod* and *ds:CanonicalizationMethod*). The *ds:Reference* element specifies the message content being signed by URI reference; and any transforms to be applied to the resource prior to signing (a transformation can be a XPath-expression that selects a defined subset of the document tree). It also specifies the hash algorithm (e.g. SHA-2, in the *ds:DigestMethod* element) applied to the transformed message content and the resulting value (*ds:DigestValue*).

Finally, the *ds:SignatureValue* element contains the Base64 encoded signature. In addition, a *ds:KeyInfo* element optionally allows the signer to provide the recipient with the key that validates the signature, in the form of a X.509 digital certificate.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.8.7.3 Digital Signature Verification Process

Figure 4-12 depicts the process to verify a digital signature. The recipient must decrypt the digital signature using the public key of the originator and recalculate the hash value of the corresponding message content. If the calculated hash value does not match the result of the decrypted signature, either the object has been altered since being signed, or the signature was not generated with the corresponding private key of the originator.

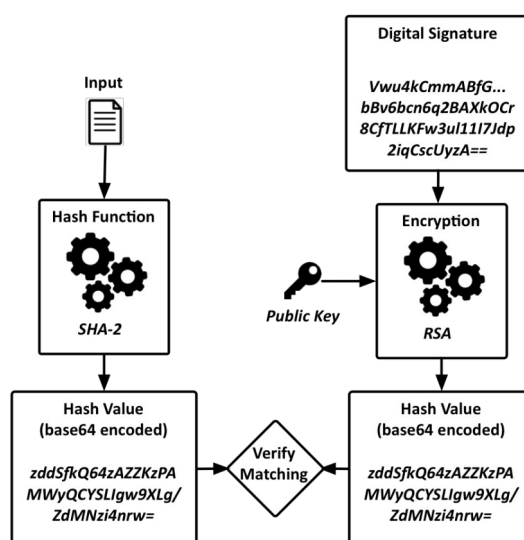


Figure 4-12: Digital Signature Verification Process

4.9 CCN2 Service Connectivity Services

4.9.1 Interconnectivity Capabilities

The CCN2 Service Connectivity Services are the core building blocks of the CCN2 Service-Oriented Integration Layer. They are responsible for binding service consumers with service providers. This provides a level of indirection between the consumer of a service and its provider. A service consumer interacts with the service provider via the CCN2 Service Connectivity Services, as depicted in Figure 4-13. Hence, each service interface (or endpoint) is only exposed via the CCN2 Integration Layer, never directly. Point-to-point integration is done at the Integration Layer instead of consumers doing it themselves.

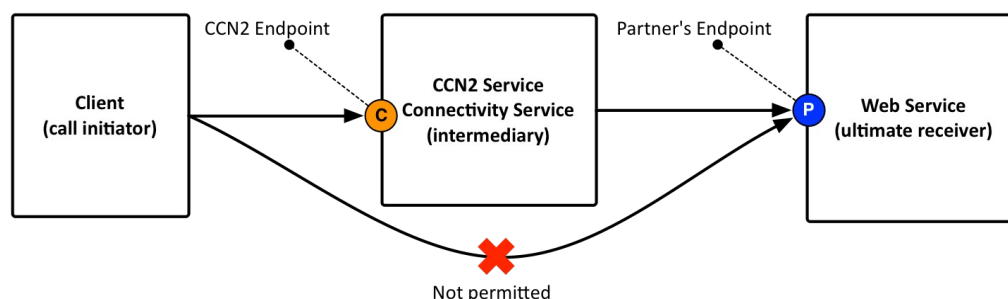


Figure 4-13: CCN2 Service Connectivity Service

In the CCN2 ecosystem, i.e. Trans-European Systems, multiple service providers can implement the same service contract. The fact that only one Partner provides a service (e.g. TES central service) is just considered as a particular case. Therefore, when submitting a service request to a CCN2 Endpoint, a service consumer needs to specify its intended recipient. This is subject to CCN2 conventions

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

relating to the routing (or addressing) capabilities (see §4.9.4.1) as well as to the way specific and required metadata is associated to an endpoint definition.

Moreover, in order to be able to be consumed by the CCN2 Partners, services exposed through the CCN2 Platform must be duly registered. The process consists firstly in the communication of the service contracts, including WSDLs and XSDs defining them, as well as other artefacts and metadata driving the deployment of service connectivity services and their intermediary capabilities (see §4.9.2).

The CCN2 Service Registration Process consists mainly of:

- The deployment of CCN2 Endpoints (see §4.9.3.6) that are used by the service consumers as official interfaces;
- The registration of Partner's Endpoints (see §4.9.3.7) referring to specific service instances. Those endpoints are only used by the CCN2 Platform that must know how to technically access the related service instances.

4.9.2 Mediation Capabilities

In addition to the support to interconnectivity, CCN2 Service Connectivity Services host the mediation logic that may perform message validation, transformation, routing and other augmented functionality (such as logging, auditing or monitoring) to enable the managed interconnectivity of the CCN2 Partners' business services.

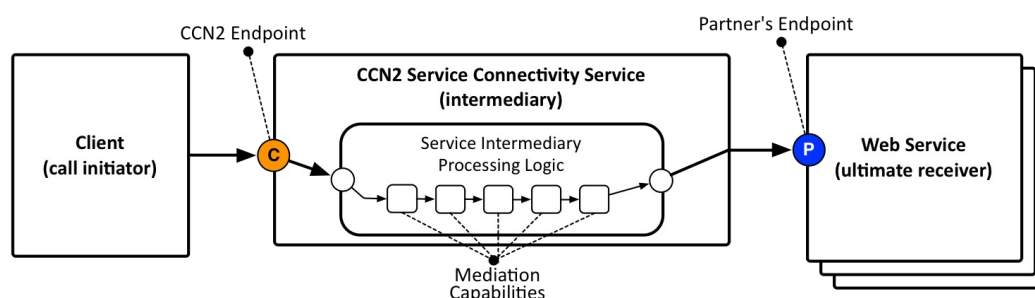


Figure 4-14: CCN2 Mediation Capabilities

The CCN2 Platform allows the insertion of the following mediation capabilities in the flows of messages, between service consumers and providers, as part of the intermediary processing logic of the CCN2 Service Connectivity Services:

- **Routing** – The CCN2 Platform offers the following routing **capability**:
 - **Header-based Routing** – the ability to route a message to a virtual (or logical) destination. It is a default capability and the basic purpose of the CCN2 Service Connectivity Services. The service interactions are managed according to supported exchange patterns (see §4.9.4) with a level of indirection between service consumers and providers. This capability is translated into constructs based on the WS-Addressing specification (see §4.9.4.1);
- **Reliability** – It is a requirement for the CCN2 Platform to support service consumers and provider that wish to communicate to do so reliably during software component, system, or network failures. The CCN2 Platform defines a messaging protocol and other measures to identify, track, and manage the reliable (and ordered) transfer of messages between CCN2 Partners. The supports to the following delivery assurances are addressed:
 - **Delivery Acknowledgement** – the ability for sending CCN2 Partners to receive confirmations (generated by the CCN2 Platform, see §4.9.5.1) of the message delivery processing or, in case of exceptions, to receive fault reports;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- **No Message Lost Assurance** – a set of default measures applied internally by the CCN2 Platform for the management of asynchronous service interactions between CCN2 Partners (see §4.9.5.2);
- **“ExactlyOnce” Delivery Support**– the support that the asynchronous service messages will be delivered once and only once to the Partner’s target endpoints as long as the required conditions are met (see §4.9.5.3);
- **Security** – The CCN2 Platform offers a set of capabilities relating to the security enforcement, namely:
 - **Authentication** – any service interaction is subjected to the authentication of the communicating Partner by the CCN2 Platform (see §4.9.6.2);
 - **Authorisation** – any service interaction is subjected to authorisation by the CCN2 Platform (see §4.9.6.5);
 - **Identity Propagation** – the identity of the communicating CCN2 Partner is propagated through the service interaction towards the target service (see §4.9.6.3);
 - **Confidentiality** – the ability to encrypt sensitive content in messages between the communicating Partners and the CCN2 Platform (see §4.9.6.6);
 - **Integrity** – the ability to check digital signatures of sensitive content in the messages between the communicating Partner and the CCN2 Platform (see §4.9.6.7).
- **Data Validation** – the ability to validate data exchanged between service consumers and providers and to report detected syntactic errors (see §4.9.7.1 **Error! No bookmark name given.**).
- **Monitoring** (see §4.7):
 - **Service Monitoring** – the ability to track service interactions and to be notified about related events such as transmission failures;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.9.3 Service Endpoint Definitions

4.9.3.1 Web Service Description Artefacts

Service Contracts are the major artefacts to govern in SOA. They are organised into a structure that reflects a separation of three major aspects:

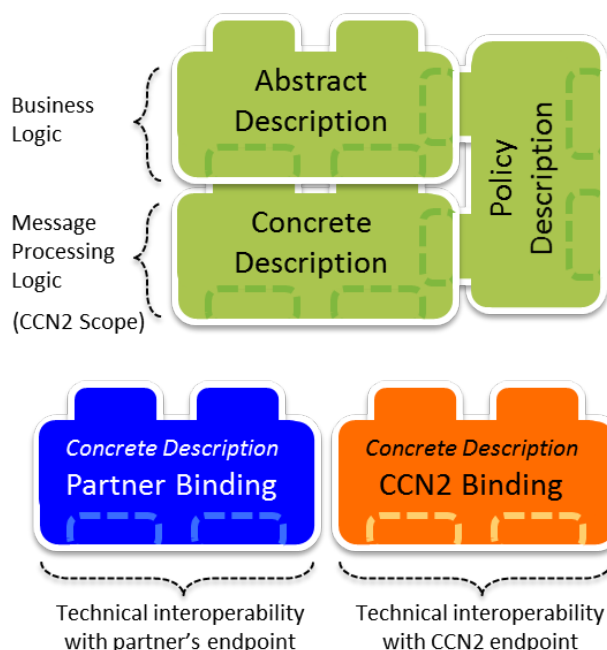


Figure 4-15: Service Contract Artefacts

- The “What”, i.e. the purpose of the service (function) and its capabilities (operations). This part of the contract (also called abstract description) is not functionally impacted by CCN2 and it is only under the control of the Business System Owners. However, by conventions, it must be expressed using standards including WSDL (describing the service capabilities, see §4.4.4) and XSD (describing the exchanged data) specifications;
- The “How” & “Where”, i.e. the access to the service. This part of the contract defines the service endpoint and is impacted by the CCN2 Platform Integration Layer. It relates to the concrete technical communication (also called binding) between service consumers and service providers. According to the principles of the CCN2 Service Connectivity Services (see §4.9), two kinds of endpoint need to be referenced:
 - CCN2 Endpoints (orange building block in the figure above), implemented by the Business System Owner or its delegate, physically deployed on the CCN2 Platform and used by the service consumers at runtime;
 - Partner’s Endpoints (blue building block in the figure above), implemented by the service providers, physically deployed on CCN2 Partner’s infrastructure and used only by the CCN2 Platform.

By conventions, the binding to service endpoints must comply to the SOAP 1.2 specification (see §4.4.5);
- The Policies applied to the service endpoint. They relate to different aspects of the communication applied to the concrete part of the service contract, including security, reliability, routing, etc. By conventions, the policies expressed in the WSDL artefact must be described using the WS-Policy specification (see §4.4.6).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

This clean separation allows different parts of the contract to be owned and developed at different stages of the service delivery lifecycle by different members of the project teams.

4.9.3.2 CCN2 vs. Partner Service Endpoints

The availability for consumption of services mediated by the CCN2 Platform is determined according to the identification, description and registration of service endpoints.

As depicted in Figure 4 -13, and according to the principles of the CCN2 Service Connectivity Services, two kinds of Endpoint must be referenced:

- CCN2 Endpoints (“C” in the Figure 4 -13 above, see §4.9.3.6), used by the service consumers at runtime and exposed solely by the CCN2 Platform;
- Partner’s Endpoints (“P” in Figure 4 -13 above, see §4.9.3.7), implemented by the service providers and used solely by the CCN2 Platform.

The presence of the Service Connectivity Services is mostly transparent to the consumer of the business services in the SOA solution. Both types of endpoint refer to specific service contracts (i.e. WSDLs) with a common abstract description¹⁷. Only the concrete part of the service contracts differs, relating to the technical communication with the related endpoints.

4.9.3.3 Service Endpoint Reference (EPR) Metadata

An endpoint reference (EPR) is a combination of elements that define the address and other information (i.e. metadata) for a service. The EPR definitions are the key elements driving the CCN2 Service Connectivity Services logic, referring to the definition of specific service instances. They are produced by the respective CCN2 Partner’s development teams.

The CCN2 Platform applies the WS-Addressing specification (see §4.4.7). This standard defines the information model and syntax of an endpoint reference (EPR). It allows a flexible exchange of endpoint information in tightly coupled environments such as the CCN2 ecosystem where communicating parties share a set of common agreements about specific policies and protocols that are used during interactions.

An EPR consists of a Uniform Resource Identifier (URI, see §4.4.3), message reference parameters and metadata concerning the interface to be used. It is used for two specific purposes:

- The definition of a service endpoint in the concrete part of service contract (see §4.9.3.5), driving the deployment of services through the CCN2 Platform;
- The identification of a service endpoint as the origin or the destination of service interactions (see §4.9.4.1), relating to the header-based routing capability of the CCN2 Platform.

The following shows the XML Infoset representation of an endpoint reference definition.

```
<wsa:EndpointReference>
  <wsa:Address>xs:anyURI</wsa:Address>
  <wsa:ReferenceParameters>xs:any*</wsa:ReferenceParameters> ?
  <wsa:Metadata>xs:any*</wsa:Metadata>?
</wsa:EndpointReference>
```

- **/wsa:EndpointReference/wsa:Address:**
A required URL specifying the physical address of the endpoint;
- **/wsa:EndpointReference/wsa:ReferenceParameters:**
This optional element is currently not used by the CCN2 Platform;
- **/wsa:EndpointReference/wsa:Metadata:**
This optional element may basically contain elements from any namespace. Such elements form

¹⁷ Except in some cases when transformations are applied by the mediation.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

the metadata that is relevant to the related service interactions through the CCN2 Platform (see §4.9.3.4, Logical Destination Principle), as well as to the configuration of mediation capabilities (see §4.9.2).

- In case of CCN2 endpoint, it should contain the CCN2 address as per following example.
- In case of Partner endpoint, it should contain the partner address.

4.9.3.4 Logical Destination Principle

When addressing a CCN2 endpoint (“C” in Figure 4 -16), a service consumer needs to specify the final destination of the submitted messages (as depicted in Figure 4 -16).

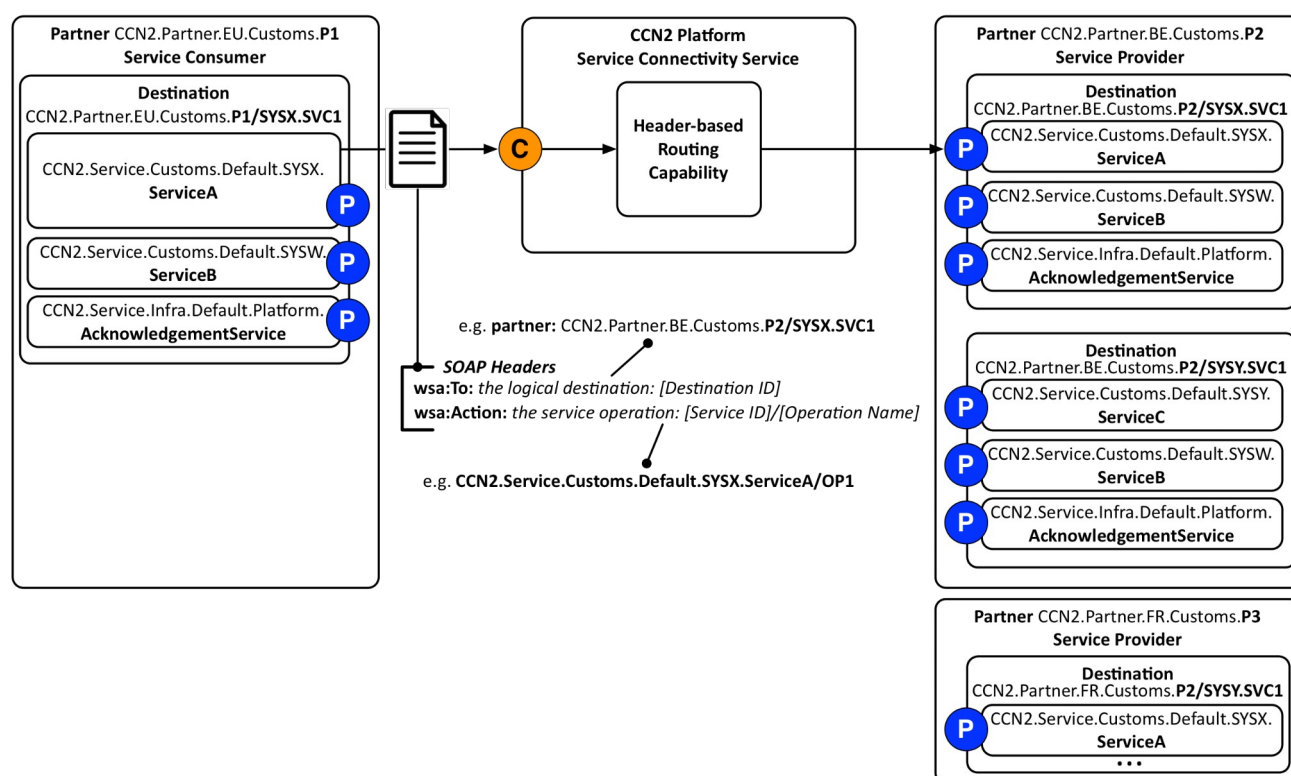


Figure 4-16: Logical Destination Principle

Because the physical endpoint of the service providers is abstracted (“P” in Figure 4 -16), as per the CCN2 Service Connectivity Service principle, the destination of the submitted messages consists of a logical address (identified by naming convention, see §C.1.3, e.g. *partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1* in Figure 4 -16 above, in `wsa:To`).

This logical address relates to a specific implementation of a service contract (identified by naming convention, see §C.1.2, e.g. *CCN2.Service.Customs.Default.SYSX.ServiceA* in Figure 4 -16 above) by a specific service provider (i.e. a CCN2 Partner identified by naming convention, see §C.1.1, e.g. *CCN2.Partner.BE.Customs.P2* in Figure 4 -16 above).

This principle provides a high level of flexibility in the way services are exposed and dynamically consumed through the CCN2 Platform, covering multiple cases, e.g. when:

- Multiple service providers implement the same business service contract, e.g. *CCN2.Service.Customs.Default.SYSX.ServiceA* in Figure 4 -16 above.

Each consumer of the service uses the same CCN2 endpoint, and can communicate in the same way with any target endpoint implementing the common business service contract.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Specifying the logical destination (specified by the `wsa:To` attribute at runtime) allows to specifically aim at a particular target endpoint, if needed. Adding any new service provider implementing the same contract does not change this principle, so the impact for the consumers is limited to the use of an additional logical destination by the consumers' systems.

- Services of different business systems are reused or recomposed,
e.g. *CCN2.Service.Customs.Default.SYSW.ServiceB* in Figure 4 -16 above.
Because, in some cases, service logic could be implemented differently according to the business context, the same service contract could be referred by multiple endpoints exposed by the same CCN2 Partner. Because any consumer of a service always uses the same CCN2 endpoint, whatever the target partner's endpoint, the number of systems implementing a specific service definition can change without technically impacting the service consumers.
- Service contracts are implemented differently by the service providers,
e.g. *CCN2.Service.Infra.Default.Platform.AcknowledgementService* in Figure 4 -16 above, illustrating the application of CCN2 Acknowledgment service (see §4.9.5.1) where multiple Service Providers in multiple Systems may implement the same Acknowledgement Service contract in their own way. In this example, acknowledgment messages can be routed to different locations.

The value of a logical destination is specified in the related EPR metadata (see §4.9.3.3) when registering a service endpoint. It needs to be defined by each Service Provider in order to establish each CCN2 Partner's endpoint (see §4.9.3.7) with their Service Provider system's physical address used only by the CCN2 Platform to forward the service messages.

Note that it is not allowed to have several logical destinations mapped to the same physical address. Those implementing several services at once (i.e. several ServiceID as part of the same implementation) can still comply with the CCN2 rule by exposing their implementation under several physical URLs. Each physical URL would be configured to receive traffic corresponding to a given logical destination, i.e. a single type of SOAP Action corresponding to one of the ServiceID being implemented. As such, there is no need to expose the physical URLs on different servers.

For example, if we have the following logical to physical destination mapping:

Logical destination:

CCN2.Service.Customs.Default.SYSX.ServiceA

CCN2.Partner.BE.Customs.P2/SYSX.SVC1

Physical destination:

<http://<some server>/Application1>

It would not be allowed to have additionally, the following logical destination mapped to the same Application1 physical destination:

Logical destination:

CCN2.Service.Customs.Default.SYSX.ServiceB

CCN2.Partner.BE.Customs.P2/SYSX.SVC1

Physical destination:

<http://<some server>/Application1> [Not allowed as already mapped]

In this context, a distinct physical destination would have to be used like in the following example:

Logical destination:

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

CCN2.Service.Customs.Default.SYSX.ServiceB

CCN2.Partner.BE.Customs.P2/SYSX.SVC1

Physical destination:

<http://<some server>/Application2> [Allowed as not already mapped]

However, nothing prevents Application1 and Application2 to be both based on the same underlying implementation, provided the implementation is exposed to requests using two distinct physical URLs.

4.9.3.5 Service Endpoint Description

A service endpoint is described through the concrete part of a service contract (i.e. WSDL, see §4.9.3.1) that each service provider must register to expose the related service through the CCN2 Platform. It is subject to a specific artefact in the form of a *WSDL (Concrete Part)* asset (see §4.9.3.1).

The abstract part of the service contract, common to all providers, is not impacted by the CCN2 connectivity requirements. It is subject to a specific artefact in the form of a *WSDL (Abstract Part)* asset (see §4.9.3.1).

The concrete description of the service contract must be defined using the WSDL specification (see §4.4.4) in a separate file named according to CCN2 conventions (see §C.2). The CCN2 Platform specifications define a set of metadata that supports the definition of endpoints to be exposed. This metadata is defined in some placeholders of the WSDL constructs in a standard way, as follows:

```
<wsdl:definitions...>
  <!-- reference to the abstract part of the service contract -->
  <wsdl:import namespace="xs:anyURI" location="URL"/>

  <wsdl:binding name="xs:string" type="xs:anyURI">
    <!-- the SOAP binding -->
    <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <!-- the policy assertion(s) at endpoint level -->
    <wsp:PolicyReference URI="xs:string" />
    <wsdl:operation name="xs:string">
      <soap:operation soapAction="xs:string"/>
      <!-- the policy assertion(s) at operation level -->
      <wsp:PolicyReference URI="xs:string" />
      <wsdl:input>
        <!-- the policy assertion(s) at message level -->
        <wsp:PolicyReference URI="xs:string" />
        <soap:body parts="param" use="literal"/>
        ...
      </wsdl:input>
      <wsdl:output>...</wsdl:output>
      <wsdl:fault name="xs:string">...</wsdl:fault>
    </wsdl:operation>
  </wsdl:binding>

  <wsdl:service name="xs:string">
    <wsdl:port name="xs:string" binding="xs:anyURI">
      <!-- the physical address of the service endpoint -->
      <soap:address location="URL"/>
      <!--
      <wsa:EndpointReference>
        <!-- the physical address of the endpoint -->
        <wsa:Address>URL</wsa:Address>
      <wsa:Metadata>
        <!-- the reference to the service contract -->
        <ccn2:ServiceID>xs:string</ccn2:ServiceID>
        <ccn2:ServiceName>xs:string</ccn2:ServiceName>
        <ccn2:ServiceDescription>xs:string</ccn2:ServiceDescription> ?
        <ccn2:ServiceVersion>xs:anyURI</ccn2:ServiceVersion>
        <!-- the logical address of the partner's endpoint -->
        <ccn2:DestinationID>xs:anyURI</ccn2:DestinationID> ?
        <ccn2:OrganisationID>xs:string</ccn2:OrganisationID> ?
        <ccn2:DestinationName>xs:string</ccn2:DestinationName> ?
        <ccn2:DestinationDescription>xs:string</ccn2:DestinationDescription> ?
      </wsa:Metadata>
    </wsdl:port>
  </wsdl:service>
</wsdl:definitions>
```

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```

<!-- other metadata relating to CCN2 mediation capabilities -->
xs:any*
</wsa:Metadata>
</wsa:EndpointReference>
</wsdl:port>
</wsdl:service>
</wsdl:definitions>

```

- **/wsdl:import**: The standard WSDL construct that allows to refer to the abstract part of the service contract;
- **/wsdl:binding/soap:binding**: The standard WSDL construct that allows to describe the technical binding to the service endpoint. It refers to the protocol to be used, i.e. SOAP (see §4.4.5) for the CCN2 Platform;
- **/wsdl:binding/wsp:PolicyReference**: The standard WS-Policy (see §4.4.6) Attachment construct that allows to reference a CCN2 policy applicable at the service endpoint level. The CCN2 Platform specification provides a set of predefined WS-Policy expressions (see §A.1) that can be referenced into a WSDL concrete part, including and WS-SecurityPolicy Assertions (see §4.9.3.8);
- **/wsdl:binding/wsdl:operation/wsp:PolicyReference**: The standard WS-Policy (see §4.4.6) Attachment construct that allows to reference a CCN2 policy applicable at the service operation level;
- **/wsdl:binding/wsdl:operation/wsdl:input/wsp:PolicyReference**: The standard WS-Policy (see §4.4.6) Attachment construct that allows to reference a CCN2 policy applicable at the message level;
- **/wsdl:service/wsdl:port/wsa:EndpointReference**: The standard WS-Addressing (see §4.4.7) construct that allows to describe EPR (see §4.9.3.3);
- **/wsdl:service/wsdl:port/wsa:EndpointReference/wsa:Address**: The standard WS-Addressing (see §4.4.7) construct used by the CCN2 Platform to specify the physical address of the service endpoint as defined by the service provider;
- **/wsdl:service/wsdl:port/wsa:EndpointReference/wsa:Metadata**: The standard WS-Addressing (see §4.4.7) construct that allows to describe the service endpoint metadata.

The following elements relate to the **CCN2 Endpoint** asset:

- **ccn2:ServiceID**: A mandatory value (of type xs:string) uniquely identifying a service contract and defined according to the CCN2 service naming convention (see §C.1.2);
- **ccn2:ServiceName**: The mandatory name (of type xs:string) of the service contract;
- **ccn2:ServiceDescription**: The optional description (of type xs:string) of the service contract;
- **ccn2:ServiceVersion**: A mandatory absolute URI (of type xs:anyURI) uniquely identifying the version of a service contract defined according to CCN2 naming conventions.

The following elements are specific to the **CCN2 Partner Endpoint** asset:

- **ccn2:DestinationID**: A mandatory value (of type xs:string) uniquely identifying the logical destination (see §C.1.3) of Partner's endpoints;
- **ccn2:OrganisationID**: A mandatory value (of type xs:string) uniquely identifying the organisation to which the defined service belongs to. CCN2 Partners can define one or more organisation units, each one managing a specific set of services;
- **ccn2:DestinationName**: The mandatory name (of type xs:string) of the destination;
- **ccn2:DestinationDescription**: The optional description (of type xs:string) of the destination.
- **xs:any***: Any additional XML element (see below) relating to service endpoint metadata (e.g. additional configuration parameters).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Additional metadata are defined to drive the configuration of some CCN2 mediations capabilities (see §4.9.2).

4.9.3.6 CCN2 Endpoint Publication

The CCN2 Endpoints are defined during the design of the services (see §5.3.3) by the development teams of the Business System Owner in charge of the (functional) service contract descriptions. In order to be consumed by CCN2 Partners, the related services must be published through the deployment of artefacts driving the configuration of the mediation logic.

Moreover, the set of metadata relating to the security model (i.e. RBAC) adopted by the CCN2 Platform must be communicated in order to establish the permissions driving the controlled access to the published services (see §4.9.6).

The registration of a CCN2 Endpoint in the CCN2 Platform consists mainly in the communication of the following artefacts by the Business System Owner:

- **WSDL files** (abstract and concrete parts, as well as imported XSD files) including the descriptions of the endpoint references (see §4.9.3.5). The metadata of a CCN2 endpoint reference does not include the definition of a logical destination since it acts as a proxy for all consumers who physically address it;
- **Permissions or Roles file**, only applicable for a CCN2 endpoint registration, relating to the Security Enforcement capabilities of the CCN2 Platform. It includes the definition of roles (see §5.2.4.3) and permissions (see §5.2.4.2) relating to the controlled access to the registered service.

4.9.3.7 Partner Endpoint Publication

Each CCN2 Partner providing the implementation of services exposed through the CCN2 Platform is responsible for the definition of the endpoints linked to them.

Because a Partner endpoint definition is based on the predefined abstract part of a service contract, only the concrete part of the WSDL needs to be produced. It includes the descriptions of the endpoint references (see §4.9.3.5) with metadata relating to the logical destination of the service instance (see §4.9.3.4, Logical Destination Principle). Note that it is not allowed to have several logical destinations mapped to the same physical address.

4.9.3.8 WS-SecurityPolicy Assertions

WS-SecurityPolicy (see §4.4.9) assertions are used by the CCN2 Platform, as an extension to the WS-Security specification, to represent the security requirements of web services as policies based on the WS-Policy framework (see §4.4.6):

- Message Level Security binding assertions defining the cryptographic algorithm and required timestamps. An example is shown below.

```
<wsp:Policy
wsu:Id="# wss11_saml20_sendervouches_token_mutual_authn_sign_encrypt">
  <wssp:AsymmetricBinding>
    <wsp:Policy>
      <wssp:AlgorithmSuite>
        <wsp:Policy>
          <wssp:Basic256Sha256 />
        </wsp:Policy>
      </wssp:AlgorithmSuite>
    </wsp:Policy>
  </wssp:AsymmetricBinding>
  <wssp:IncludeTimestamp />
  ...
</wsp:Policy>
```

Example 4-1: Message Level Security Assertion

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- Encryption assertions identifying the elements of a message that are required to be encrypted. An example is shown below.

```
<wsp:Policy wsu:Id="#encrypt_body">
  <wssp:EncryptedParts>
    <wssp:Body />
  </wssp:EncryptedParts>
</wsp:Policy>
```

Example 4-2: Message Level Encryption Assertion

- Digital Signature assertions identifying the elements of a message that are required to be signed. An example is shown below.

```
<wsp:Policy wsu:Id="#sign_body">
  <wssp:SignedPart>
    <wssp:Body />
  </wssp:SignedPart>
</wsp:Policy>
```

Example 4-3: Message Level Digital Signature Assertion

According to the WS-Policy standard, policies can be attached to different parts of the WSDL: service, port, operation, and message. However due to the implementation of the CCN2-Platform, only the service level is applicable.

Please refer to the WS-SecurityPolicy¹⁸ documentation (Appendix A) and to WS-PolicyAttachment¹⁹ (Chapter 4) documentations for detailed information. The list of security policies applicable to the CCN2 Platform is provided in §A.1.1.

4.9.4 Supported Message Exchange Patterns (MEP)

When services are invoked, service consumers and providers exchange messages according to specific patterns. The CCN2 Platform supports the application of the following message exchange patterns (as described in the CCN2 Platform Functional Specification)

- Synchronous Request-Response (see §4.9.4.4);
- Asynchronous One-Way (see §4.9.4.5);
- Asynchronous Request-Callback (see §4.9.4.6);

From a technical point of view, the application of those MEPs relates to either synchronous exchanges or asynchronous exchanges driven by header-based routing conventions in conformance with the WS-Addressing specification (see §4.9.4.1).

4.9.4.1 Usage of WS-Addressing

The header-based routing logic of the CCN2 Service Connectivity Services is driven by the WS-Addressing specification (see §4.4.7). It defines Message Addressing Properties that augment a SOAP message with specific SOAP Headers. The CCN2 Platform uses them as follows:

- **wsa:To** property identifies the logical address of the intended receiver of the message (see §4.9.3.4, Logical Destination Principle);
- **wsa:Action** property identifies the type of the exchanged message. According to the WS-Addressing specification, it must be a value to unambiguously determine the semantic of the message. The CCN2 wsa:Action has a specific format which is described in C.1.7, SOAP Action Naming Convention. The following rules apply:

¹⁸ <http://docs.oasis-open.org/ws-sx/ws-securitypolicy/200702/ws-securitypolicy-1.2-spec-os.html>

¹⁹ <http://www.w3.org/Submission/WS-PolicyAttachment/>

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

1. If wsaw:Action is explicitly associated in the WSDL with wsdl:input message (wsaw stands for WS-Addressing wsdl), then this value is used in request, response and fault messages. An example is shown below.

```
<definitions
  targetNamespace="http://greath.example.com/2004/schemas/resSvc"...>
  ...
  <portType name="reservationInterface">
    <operation name="opCheckAvailability">
      <input message="tns:checkAvailability"
        wsaw:Action= "CCN2.Service.Platform.SampleService/opCheckAvailability"/>
      <output message="tns:checkAvailabilityResponse"
        wsaw:Action= "CCN2.Service.Platform.SampleService/opCheckAvailabilityResponse"/>
    </operation>
  </portType>
  ...
</definitions>
```

In the example above, the wsaw:Action value for the input of the “opCheckAvailability” operation within the “reservationInterface” port type is explicitly defined to be “CCN2.Service.Platform.SampleService/opCheckAvailability”.

The action for the output of this same operation is “CCN2.Service.Platform.SampleService/opCheckAvailabilityResponse”.

2. If wsaw:Action is not specified on the wsdl:input message and non-empty soapAction is specified on wsdl:binding/wsdl:operation, then the value of the soapAction is used. An example is shown below.

```
<definitions
  targetNamespace="http://greath.example.com/2004/schemas/resSvc"...>
  ...
  <wsdl:binding name="reservationSOAPBinding" type="...">
    <soap:binding style="document"
      transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name=" opCheckAvailability">
      <soap:operation style="document"
        soapAction= "CCN2.Service.Platform.SampleService/opCheckAvailability"/>
      <input>
        <soap:body use="literal"/>
      </input>
      <output>
        <soap:body use="literal"/>
      </output>
    </operation>
  </wsdl:binding>
</definitions>
```

In the example above, the wsaw:Action values are “CCN2.Service.Platform.SampleService/opCheckAvailability”.

3. If wsaw:Action is not specified on the wsdl:input message and either soapAction is not specified or empty, the WS-Addressing specification (and related specifications) defines a default pattern relating to the value of the wsaw:Action attribute for inputs and outputs according to the related WSDL definition as follows:

```
[target namespace]/[port type name]/[input|output name]
```

If the name attribute is absent for the input and output of an operation, the default value is the name of the operation with respectively "Request" and “Response” appended.

For fault messages, the general form of an action URI is as follows:

```
[target namespace]/[port type name]/[operation name]/Fault/[fault name]
```

An example is shown below.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```

<definitions
  targetNamespace="http://greath.example.com/2004/schemas/resSvc" ...
  ...

  <wsdl:binding name="reservationSOAPBinding" type="...">
    <soap:binding style="document"
      transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name=" opCheckAvailability">
      <soap:operation style="document"/>
      <input>
        <soap:body use="literal"/>
      </input>
      <output>
        <soap:body use="literal"/>
      </output>
    </operation>
  </soap:binding>
</wsdl:binding>
</definitions>

```

Those two properties are the key elements of the header-based routing capabilities of the CCN2 Platform. The combination of the logical destination (as specified by the *wsa:To* property) and the specific service message type (as specified by the *wsa:Action* property) allows the CCN2 Service Connectivity Services to resolve the target physical endpoint as specified by each CCN2 Partner during the registration of their service instance;

- ***wsa:MessageID*** property uniquely identifies the message. The CCN2 Platform requires the presence of this attribute because it serves other purposes relating to Service Monitoring and auditing, as well as to support the “ExactlyOnce” delivery support (see §4.9.5.3);
- ***wsa:ReplyTo*** property indicates that the related exchange (i.e. a service request) could trigger a subsequent reply. The CCN2 Platform requires the presence of this attribute in the context of the request/callback message exchange pattern. In order to make a distinction between a synchronous and an asynchronous service invocation, the WS-Addressing specification defines the following conventions:

For synchronous invocations, referring to the Request-Response MEP the reply endpoint is implicit. WS-Addressing defines the following URI for use by endpoints that cannot have a stable, resolvable URL: “<http://www.w3.org/2005/08/addressing/anonymous>”.

In the context of the CCN2 Platform, for the *wsa:ReplyTo* property the following rules should be apply:

- This “<http://www.w3.org/2005/08/addressing/anonymous>” URI is used to allow such endpoints to send and (synchronously) receive messages. The precise meaning of this URI is defined by the binding to a specific protocol. Because the CCN2 Platform relies on SOAP and HTTP (as per the Web Services Addressing 1.0 - SOAP Binding specification²⁰), the reply is sent back in the same HTTP connection;
 - In case of asynchronous invocations, referring to Request-Callback MEP (see §4.9.4.6), the replies will be sent to the endpoint provided by the consumer in the *wsa:ReplyTo* field (in other words the consumer acts as server for the asynchronous replies). To achieve such an asynchronous reply, the CCN2 Platform requires the registration of this endpoint with its logical destination.
 - In case of asynchronous invocations, referring to Fire-Forget MEP (see §4.9.4.5), no business response is sent, hence the following value of WS-Addressing should be used: “<http://www.w3.org/2005/08/addressing/none>”.
- ***wsa:RelatesTo*** property indicates that the message is related to another message according to its message ID property. It also identifies the nature of the relationship (i.e. *RelationshipType*). The default value defined by the WS-Addressing specification is:

²⁰ <https://www.w3.org/TR/ws-addr-soap/>

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- “http://www.w3.org/2005/08/addressing/reply”.

The CCN2 Platform defines two other values for the *RelationshipType* attribute to support the identification of asynchronous acknowledgement types:

- “http://ccn2.ec.eu/addressing/ack” for positive acknowledgement;
- “http://ccn2.ec.eu/addressing/err” for negative acknowledgement.
- **wsa:FaultTo** property identifies a reply endpoint to specifically receive asynchronous²¹ fault messages;
- **wsa:From** property identifies the logical address of the sender of the message.

4.9.4.2 CCN2 Message Header Attributes

Table 16 describes the list of message attributes defined for the CCN2 Platform. They are subject to a presence in the SOAP Header according to the related purpose and optionality. For some of the following optional attributes a default value is specified. This default value will be assumed if the attribute is not specified in the header.

Functional Description	Technical Representation	Description
Sending Date And Time	ccn2:SendingDateAndTimeType	Optional xs:dateTime (YYYY-MM-DDThh:mm:ss.sTZD²²). The date and time the message was sent by Service Consumer. If ccn2:MessageHeaderType for the given service is created by CCN2 Platform (see ccn2_flag_noheader in KPS) then it is time of creation this attribute by CCN2 hence it is time when message was received by CCN2.
Message Expiration Timestamp	ccn2:MessageExpirationTimestamp	Optional xs:dateTime (YYYY-MM-DDThh:mm:ss.sTZD²²). The date and time after which the message is obsolete. This attribute is only for asynchronous messages. Default value: ccn2:Timestamp + 1 hour

²¹ Due to the application of WS-Addressing 1.0 - SOAP Binding specification.

²² Note that the timestamps are aligned with the ISO8601 standard and are recorded in UTC time. TZD refers to the Time Zone Definition. A valid example of this is 2016-07-08T05:42:13.492Z.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Functional Description	Technical Representation	Description
Correlation ID	ccn2:CorrelationID	Optional xs:string. Opaque ID to identify messages belonging to the same business transaction, carried out on several message exchanges. The exact semantic of the business transaction is out of scope of the CCN2 Platform and shall be defined by the application protocol. Default value: <i>A random value will be generated by the CCN2 Platform. The format is cid:<uuid> where <uuid> is a type 4 random UUID. E.g.: cid:76f03dda-55bd-4f74-a150-61269599e3b7</i>
Message ID	wsa:MessageID	See §4.9.4.1, Usage of WS-Addressing.
Action	wsa:Action	
Sending Partner	wsa:From	
Sending Application Service		
Receiving Partner	wsa:To	
Receiving Application Service		
Call-back Application Service	wsa:ReplyTo	
Async Key	wsa:RelatesTo	
Request Acknowledgements	ccn2:RequestCOD	Optional xs:Boolean. Boolean value indicating of the sending application wants to receive acknowledgements (see §4.9.5.1). Default value: false
Username and Password credentials	wsse:Security	See §4.9.6.1. Use of WS-Security.
Certificate	wsse:Security	
Message Header Version	ccn2:Version	Required xs:string The version of the message header being used.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Functional Description	Technical Representation	Description
Message type	ccn2:MessageType	Required xs:string Describes the types of messages sent by the Systems integrating with CCN2 Platform. Each System integrating with CCN2 should determine the values for ccn2:MessageType itself, so that to easier and uniquely identify the types of messages sent by given System.

Table 16: CCN2 Message Header Attributes

4.9.4.3 Activity Monitoring Header Attributes

The CCN2 Platform is business agnostic and does not read the business data from a message Body besides situation when an optional message body validation is enabled on the service configuration level.

That means it is impossible to deliver reports that are addressing business aspects of message exchange. For that reason the CCN2 Platform delegates this responsibility to external reporting systems by exposing the audit data (metadata) of the message exchanges on demand based on the CCN2 Service configuration.

For some cases additional business values are required to deliver proper reports therefore the CCN2 Platform allows the Domain System to send an additional data set in the request that will enrich the audit data set. By the rule the CCN2 Platform does not read any business data from message Body hence the required business data set needs to be passed in a dedicated technical Header located under Soap Header.

Following table contains the detailed description of a generic key-value structure that can be used to feed an external reporting system with business data. Although the Header is optional if it is present it has to be a valid object according to CCN2 Technical Specification.

Functional Description	Technical Representation	Description
Activity Monitoring Properties	ccn2am:PropertiesType	Optional Wrapper element for collection of Activity Monitoring Property
Activity Monitoring Property	ccn2am:PropertyType	A single metadata entry consists of a key and corresponding value. Each pair will be used to enrich activity monitoring events created during message handling.
Name	xs:string	A name or a key for the given message metadata entry. This name must be unique across all ActivityMonitoringProperty in the document.
Value	xs:string	A value for the given message metadata entry.

Table 17: Activity Monitoring Header Attributes

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.9.4.4 Synchronous Exchanges MEP

The CCN2 Platform supports the application of the Request-Response MEP. It refers to a synchronous exchange because the processing thread of the calling application is blocked, waiting for the target service reply before it continues.

The CCN2 Platform supports SOAP-based web service, as described below.

Figure 4 -17 depicts the sequence of interactions involved in such an exchange pattern.

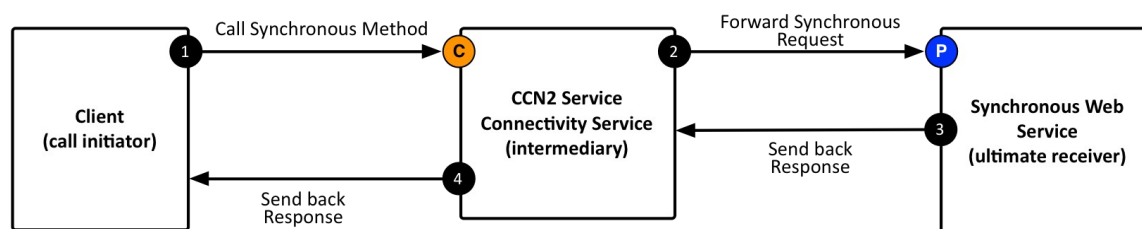


Figure 4-17: Synchronous Request-Response Web Service Interactions

1. The client application calls a synchronous service operation using the CCN2 EPR address as published in the CCN2 Service Registry.

The header of the submitted SOAP message must contain the required information, including:

- WS-Addressing attributes defining the routing conditions (see §4.9.4.1). For a request-response MEP, the mandatory attributes are:
 - Destination (wsa:To), an absolute URI representing the logical address of the intended receiver of this service request (see §4.9.3.4);
 - Action (wsa:Action), a value that uniquely identifies the semantics implied by this exchange (e.g. the message type);
 - Message ID (wsa:MessageID), an opaque value that uniquely identifies the message. It is subsequently used to correlate possible replies. This attribute is also required to achieve the quality of service relating to the “ExactlyOnce” delivery support (see §4.9.5.3). It is the responsibility of the sender to ensure that each message is uniquely identified. It is then unique from the Calling Partner Application perspective, and it is treated as an opaque token from CCN2 perspective;
 - Reply Endpoint (wsa:ReplyTo), referring to an “anonymous” endpoint denoting a synchronous interaction, with a value for the address that must be: *http://www.w3.org/2005/08/addressing/anonymous*
 - Source Endpoint (wsa:From), identifying the logical address of the originator.
- WS-Security attributes identifying the caller (see §4.9.6.2);

And optionally, according to the service contract policies:

- WS-Security attributes referring to a digital signature (see §4.9.6.7) and encryption (see §4.9.6.6);
 - The SOAP Body, or part of it, might have to be encrypted if the related service contract includes such a policy assertion (see §4.9.3.8);
2. After security validation and other checks (e.g. data validation), the CCN2 Platform forwards the service request message to the target Partner’s endpoint, according to Partner’s Endpoint definition (see §4.9.3.7), including applicable policies;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

3. Once its functional processing is executed, the service provider sends back the response synchronously (i.e. in the same HTTP connection) containing a HTTP 2xx status code (usually 200). The header of the returned SOAP message must contain the required information, including:

- WS-Addressing attributes defining the routing conditions (see §4.9.4.1). For a request-response MEP, the mandatory attributes for a response are:
 - Destination (wsa:To), the address of the reply endpoint. In this case, it refers to an “anonymous” endpoint denoting a synchronous interaction. Therefore the value for the reply endpoint address must always be: “<http://www.w3.org/2005/08/addressing/anonymous>”
 - Action (wsa:Action), a value that uniquely identifies the semantics implied by the reply (e.g. the message type);
 - Message ID (wsa:MessageID), an opaque value that uniquely identifies the message. This attribute is also required to achieve the quality of service relating to the “ExactlyOnce” delivery support (see §4.9.5.3). It is the responsibility of the application to ensure that each message is uniquely identified;
 - Relationship (wsa:RelatesTo), a pair of values including:
 - The value that corresponds to the request message's Message ID property;
 - An absolute URI that identifies the type of the relationship. In this case, because it relates to a functional response or fault, the standard WS-Addressing value is used, considered as the default value when not specified: <http://www.w3.org/2005/08/addressing/reply>.
 - Source Endpoint (wsa:From), an EPR with the logical address of the service endpoint;
 - The usage of wsa:FaultTo is not supported in the synchronous MEP;

And optionally, according to the service contract policies:

- WS-Security attributes referring to a digital signature (see §4.9.6.7) and encryption (see §4.9.6.6);
 - The SOAP Body, or part of it, might have to be encrypted if the related service contract includes such a policy assertion (see §4.9.3.8);
4. The CCN2 Platform sends back the service request response synchronously (i.e. in the same HTTP connection) through a HTTP 200.

As alternatives to the expected interactions above, exceptions could be synchronously raised:

- The CCN2 Platform rejects the service request or response (e.g. Invalid body – in this case platform sends two faults – one to service provider, and one to the service customer). It sends back a SOAP fault synchronously (i.e. in the same HTTP connection) using a HTTP 4xx or HTTP 5xx as appropriate.

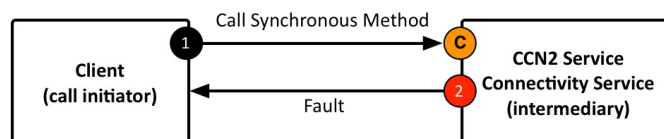


Figure 4-18: Synchronous Request-Response (CCN2 Endpoint Exceptions)

- The target service endpoint returns an exception. It sends back the related SOAP fault synchronously (i.e. in the same HTTP connection).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

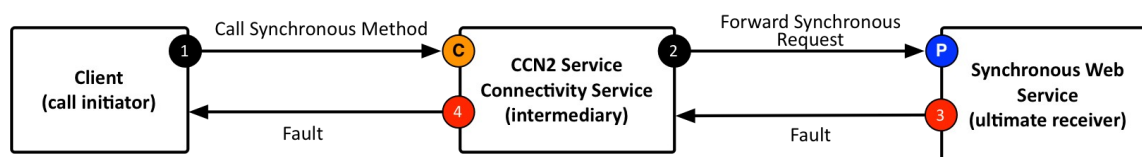


Figure 4-19: Synchronous Request-Response (Partner's Endpoint Exceptions)

4.9.4.5 One Way/Fire and Forget MEP

Basically, a One-Way MEP is adopted when a business service operation does not require a response. It refers to an asynchronous exchange because the processing logic of the target service does not block the consumer. Figure 4-20 depicts the sequence of interactions involved in such exchange pattern.

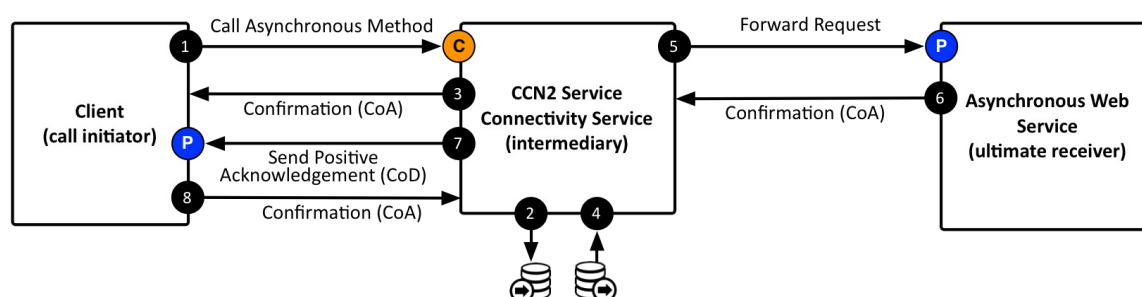


Figure 4-20: Asynchronous One-Way Web Service Interactions

1. The client application calls an asynchronous service operation using the CCN2 EPR address as registered in the CCN2 Service Registry.

The header of the submitted SOAP message must contain the required information, including:

- WS-Addressing attributes defining the routing parameters (see §4.9.4.1). For a one-way MEP, the mandatory attributes are:
 - Destination (wsa:To), an absolute URI (Destination ID) representing the logical address of the intended receiver of this service request (see §4.9.3.4);
 - Action (wsa:Action), a value that uniquely identifies the semantics implied by this exchange;
 - Message ID (wsa:MessageID), an opaque value that uniquely identifies the message. Subsequently, it can also be used to correlate possible acknowledgments. In addition, this attribute is required to achieve the quality of service relating to the “ExactlyOnce” delivery support (see §4.9.5.3). It is the responsibility of the sender to ensure that each message is uniquely identified;
 - Source Endpoint (wsa:From), an EPR with the logical address of the service endpoint.
 - Reply Endpoint (wsa:ReplyTo), an endpoint reference including a destination for asynchronous replies to this request (see §4.9.5.1). No reply is expected, hence the conventional “none” URI must be used (i.e. <https://www.w3.org/2005/08/addressing/none>).

And optionally, in order to receive an asynchronous acknowledgment (see §4.9.5.1):

- Fault Endpoint (wsa:FaultTo) as a specific endpoint reference to receive a reporting on exception. If this attribute (wsa:FaultTo) is not specified, the consumer will not be notified about an error arising during asynchronous message processing. If the consumer must be

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

aware of the asynchronous failure, `wsa:FaultTo` must be set.

- WS-Security attributes identifying the caller (see §4.9.6.2);

And optionally, according to the service contract policies:

- WS-Security attributes referring to a digital signature (see §4.9.6.7) and encryption (see §4.9.6.6);
 - The SOAP Body, or part of it, might have to be encrypted if the related service contract includes such a policy assertion (see §4.9.3.8);
2. The CCN2 Platform receives the request message and safely²³ stores it. The CCN2 Platform relies on an internal queuing system to safely store transiting messages (see §4.9.5.2, No-Message-Lost-Assurance);
 3. The CCN2 Platform synchronously sends back (inside the same HTTP connection) an acknowledgment (i.e. CoA) to the client containing a HTTP 202 status code before the HTTP connection is closed;
 4. Messages safely stored in the CCN2 Platform are processed by the routing capabilities, resolving the location of the target Partner's service endpoint;
 5. The CCN2 Platform forwards the service request message to the target Partner's endpoint, according to Partner's Endpoint definition (see §4.9.3.7), including applicable policies;
 6. The Partner's service synchronously sends back (inside the same HTTP connection) an acknowledgment (i.e. CoA) to the CCN2 Platform containing an HTTP 202 status code before the HTTP connection is closed and it continues the request processing asynchronously;
- At this stage, the delivery of the request message to the target endpoint is considered as achieved, out of subsequent failures of the Partner's service;
7. The CCN2 Platform notifies the call initiator about the delivery of its request (i.e. CoD) to the acknowledgment service endpoint (see §4.9.5.1, Delivery Acknowledgements). The CoD message is always sent to consumer based on the `wsa: From`.

Note that the CCN2 Platform acknowledgments themselves are managed safely. They also rely on the underlying "asynchronous queuing" system (see §4.9.5.2), as any message asynchronously exchanged inside the CCN2 Platform.

According to the result of step 6 (i.e. confirmation to the target endpoint), the CCN2 Platform calls back the interaction initiator to:

- the Source `wsa:From` in case of positive acknowledgement reporting a successful message delivery.
- the Fault Endpoint in case of negative acknowledgement (see alternative flows below) reporting an exception.

Such an acknowledgement message includes a specific WS-Addressing SOAP Header attribute describing its relationship with the initial service request (i.e. `wsa:RelatesTo`, for correlation purpose). As a pair of values, it includes:

- An absolute URI that identifies the type of the relationship. The CCN2 technical specification has a predefined relationship type to identify a positive acknowledgment, namely: "`http://ccn2.ec.eu/addressing/ack`";
 - The value that corresponds to the request message's Message ID property;
8. The call initiator synchronously sends back (inside the same HTTP connection) an

²³ Safely to be understood as durable and secure persistence.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

acknowledgment (i.e. CoA) containing a HTTP 202 status code to the CCN2 Platform in order to confirm the receipt of the asynchronous acknowledgment (i.e. CoD) before closing the HTTP connection.

At this stage, the one-way interaction is completed and the initiator is informed about the delivery status of its service request.

The status of the service message exchanges can be consulted through the monitoring capabilities of the CCN2 Platform;

As alternatives to the expected interactions above, exceptions could be raised:

- If an error appears in first part of FF request support by CCN2 and the request can not be put to a queue then request is rejected. CCN2 sends back a response containing an HTTP 4xx or HTTP 5xx status code and SOAP Fault in synchronous way to the request.

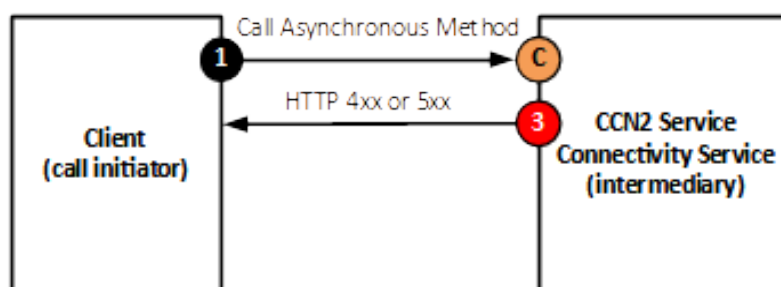


Figure 4-21: Asynchronous One-Way (CCN2 Endpoint Exceptions)

- A permanent failure occurs during the transmission of the message through the CCN2 Platform (including message expiration or retry exhaustion conditions). In that case, the message is safely stored (step 6b in Figure 4 -22) for further compensation (see §4.9.5.2, No-Message-Lost-Assurance) and the failure is reported through an asynchronous (negative) acknowledgement (i.e. CoE, see §4.9.5.1), using the specified and registered endpoint. A standard SOAP Fault construct is used to describe the nature of the related exception.

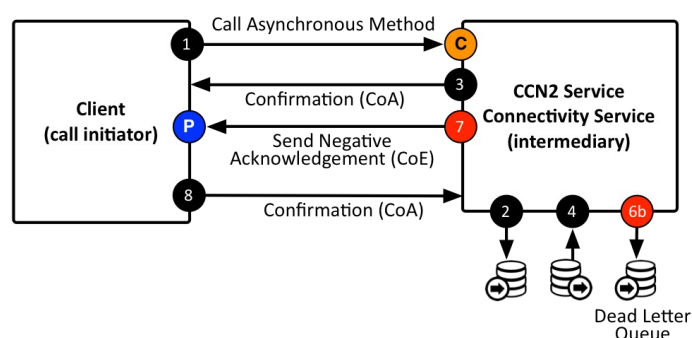


Figure 4-22: Asynchronous One-Way (Asynchronous CCN2 Exceptions)

Such a negative acknowledgement message includes a specific WS-Addressing SOAP Header attribute, describing its relationship with the initial service request (i.e. *wsa:RelatesTo*). As a pair of values, it includes:

- An absolute URI that identifies the type of the relationship. The CCN2 technical specification has a predefined relationship type to identify a negative acknowledgment, namely: "*http://ccn2.ec.eu/addressing/err*";
- An absolute URI that corresponds to the request message's Message ID property.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- The target service endpoint returns an exception synchronously (i.e. in the same HTTP connection). The CCN2 Platform retries the message submission according to Retry Mechanism and the specified *ccn2:MessageExpirationTimestamp* attribute. On the last unsuccessful delivery attempt, a CoE is created to report the error.

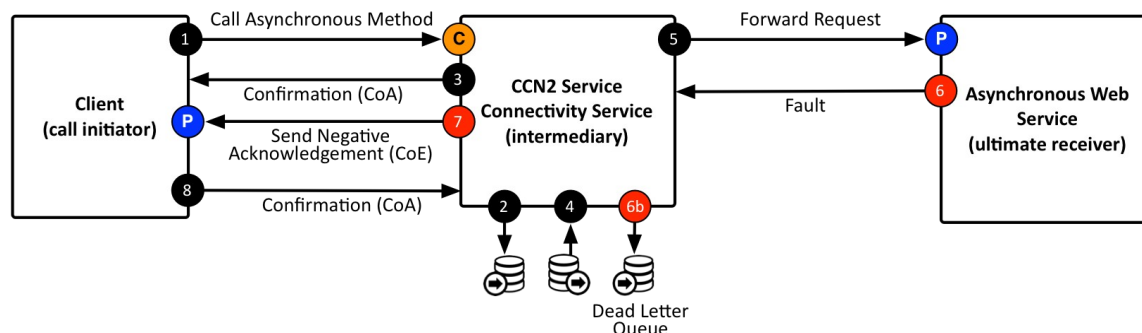


Figure 4-23: Asynchronous One-Way (Asynchronous Partner's Exceptions)

As any other asynchronous exchanges, asynchronous acknowledgments are subjected to the “No Message Lost Assurance” (see §4.9.5.2).

4.9.4.6 Request-Callback MEP

A Request-Callback MEP offers the ability for service consumers to execute other tasks while waiting for the service replies. It refers to two one-way asynchronous exchanges (as depicted in Figure 4-24 below) that are correlated, one for the request and one for the response.

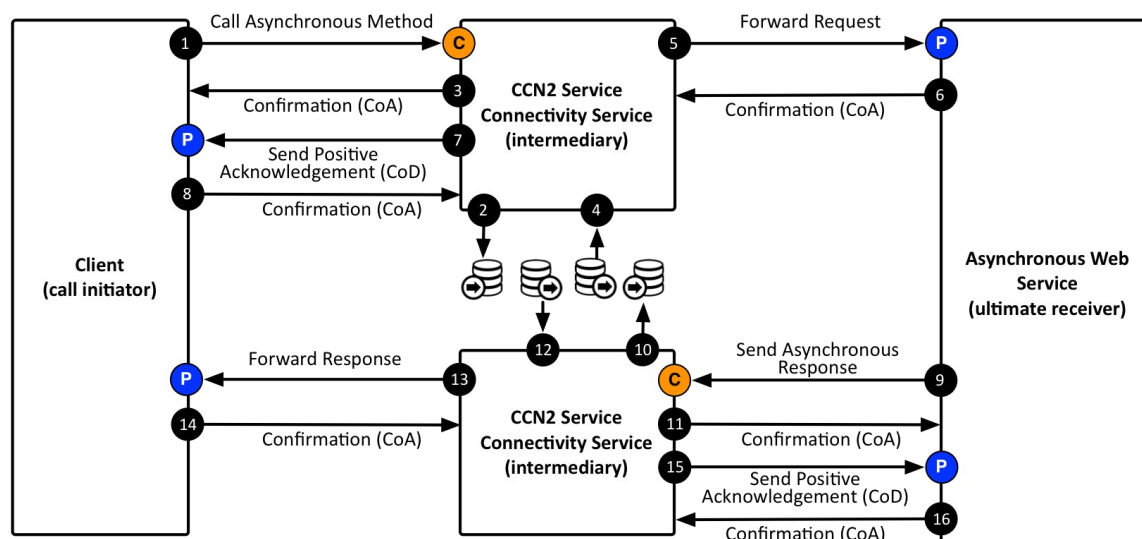


Figure 4-24: Asynchronous Request-Callback Web Service Interactions

Steps 1 through 8 form a one-way exchange to transmit a service request, as described in §4.9.4.5 above. However, in this case, the consumer must specify a reply endpoint and optionally an alternate fault endpoint in order to receive the asynchronous service reply.

Steps 9 through 16 form a one-way exchange to asynchronously transmit a service response:

- Once its functional processing is executed, the service application sends back the response using the logical address as defined by the reply endpoint in the initial request and the relating CCN2 service endpoint.

DG-TAXUD	Ref.: CEN2-CIMA
CEN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

The header of the submitted SOAP message must contain the required information, including:

- WS-Addressing attributes defining the routing conditions (see §4.9.4.1). For an asynchronous response, the mandatory attributes are:
 - Destination (wsa:To), an absolute URI representing the logical address (see §4.9.3.4) of the intended receiver of this service response as specified in the reply endpoint of the initial request;
 - Action (wsa:Action), an absolute URI that uniquely identifies the semantics implied by this exchange (i.e. message type);
 - Relationship (wsa:RelatesTo), allowing the correlation of the response and the request. It is a pair of values including:
 - The value that corresponds to the request message's Message ID property;
 - An absolute URI that identifies the type of the relationship. In this case, because it relates to a functional response or fault, the standard WS-Addressing value is used, considered as the default value when not specified: i.e. *"http://www.w3.org/2005/08/addressing/reply"*;

The service provider is able to specify other relationship types through additional pairs of values.

- Message ID (wsa:MessageID), an opaque value that uniquely identifies the message. It is subsequently used to correlate possible acknowledgements. This attribute is also required to achieve the quality of service relating to the "ExactlyOnce" delivery support (see §4.9.5.3). It is the responsibility of the sender to ensure that each message is uniquely identified;
- Source Endpoint (wsa:From), an EPR with the logical address of the service endpoint.

Additionally, in order to receive an asynchronous acknowledgment relating to the delivery of the response to the consumer (see §4.9.5.1):

- Reply Endpoint (wsa:ReplyTo), a mandatory endpoint reference including a destination for an asynchronous business reply;
- Fault Endpoint (wsa:FaultTo) an optional and specific endpoint reference to receive a reporting on exception. If this attribute (wsa:FaultTo) is not specified, the consumer will not be notified about an error which can arise during asynchronous message processing.
- WS-Security attributes identifying the caller (see §4.9.6.2);

And optionally, according to the service contract policies:

- WS-Security attributes referring to a digital signature (see §4.9.6.7) and encryption (see §4.9.6.6);
- The SOAP Body, or part of it, might have to be encrypted if the related service contract includes such a policy assertion (see §4.9.3.8);

10. The CEN2 Platform receives the response message and safely stores it. The CEN2 Platform relies on an internal queuing system to safely store transiting messages (see §4.9.5.2);

11. The CEN2 Platform synchronously sends back (inside the same HTTP connection) an acknowledgment (i.e. CoA) containing a HTTP 202 status code to the service before closing the HTTP connection;

At this stage, the service application can be sure that the CEN2 Platform has accepted the response and takes care of the delivery.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

12. The messages safely stored in the CCN2 Platform are processed by the routing capabilities, resolving the location of the reply endpoint;
13. The CCN2 Platform calls back the service caller through the resolved reply endpoint, according to related Partner's Endpoint definition, including applicable policies;
14. The service caller synchronously sends back (inside the same HTTP connection) an acknowledgment (i.e. CoA) containing a HTTP 202 status code to the CCN2 Platform before closing the HTTP connection and continues with the response processing asynchronously;

At this stage, the delivery of the response message to the caller reply endpoint is considered as achieved, out of subsequent failures of the Partner's application.

15. The CCN2 Platform notifies the Service Provider (ultimate receiver) about the delivery of its response (i.e. CoD) based on wsa:From. The rest of this step is similar to the step 7 of the basic one-way exchange (see §4.9.4.5);
16. The service synchronously sends back (inside the same HTTP connection) an acknowledgment (i.e. CoA) containing a HTTP 202 status code to the CCN2 Platform in order to confirm the receipt of the asynchronous acknowledgment (i.e. CoD) before closing the HTTP connection.

At this stage, the request-callback interaction is completed, the initiator received the response and the requested service is confirmed with the delivery status of its response.

The status of the service message exchanges can be consulted through the monitoring capabilities of the CCN2 Platform;

As alternatives to the expected interactions above, exceptions could be raised for reasons as described for the one-way interactions (see §4.9.4.5). Note that a fault returned by the service provider is sent back to the caller through the fault endpoint as described by the Partner's service contract (and not under the form of a CCN2 acknowledgment).

4.9.5 Message Delivery Assurances

4.9.5.1 Delivery Acknowledgements

The term "Fire-and-Forget" is commonly used to explain the behaviour of parties sending messages to their Partners according to the "One-Way" MEP (see §4.9.4.5). However, in practice, people might want to be sure the messages finally have been processed successfully, relying on a guarantee of delivery, and/or want to know what happened with such exchanges.

Although such feedbacks are initially intended for management of the technical interoperability, some could want to use it at a functional level. In a SOA, this should be avoided in order to reduce the coupling between the business processes and the underlying infrastructure. As a result, the way to receive an acknowledgement from the CCN2 Platform is not part of the business service contract under the control of CCN2 Partners.

This type of mechanism should be implemented at the technical protocol level only. It is technically specified by the CCN2 Platform as follows:

- **Confirmation of Arrival (CoA)** is a (default) acknowledgement by participating applications ensuring that a message has been well received, validated and safely stored. The CCN2 Platform uses this mechanism while responding to any request. The CoA is synchronously returned towards the Calling Application, inside the same HTTP connection;
- **Confirmation of Exception (CoE)** is a negative acknowledgement asynchronously sent, out of a business service interface, to the Calling Partner Application when delivery of the message failed;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- **Confirmation of Delivery (CoD)** is a positive acknowledgement asynchronously sent, out of a business service interface, to the Calling Partner Application when the message is delivered successfully to the Destination Partner Application.

The CoD is only generated by the CCN2 Platform when the Calling Partner Application sets the appropriate CCN2 Header Element “ccn2:RequestCoD” to ‘true’. It is transmitted according to the Asynchronous “One-Way” MEP (see §4.9.4.5).

A specific CCN2 interface is defined to receive such acknowledgements from the CCN2 Platform (see below). It is described in a CCN2 WSDL. In addition to the specific message payloads carried out through this interface, the standard WS-Addressing SOAP Headers provide the following information allowing the correlation of an asynchronous acknowledgement with the initial message submission:

- Relationship (wsa:RelatesTo), a pair of values including:
 - An absolute URI that identifies the type of the relationship. The CCN2 technical specification has predefined relationship types, namely:
 - Acknowledgment: *http://ccn2.ec.eu/addressing/ack;*
 - Exception: *http://ccn2.ec.eu/addressing/err;*
 - An absolute URI that corresponds to the Message ID property of the message at the origin of the acknowledged exchange.
- Source Endpoint (wsa:From), an EPR representing the logical address of the acknowledgement sender;
- Destination (wsa:To), an absolute URI representing the logical address of the acknowledgement receiver;
- Action (wsa:Action), an absolute URI that uniquely identifies the semantics implied by the acknowledgement exchange;
- Message ID (wsa:MessageID), an absolute URI that uniquely identifies the acknowledgement message.

The CCN2 Asynchronous Acknowledgement Interface defines the following operations and the related payload definitions:

- **Confirmation of Delivery:** an operation, defined according to a one-way MEP, to receive a positive acknowledgment relating to the successful delivery of an asynchronous message by the CCN2 Platform. The following shows the XML Infoset representation (of type ccn2ack:CoDType) of the CCN2 Confirmation of Delivery.

```
[Action]
CCN2.Service.Platform.AcknowledgementService/CoD

[Body]
<ccn2ack:CoD>
  <ccn2ack:EventTimestamp>xs:dateTime</ccn2ack:EventTimestamp>
</ccn2ack:CoD>
```

- **[Body]/ccn2ack:CoD/ccn2ack:EventTimestamp:** A mandatory timestamp value (of type xs:dateTime) indicating when the message has finally been delivered.
- **Exception Report:** an Operation, defined according to a one-way MEP, to receive a negative acknowledgment relating to a failure in the delivery of an asynchronous message by the CCN2 Platform. The following shows the XML Infoset representation (of type ccn2:CoEType) of the CCN2 Exception Report.

```
[Action]
CCN2.Service.Platform.AcknowledgementService/CoE

[Body]
<ccn2ack:CoE>
  <ccn2ack:Severity>ccn2:severityEnum</ccn2ack:Severity>
```

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```

<ccn2ack:EventTimestamp>xs:dateTime</ccn2ack:EventTimestamp>
<ccn2ack:Payload>
  <soap12:Fault>
    <soap12:Code>
      <soap12:Value>xs:string</soap12:Value>
      (
        <soap12:Subcode>
          <soap12:Value>xs:string</soap12:Value>
          <soap12:Subcode>...</soap12:Subcode> ?
        </soap12:Subcode> ) ?
      </soap12:Code>
      <soap12:Reason>
        <soap12:Text xml:lang="xs:string">soap12:reasontext</soap12:Text> *
      </soap12:Reason>
      <soap12:Node>xs:anyURI</soap12:Node> ?
      <soap12:Role>xs:anyURI</soap12:Role> ?
      <soap12:Detail>
        <ccn2:Fault>
          <StatusCode>xs:string</StatusCode>
          <FaultMessage>xs:string</FaultMessage>
        </ccn2:Fault>
      </soap12:Detail>
    </soap12:Fault>
  </ccn2ack:CoE>

```

- **[Body]/ccn2ack:CoE/ccn2ack:Severity:**
A mandatory value (of type ccn2:severityEnum) indicating the severity of the recorded error. The following values are possible:
 - **Critical:** It prevents the use of the complete component (e.g. configuration issue);
 - **Emergency:** It is an error requiring immediate action by the appropriate Operations Team;
 - **Error:** It is a situation where part of the service cannot be fulfilled (but the component is available);
 - **Warning:** It is an abnormal situation, but without preventing normal completion of an operation;
 - **Info:** It is any message not requesting action, but which can be used later for troubleshooting;
- **[Body]/ccn2ack:CoE/ccn2ack:EventTimestamp:**
A mandatory timestamp value (of type xs:dateTime) indicating when the error has been recorded;
- **[Body]/ccn2ack:CoE/ccn2ack:Payload/soap12:Fault:**
A mandatory and standard SOAP 1.2 Fault element;
- **[Body]/ccn2ack:CoE/ccn2ack:Payload/soap12:Fault/soap12:Code:**
A mandatory and standard SOAP 1.2 Code element defining the specific error that happened;
- **[Body]/ccn2ack:CoE/ccn2ack:Payload/soap12:Fault/soap12:Reason:**
A mandatory and standard SOAP 1.2 Reason element providing a human-readable explanation of the fault;
- **[Body]/ccn2ack:CoE/ccn2ack:Payload/soap12:Fault/soap12:Node:**
An optional and standard SOAP 1.2 Node element identifying the component in which the fault was detected. The CCN2 Platform must always specify it;
- **[Body]/ccn2ack:CoE/ccn2ack:Payload/soap12:Fault/soap12:Role:**
An optional and standard SOAP 1.2 Role element identifying the role of the component in which the fault was detected;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- **[Body]/ccn2ack:CoE/ccn2ack:Payload/soap12:Fault/soap12:Detail:**
An optional and standard SOAP 1.2 Detail element intended for carrying application-specific error information;

The acknowledgement endpoint is identified at runtime based on the WS-Addressing *wsa:From* attribute (see §4.9.4.1, Usage of WS-Addressing).

Therefore, each Partner should define at least one service endpoint (see §4.9.3.7) relating to this interface and register it in the CCN2 Platform. It should be defined with EPR metadata (see §4.9.3.3) that defines a logical destination for asynchronous acknowledgements as follows:

```
<wsa:EndpointReference>
  <wsa:Address>the physical address of the endpoint</wsa:Address>
  <wsa:Metadata>
    <ccn2:ServiceID>
      CCN2.Service.Infra.Default.Platform.AcknowledgementService</ccn2:ServiceID>
    <ccn2:ServiceName>the name of the service in the contract</ccn2:ServiceName>
    <ccn2:ServiceDescription>the service description</ccn2:ServiceDescription>
    <ccn2:ServiceVersion>the version of the service contract</ccn2:ServiceVersion>
    <ccn2:DestinationID>the logical address of the endpoint</ccn2:DestinationID>
  </wsa:Metadata>
</wsa:EndpointReference>
```

Comparing to a regular service metadata definition, the following attributes must be considered specifically:

- **Service ID:** A mandatory absolute and predefined value (of type xs:string) uniquely identifying the service contract relating to the CCN2 Asynchronous Acknowledgement Interface:
CCN2.Service.Infra.Default.Platform.AcknowledgementService;
- **Destination ID:** An absolute URI (of type xs:anyURI) uniquely identifying the logical destination (refer to C.1.3) of the Partner's endpoint for asynchronous acknowledgements.

4.9.5.2 No-Message-Lost-Assurance

The general "No-Message-Lost-Assurance" principle (applicable for any data managed by the CCN2 Platform) is specifically addressed here in the context of the service connectivity services. The following measures are applied according to the type of exchanges:

- **Synchronous Exchanges** – The Calling Partner Application is capable to recover from the technical communication errors (e.g. Destination Partner Application is not available or the CCN2 Platform call times out) reported by the CCN2 Platform. In such cases, the Calling Partner Application could resubmit the message in order to guarantee its delivery if allowed by the service contract. If re-submission is allowed, the Destination Partner Application must be able to identify duplicates (e.g. based on a unique business-defined key);
- **Asynchronous Exchanges** – Basically, the CCN2 Platform takes the responsibility for the message delivery to the Destination Partner Application (or to its internal services) as soon as the message is successfully validated and stored internally (step 2 in Figure 4-25).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```

...
<wsa:MessageID>urn:uuid:0263e1b8-3fb4-4e74-9f31-b5867322d969</MessageID>
...
</soap12:Header>
</soap12:Envelope>

```

Example 4-4: Message ID

4.9.6 Service Endpoint Security Enforcement

4.9.6.1 Use of WS-Security

The CCN2 Platform uses the WS-Security specification (see §4.4.8) to apply security to web services as an extension to SOAP (see §4.4.5) as follows:

```

<soap12:Envelope>
  <soap12:Header>
    <wsse:Security soap12:mustUnderstand="true">
      <!-- WS-Security constructs -->
    </wsse:Security>
  </soap12:Header>
  <soap12:Body>
    ...
  </soap12:Body>
</soap12:Envelope>

```

Specific SOAP Headers must be inserted in the *wsse:Security* SOAP Header Block according to the applicable policies specified through WS-SecurityPolicy assertions (see §4.9.3.8). It relates to integrity and confidentiality enforcement by the CCN2 Platform, and the usage of an XML Signature (see §4.9.6.7) and XML Encryption (see §4.9.6.6) to provide point-to-point security.

It is also the mechanism used to attach security information concerning the CCN2 User identity that is propagated by the CCN2 Platform (see §4.9.6.3).

Please refer to the WS-Security documentation for detailed information²⁵.

4.9.6.2 CCN2 Endpoint Authentication

When accessing a CCN2 service endpoint, the related SOAP message must contain the authentication information under the form of WS-Security SOAP Header (*wsse:Security*). It should include the specified user authentication information, according to the applicable authentication policy (see §A.1.1), either through:

- An Username Token (can contain a maximum of 4 elements, consisting of 2 mandatory and 2 optional elements).
The elements *wsse:UsernameToken/wsse:Username* and *wsse:UsernameToken/wsse:Password* are **mandatory**.
The elements *wsse:UsernameToken/wsse:Nonce* and *wsse:UsernameToken/wsui:Created* are **optional**.
The Username Token includes the value of the “ccn2:UserID” element provided at the user’s registration time and his password. In this case both elements *wsse:UsernameToken/wsse:Username* and *wsse:UsernameToken/wsse:Password* are used for authentication. As already mentioned above, the optional elements *wsse:UsernameToken/wsse:Nonce* and *wsse:UsernameToken/wsui:Created* are also available.
- A Encrypted & Signed Username Token (*wsse:UsernameToken*) signed (see also §4.9.6.7) and encrypted (see also §4.9.6.6). The Username Token can contain a 4 mandatory elements" (as they are all mandatory).

²⁵ <http://docs.oasis-open.org/wss/v1.1/wss-v1.1-spec-os-SOAPMessageSecurity.pdf>

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

The elements *wsse:UsernameToken/wsse:Username* and *wsse:UsernameToken/wsse:Password* are **mandatory**.

The elements *wsse:UsernameToken/wsse:Nonce* and *wsse:UsernameToken/wsui:Created* are **mandatory**.

The Username Token includes the value of the “ccn2:UserID” element provided at the user’s registration time and his password. In this case both elements *wsse:UsernameToken/wsse:Username* and *wsse:UsernameToken/wsse:Password* are used for authentication. The elements *wsse:UsernameToken/wsse:Nonce* and *wsse:UsernameToken/wsui:Created* are also available and mandatory.

- An X.509 Certificate (*wsse:BinarySecurityToken*) and Timestamp (*wsu:Timestamp*) that both need to be present. The Timestamp must be signed by the private key associated with the attached X.509 Certificate. The attached Certificate must be valid and trusted by the CCN2 Platform. The X.509 Certificate Subject includes the value of the “ccn2:UserID” element provided at the user’s registration time. There is no password provided as the validity of the signature proves that the sender is in possession of the private key.

Figure 4 -26 depicts the role of the CCN2 Service Connectivity Services to enforce the user authentication before any other processing.

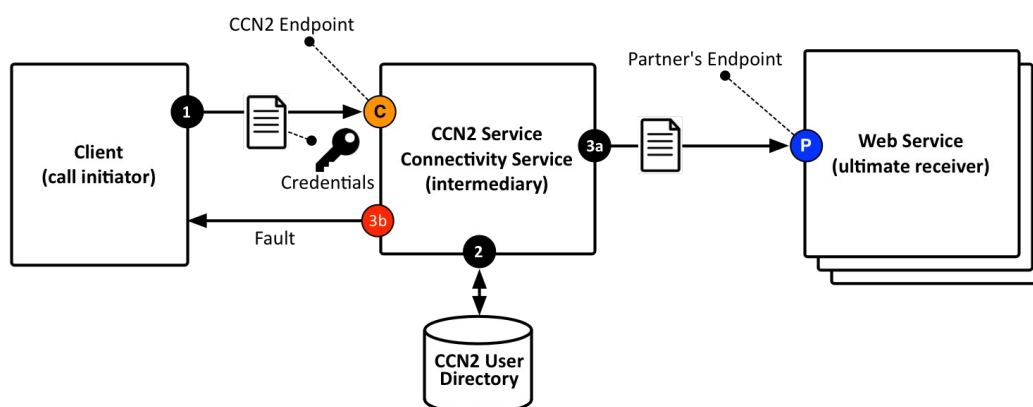


Figure 4-26: CCN2 Endpoint Authentication

1. The client application sends a message including the user authentication information;
2. The CCN2 Platform checks the validity of the user authentication information by consulting the CCN2 User Directory or by Signature and Certificate validation;
3. According to the result of the authentication process:
 - The CCN2 Platform forwards the message to the target Partner’s endpoint (see §4.9.6.3, CCN2 Identity Propagation Mechanism);
 - In case of failure, the CCN2 Platform returns a SOAP Fault indicating the reason (see Chapter Annex B.).

4.9.6.3 CCN2 Identity Propagation Mechanism

Figure 4 -27 depicts the way CCN2 user identities are propagated through the managed service interactions.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

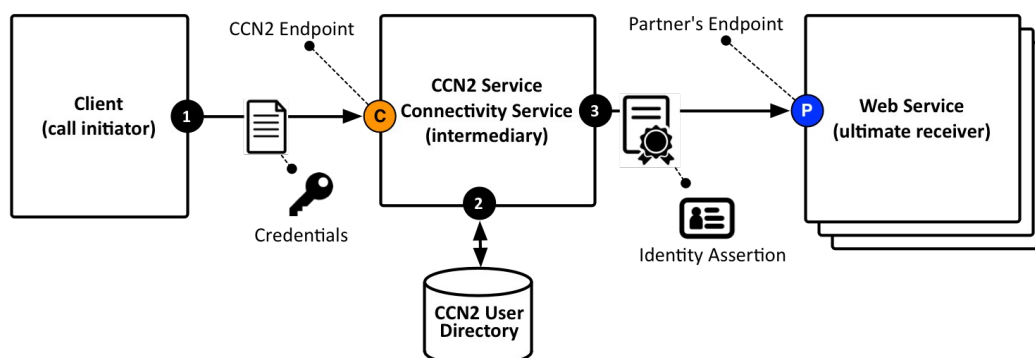


Figure 4-27: CCN2 Identity Propagation in Service Interactions

When invoking a CCN2 service endpoint, any consumer must be authenticated through the credentials it provides in the service request (see §4.9.6.2) according to the applicable policies (see §A.1.1);

The user's authentication is supported by credential information maintained in the CCN2 User Directory. A role-based authorisation model supports the CCN2 authorisation mechanism. It refers to the definition of permissions and security policies enforced by the CCN2 Platform mediation capabilities;

After a successful authentication and authorisation (see §4.9.6.5), the CCN2 Platform propagates the authenticated identity and profile information²⁶ by constructing a security token (see §4.8.3) that will contain the user ID and all roles assigned to the user whatever the accessed resource.

Subsequently, the CCN2 Partner's application can rely on the CCN2 Identity Management Service to obtain additional user profile information not present in CCN2 Security Token, using the provided *ccn2:UserID*.

4.9.6.4 Third Party Identity Propagation

Because other security assertions could be present in the SOAP Header of a message exchanged through the CCN2 Platform, it is required to accurately identify the one to be considered.

By convention, the CCN2 Platform only processes the security header with the role "CCN2.Platform" and removes it from the message before propagation to the Partner service. All other possible security headers are propagated "as is" to the Partner service.

However, some discrepancies exist, see Annex H.1 for more details.

Warning

Partners should be careful not to propagate via the CCN2 Platform any sensible information embedded in their own security headers. Indeed, as the CCN2 Platform does not remove nor alter those security headers, any sensible information, such as passwords in clear, would be propagated "as is".

4.9.6.5 CCN2 Endpoint Authorisation

Figure 4 -28 depicts the role of the CCN2 Service Connectivity Services to enforce the controlled access to exposed services.

²⁶ Note that credentials are only used for authentication purposes and are therefore never shared.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

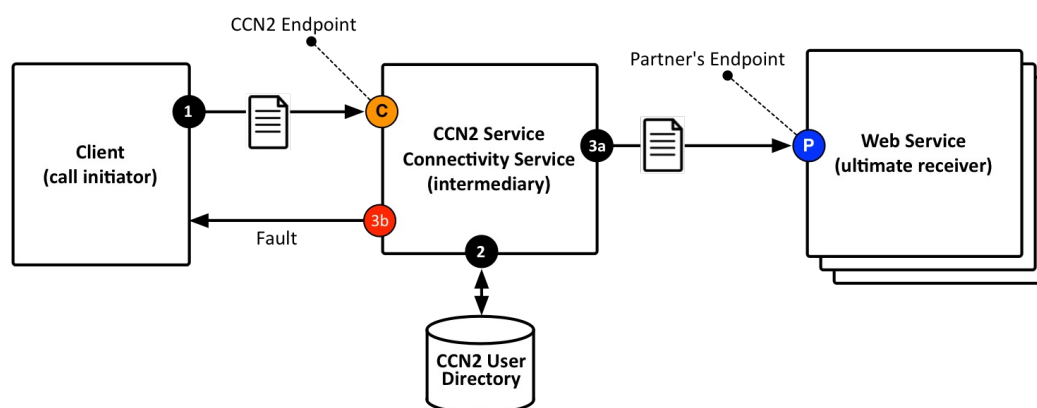


Figure 4-28: CCN2 Endpoint Authorisation

1. The client application sends a message referring to a specific operation on an exposed service;
2. Once the CCN2 user has been successfully authenticated (see §4.9.6.2), the CCN2 Platform checks the roles / permissions (maintained in the CCN2 User Directory) associated to his roles to verify if he has the required authorisation;
3. According to the result of the authorisation process:
 - The CCN2 Platform forwards the message to the target Partner's endpoint (see §4.9.6.3, CCN2 Identity Propagation Mechanism, which describes how a Partner's application can implement additional access controls according to the CCN2 user identity assertion);
 - In case of failure, the CCN2 Platform returns a SOAP Fault indicating the reason (with one error code defined to the Chapter Annex B.).

4.9.6.6 Point-to-Point Message-Level Encryption

The CCN2 Platform offers capabilities relating to point-to-point encryption at message level, based on a mutual trust between Partners and the CCN2 Platform. This ensures message confidentiality whilst allowing the CCN2 Platform to access the message content for intermediary processing. The CCN2 Platform supports two encryption flows:

- Full asymmetric encryption (RSA – 2048 bits);
- Symmetric encryption (AES-256) through the Key Encapsulation Mechanism (KEM, see §4.8.6.2) for optimisation²⁷ purposes (i.e. efficiency of processing of big messages).

Figure 4 -29 below depicts the role of the CCN2 Service Connectivity Services to preserve the confidentiality of the exchanged messages.

CCN2 service endpoints and Partners' service endpoints can be configured in such way they enforces the confidentiality of the exchange messages. This is subject to a specific policy (see §A.1.1) defined using WS-SecurityPolicy assertions (see §4.9.3.8) when deploying service endpoints. The scope of a message encryption can be the message body (i.e. payload), the message header or both (Please refer to A.2.3 Security Policies to see the list of specific security policies that are used for these purposes).

²⁷ Generally, symmetric encryption is processed faster than asymmetric encryption methods.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

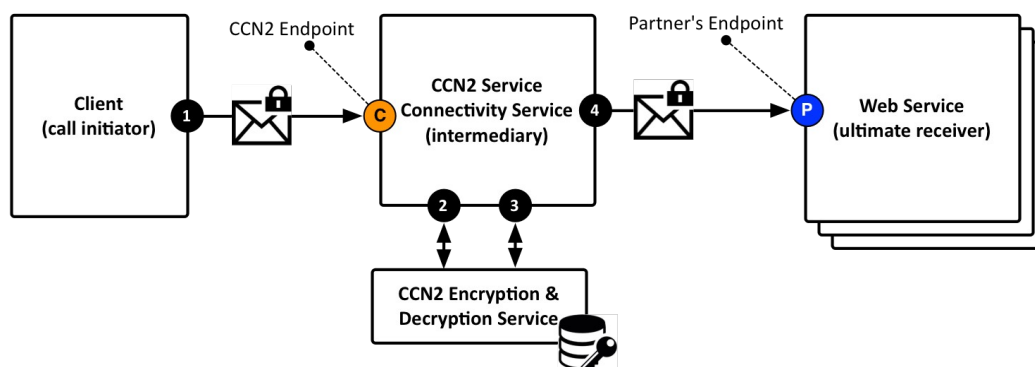


Figure 4-29: CCN2 Point-to-Point Message-Level Encryption

1. The Partner's application encrypts the message according to the algorithm defined by the CCN2 endpoint and sends it to the CCN2 Platform;
2. In order to access the message payload, the CCN2 Platform relies on its internal decryption capability.

After some possible processing on the message payload by mediation capabilities, the CCN2 Platform must forward the message to the target Partner's endpoint. Therefore, the following steps are executed for the forwarding:

3. The CCN2 Platform encrypts the message using its internal encryption capability;
4. The CCN2 Platform sends the encrypted message to the Partner's service endpoint.

4.9.6.7 Point-to-Point Message-Level Digital Signature

In addition to demonstrate the authenticity of the sender (see §4.9.6.2), the CCN2 Platform offers Digital Signature capabilities to preserve the integrity of the messages exchanged between the CCN2 Partners and the CCN2 Platform.

Figure 4 -30 depicts the role of the CCN2 Service Connectivity Services to preserve the integrity of the exchanged messages.

CCN2 service endpoints and Partners' service endpoints can be configured in such way they enforce the integrity of the exchange messages. This is subject to a specific policy (see §A.1.1) defined using WS-SecurityPolicy assertions (see §4.9.3.8) when deploying service endpoints. The scope of a digital signature can be the message body (i.e. payload), the message header (or part of it) or both (Please refer to A.2.3 Security Policies to see the list of specific security policies that are used for these purposes).

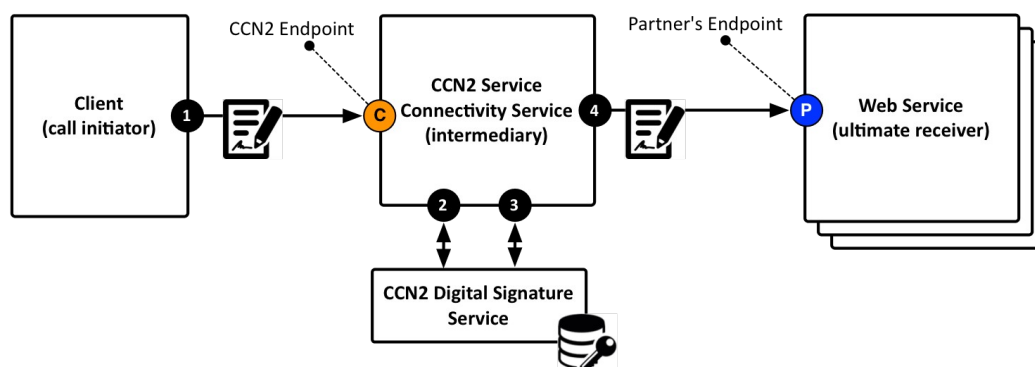


Figure 4-30: CCN2 Point-to-Point Message-Level Digital Signature

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

1. The Partner's application signs the message according to the algorithm defined by the CCN2 endpoint and sends it to the CCN2 Platform;
2. The CCN2 Platform verifies the digital signature (see §4.8.7.3) by relying on its internal digital signature service.

After some possible processing on the message payload by mediation capabilities (see §4.9.2), the CCN2 Platform forwards the message to the target Partner's endpoint. Therefore, the following steps are executed for the forwarding:

3. The CCN2 Platform signs the message using its internal digital signature service;
4. The CCN2 Platform sends the signed message to the Partner's service endpoint.

4.9.7 Data-related Capabilities

The business-agnostic nature of the CCN2 Platform capabilities should not interfere with the business payload of exchanged messages. However, in some cases, the positioning of the CCN2 Platform as an intermediary between service consumers and providers allows the flexible insertion of business data processing as far as it is accessible (i.e. not encrypted or signed). It allows:

- The syntactical validation of the message payload before transmission to the target service endpoint, avoiding unnecessary processing by the service providers (see §4.9.7.1);

4.9.7.1 Data Validation

The CCN2 Platform offers the ability to validate data exchanged during service interactions through mediation capabilities. It supports only XML syntactic validation of messages associated to service actions and defined by the XSDs associated to the related WSDL (see §4.9.3.1).

The data validation is turned on by default against the XSD associated to the WSDL. XML validation can be turned off or on for any exposed service on the CCN2 Platform. The setting is global per service. The setting cannot be applied per operation. The setting of this is done in the EPR metadata. The XML infoset definition for it looks as follows:

```
<ccn2:XMLValidation>xs:boolean<ccn2:XMLValidation>
```

4.10 CCN2 Monitoring Facilities

Monitoring is the way to control the behaviour of activities through regular observation and systematic recording in support of governance processes and capacity planning. The CCN2 Platform offers two levels of monitoring to the CCN2 Partners, namely:

- **Service Monitoring**, relating to the technical services interactions systematically logged by the CCN2 Service Connectivity Services (see §4.9).
- **The Partner Service Monitoring** will provide monitoring and metrics regarding service usage for the Partner Services.

4.10.1 Service Monitoring

The goal of Service Monitoring is to provide metrics regarding service usage. This provides dashboards and reports for:

- the Partner Service Monitoring on the CCN2 services exposing Partner Services;
- the CCN2 Platform Service Monitoring will provide dashboards and reports for the CCN2

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Services provided by the CCN2 Platform.

Partner Services are the services that are either exposed at the Partners' premises or the CCN2 configured services (referred as proxies) that will facilitate the communication with the Partners' services (referred also as provider services). In the scope of the CCN2 Platform, the term Partner Services covers the proxies developed and deployed in the CCN2 Platform and the services of the same scope, deployed in the Partners' premises. The monitoring metrics for the Partner Services on the Partners' premises will be calculated based on data of the CCN2 Platform.

The dashboards and reports are defined as following:

- Dashboards
 - The Partner Service dashboards will allow a near real-time summary view of a specific business activity of the Partner Services for the specific business services.
- Reports
 - The Partner Service reports will allow a snapshot view of a specific business activity of the Partner Services for the specific business services.

The following figure depicts the way the monitoring is integrated to the rest of the CCN2 Platform and with CCN2 Partner's Applications.

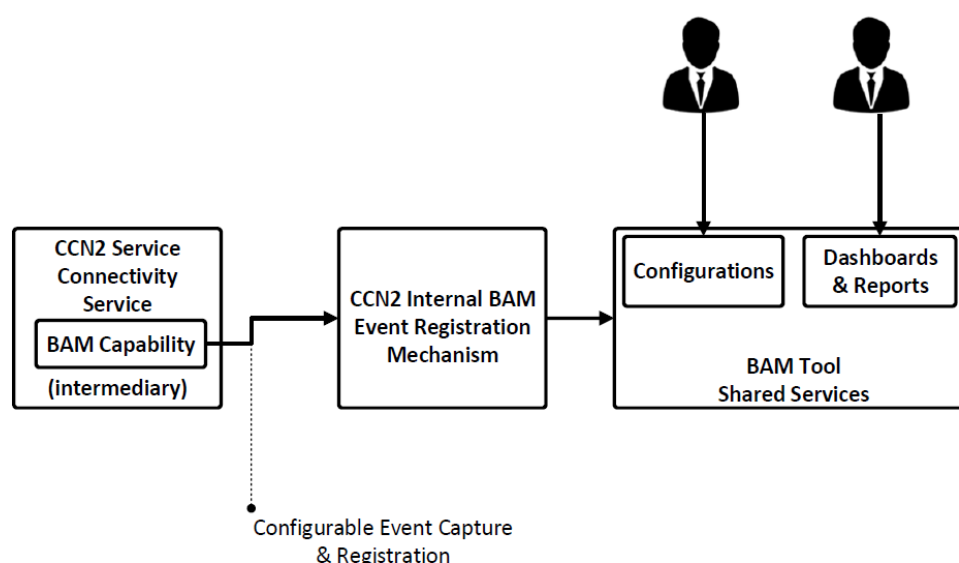


Figure 4-31: CCN2 Business Activity Monitoring

The CCN2 Platform offers:

- Capture business events in the flows of service interactions mediated by the CCN2 Service Connectivity Services; this is delivered out of the box in CCN2;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.11 Oracle Access Manager (OAM)

The CCN2 Oracle Access Manager(OAM) with Oracle HTTP Server(OHS), as a reverse proxy, is responsible for binding user agents, typically web browsers, to web resources (including HTML pages, CSS, images, Javascript files, etc., as well as REST services). As depicted in Figure 4-32, it provides a level of indirection to implement centralised access controls (see §4.11.3) and a Single Sign-On (SSO) mechanism (see §4.11.2).

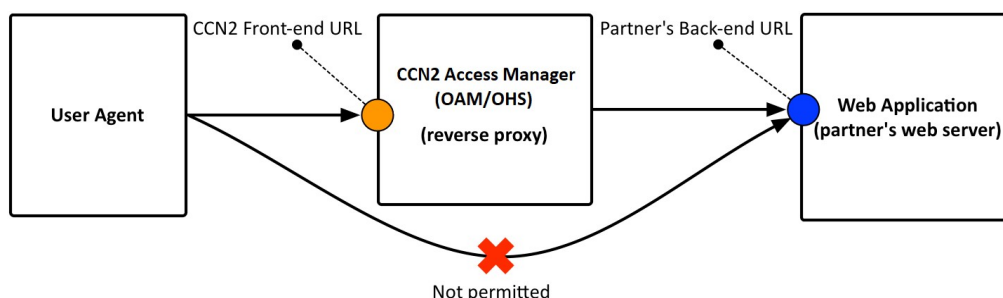


Figure 4-32: CCN2 Oracle Access Manager

4.11.1 Proxy Mechanism

The CCN2 Platform specifications define a set of metadata that supports the description of web applications as exposed by the CCN2 OAM proxy through CCN2 Front-end URL. They are described in the table hereafter:

Name	The Web application name. It is mandatory and must uniquely identify the Web application. It is specified according to the CCN2 naming convention (see §C.1.2).
Description	The optional description of the Web application.
Version	A mandatory absolute URI uniquely identifying a Web application version according to the CCN2 convention.
Organisation ID	A value uniquely identifying the organisation to which the defined service belongs to. CCN2 Partners can define one or more organisation units, each one managing a specific set of services.
Identity Propagation Mechanism	A value uniquely identifying the U2S Identity Propagation Mechanism to which the defined service belongs to (see §4.11.4). CCN2 Partners can define either to choose “SAML”(see §4.11.4.1) or “HTTP”(see §4.11.4.2).
Logout URL	An optional value referring to the Partner’s Logout URL.
Resources	The list of resources relating to the Web application that need to be exposed by the CCN2 OAM: ▪ Name: A mandatory value uniquely identifying a web resource ▪ URL: A mandatory value identifying the CCN2 OAM Front-end URL. This value needs to be agreed upfront between DG TAXUD and the service provider. This values however might

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

	be subject to change due to DG TAXUD policies; ▪ PartnerURL: A mandatory value referring to the Partner's Backend URL.

The Partner's web application must support to be accessed through a reverse proxy (the CCN2 OHS associated to the CCN2 OAM acts as a reverse proxy). This means that it must not use absolute Partner's URLs referring directly to its local domain (i.e. Backend URL) as these URLs could not be resolved by third parties accessing the URL through the OAM. Instead, it should use the CCN2 Front-end URL domain or, mostly recommended, use relative URLs to implement navigation inside the web application.

For example, in an HTML page, the links should refer to relative path (e.g. href="/site/page1") and not to absolute path (e.g. href="http://localhost/site/page1").

4.11.2 Single Sign-On Mechanism

Figure 4 -33 depicts the interactions involved in the access to Web resources through the CCN2 Platform and the SSO mechanism supporting the authentication enforcement.

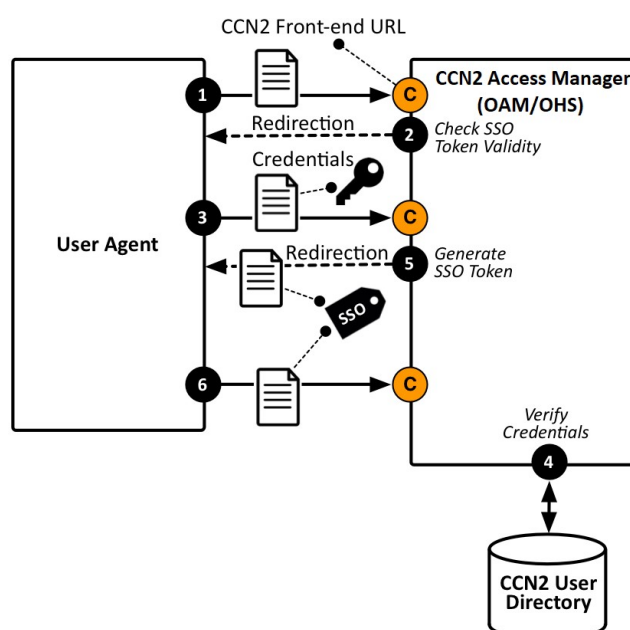


Figure 4-33: CCN2 Single Sign-On Mechanism

1. When accessing a web resource, a CCN2 Front-end URL is used, as defined when registering a Partner's web application through the CCN2 Platform (see §7.4);
2. The CCN2 Oracle Access Manager (OAM) checks for the CCN2 SSO Token in the HTTP request. If the CCN2 OAM does not find an SSO token or if the SSO token is not valid, it redirects the user to one of the following authentication mechanisms according to the authentication policies:
 - Username/password challenge according to the HTTP Basic Authentication mechanism whereby the CCN2 OAM returns a response with a HTTP status code 401 (i.e. Not Authorized) upon unauthenticated request;
 - CCN2 login page prompted by the CCN2 OAM, as the preferred and most user-friendly way of authenticating end-users interacting with web-based resources;
 - Certificate request;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

If an SSO Token is already present in the request and is still valid, the CCN2 OAM authorises the access to the requested resource without prompting the user again (see step 7) for authentication.

As a note, the user agent must support session cookies to enable an SSO-based session.

3. The user provides his credentials according to the configured authentication mechanism through:
 - HTTP Basic Authentication;
 - Using the CCN2 Login form;
 - Authentication by certificate.
4. The CCN2 OAM checks the validity of the provided credentials using one of the following services:
 - CCN2.SEC.OAM.Authen.Basic, for HTTP Basic Authentication (SEC_Authen_01);
 - CCN2.SEC.OAM.Authen.Form, for authentication using the CCN2 Login form (SEC_Authen_03);
 - CCN2.SEC.OAM.Authen.Cert, for authentication by certificate (SEC_Authen_04 and SEC_Authen_07);
5. If the submitted user credentials are valid, the CCN2 OAM returns the SSO token in a cookie that will be part of the subsequent interactions. If not, an error message is displayed in the user agent;
6. If the authentication is successful, the user is redirected to the CCN2 Front-end URL initially requested.

4.11.3 OAM Authorisation Enforcement

Once authenticated (see §4.11.2), any request to an exposed resource must be authorised according to the defined roles granted through the CCN2 Authorisation Management Process

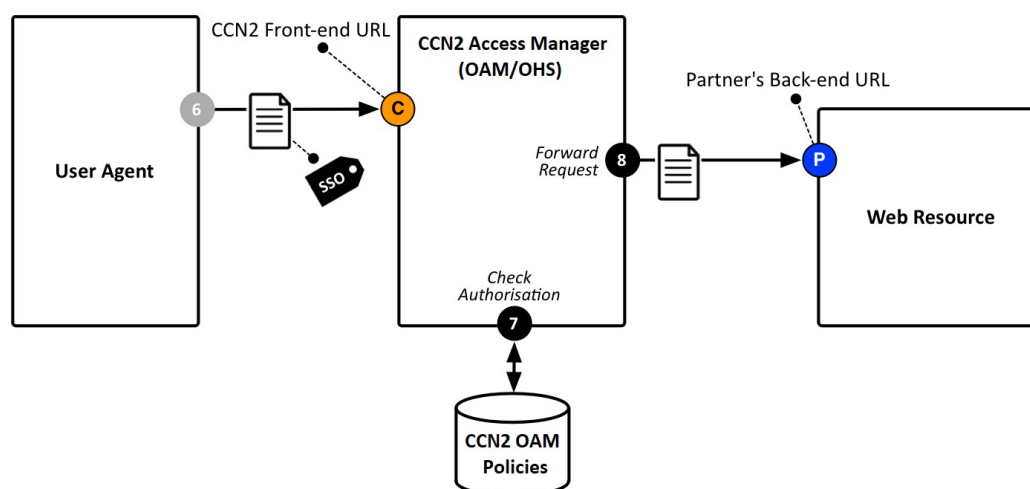


Figure 4-34: CCN2 OAM Authorisation Enforcement

7. The CCN2 OAM authorises the access to the web resource (in this case identified by the URL) according to the roles relating to the requested operation (in this case identified by the HTTP verb) on the resource, as defined when securing a Partner's web application through the CCN2 Platform (see §5.4.1);
8. As soon as the HTTP request has been authenticated and authorised, the CCN2 OAM forwards it to the Partner's web application. Most of the time, a web application needs some trusted user identity attributes to validate the security context. This is enabled by the identity propagation

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

mechanisms offered by the CCN2 Platform (see §4.11.4). In addition, the CCN2 Platform offers services to share CCN2 user identities with CCN2 Partner's applications

4.11.4 U2S Identity Propagation Mechanisms

The CCN2 Platform supports two methods of identity propagation for user-to-system interactions:

- SAML 2.0 Web Browser SSO Profile (see §4.11.4.1) as the default mechanism;
- HTTP Headers (see §4.11.4.2) as the fall-back mechanism for web resources that do not yet support SAML v2.0.

4.11.4.1 SAML 2.0 Web Browser SSO Profile

The CCN2 OAM supports the SAML v2.0 framework for:

- Federated authentication on Partner Web Applications in which the CCN2 OAM will be an Identity Provider to the Partner Web Application (i.e. SAML Service Provider);
- Exchanging CCN2 Platform user attributes.

The CCN2 Platform implements SAML v2.0 according to the specifications listed in the table below:

Element	Description	CCN2 Platform Implementation
Profile	Defines specific sets of rules for using and restricting SAML's rich and flexible syntax for conveying security information to solve specific business problems (for example, to perform a web SSO exchange). It has several associated small schemas covering syntax aspects of attribute profiles.	Web Browser SSO Profile
Binding	Defines how SAML assertions and AuthnRequest-AuthnResponse protocol messages can be exchanged between systems using common underlying communication protocols and frameworks.	- HTTP Redirect or HTTP POST Binding is used by Partner Applications to send a <samlp:AuthnRequest> message to CCN2 Identity provider. - HTTP POST Binding is used by CCN2 Identity provider to send a SAML Response message to Partner Applications.
Protocols	AuthnRequest and AuthnResponse for obtaining assertions and doing identity management.	- Authentication Request Protocol (i.e. AuthnRequest and AuthnResponse).
Assertions	Defines authentication, attribute and entitlement information.	- Authentication statements; - Attribute statements.
SSO initiation	Message flow involved in exchange Web SSO exchanges.	- Service Provider initiated
Security	Measures to ensure SAML confidentiality and integrity.	- Between the CCN2 Access Point and a Partner, transport level encryption (see section §4.8.6.1, Network layer encryption) is always enforced.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

		- Digital Signature is added in the SAML Response for integrity purposes.
NameID Format	Format of name identifiers assigned to a principal during Federation SSO. Supported values are: - urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified - urn:oasis:names:tc:SAML:1.1:nameid-format:emailAddress - urn:oasis:names:tc:SAML:1.1:nameid-format:X509SubjectName - urn:oasis:names:tc:SAML:1.1:nameid-format:WindowsDomainQualifiedName - urn:oasis:names:tc:SAML:2.0:nameid-format:Kerberos - urn:oasis:names:tc:SAML:2.0:nameid-format:persistent - urn:oasis:names:tc:SAML:2.0:nameid-format:transient - custom value	Unspecified

Table 18: SAML specifications for user-to-system interactions

The flow of events is described in the following sequence diagrams. Figure 4-35 shows the flow that illustrates the events when a user logs on with a valid session.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

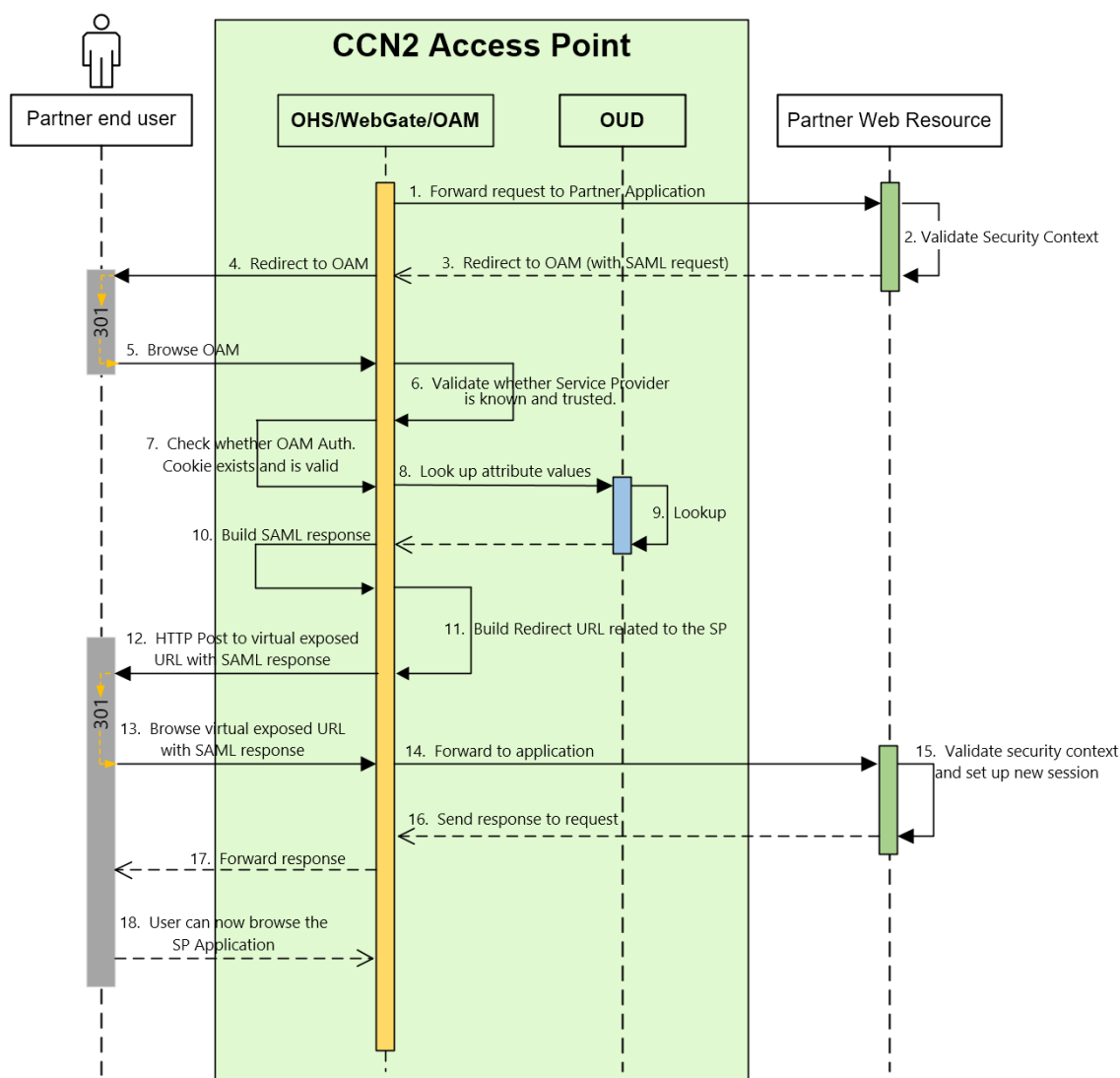


Figure 4-35: Operation Flow – SAML (User-To-System)

The steps used in this diagram are listed below²⁸:

Step	Description
1	OAM gateway makes a request to the backend application service.
2	Since the backend application is a SAML service provider and the user has no valid session on the Service Provider (hereafter referred to as “SP”), the SP redirects the user to the Identity Provider (hereafter referred to as “IDP”). The SP should be configured to only allow requests coming from the CCN2 Platform (i.e. OAM Identity Provider) and automatically send the request to it. This avoids an Identity Provider selection menu or a WAYF (“Where Are You From?”) page.
3	The SP sends a HTTP redirect or HTTP POST response (HTTP status code 200) to OAM. It passes an HTTP Header called <i>Location</i> that contains the URL associated to OAM IDP.

²⁸ Please keep in mind that the flow starts with the end-user accessing an application from the Service Provider.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

	The following <i><SAML AuthnRequest></i> is sent along as an URL Query Parameter, called <i>SAMLRequest</i>: <pre> <samlp:AuthnRequest xmlns:samlp="urn:oasis:names:tc:SAML:2.0:protocol" xmlns:saml="urn:oasis:names:tc:SAML:2.0:assertion" ID="Unique ID to identify the SAML Request" Version="2.0" IssueInstant="Date and Time that the SAML Request is being issued" Destination="The IDP's URL associated with the binding" AssertionConsumerServiceURL="The address of the SP's SAML SSO endpoint as it is known and is exposed by Oracle OAM/OHS." ProtocolBinding="urn:oasis:names:tc:SAML:2.0:bindi ngs:HTTP-POST" > <saml:Issuer>The SP's URL associated with the SAML Issuer</saml:Issuer> /> </samlp:AuthnRequest> </pre>
4	The OAM gateway forwards the redirect (HTTP 302 or 303) and SAML request to the user's browser.
5	The user's browser performs a redirect (HTTP 302 or 303) from the SP to the IDP (i.e. from a specific URL defined by the SP and exposed by OAM / OHS to another URL defined by IDP (OAM) and exposed by OAM / OHS).
6	OAM IDP consumes the SAML Request and checks if a valid SP is set on IDP Configuration.
7	OAM Authentication checks whether the user still has a valid session cookie on the OAM Server.
8	OAM Authentication retrieves the claimed attribute values from the CCN2 Platform User Directory in order to build the SAML Assertion in SAML Response.
9	The User Credential Directory returns requested attributes values.
10	OAM IDP builds the SAML Assertion to insert in the SAML Response. The <i><SAML AuthnResponse></i> message will contain the following elements: <pre> <samlp:Response xmlns:samlp="urn:oasis:names:tc:SAML:2.0:protocol" Destination="SP's URL associated with the binding" ID="Unique ID to identify the SAML Response" InResponseTo="Link to the Unique ID that identifies the </pre>

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

	<pre> SAML Request" IssueInstant="Date and Time that the SAML Response is being issued" Version="2.0" > <saml:Issuer xmlns:saml="urn:oasis:names:tc:SAML:2.0:assertion">The IDP's URL associated with the SAML Issuer</saml:Issuer> <saml:Assertion xmlns:saml="urn:oasis:names:tc:SAML:2.0:assertion" ID="Unique ID to identify the SAML Assertion" IssueInstant="Date/Time that the SAML Assertion is being issued" Version="2.0"> <saml:Issuer>The IDP's URL associated with the SAML Issuer</saml:Issuer> <saml:Subject> </saml:Subject> </saml:AuthnStatement> <saml:AttributeStatement> </saml:AttributeStatement> </saml:Assertion> </samlp:Response> </pre>
11	OAM IDP reads from SP metadata the Partner (SP) Assertion Consumer Service URL. The URL is then added to the message.
12	The <samlp:Response> message is signed and placed in an HTML Form which contains the following (hidden) fields: • SAMLResponse: The SAML Response message; • RelayState: the page the user is to be redirected to; Action: the URL of the SP where the form is being submitted to.
13	User's browser requests SP page. This is typically done automatically, by a JavaScript function that submits the form. No user interact action required.
14	OAM Gateway forwards the SAML Response to the SP.
15	SP consumes the provided SAML Response. The SP can now build a valid security context for the user. As part of an optional fine-grained authorisation, the SP can decide to block the request. If that happens, an exception is sent back.
16	SP sends the response through the OAM WebGate.
17	OAM WebGate forwards the response to the user's browser.
18	User can now browse the SP's web resource via the OHS reverse proxy mechanism.

Table 19: Flow – SAML (User-To-System)

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

4.11.4.2 Identity HTTP Headers

The CCN2 Oracle Access Manager (OAM) supports the exchange of the authenticated user identity attributes with the CCN2 Partner s Web resources through HTTP Headers. This allows the set-up of a security context at the CCN2 Partner's web application level.

The HTTP Headers will contain the following attributes:

- HTTP_UID: Username ID;
- HTTP_PARTNERNAME: Partner Name;
- HTTP_COUNTRYOFORIGIN: Country Of Origin;
- HTTP_ROLES: List of Roles.

By default, the CCN2 Platform operates using SAML exchanges for Identity Propagation, as described in §4.11.4.1. This option is provided as the fall-back scenario for web resources that do not yet support SAML v2.0 and Web Browser SSO Profile.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

5. Design-Time

5.1 Introduction

At design-time, the role of the CCN2 Platform must be considered as a governance principle:

- When the functional inter-operability between partners (i.e. business processes) crosses the Common Domain, whatever the technical implementations or physical locations of the services. This means that if services serve other CCN2 Partners, they must communicate through the CCN2 Platform. This allows the enforcement of the centralised governance of business services and the centralised monitoring of business activities relating to trans-European business processes;

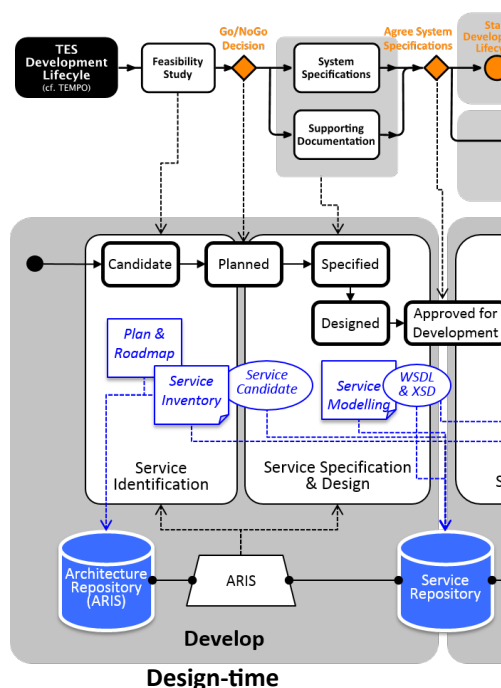


Figure 5-36: Design-time

- When the technical interoperability between partners refers to the sharing of common resources through the Common Domain (e.g. centralised service implementations as per the cloud-computing model). This means that if a national business process implementation reuses a centralised (and virtualised) service logic implementation (e.g. common validation or transformation logic offered by DG TAXUD web services), it needs to interact through the CCN2 Platform. This allows the enforcement of the centralised governance of common resources and the monitoring of the related Service Level Agreements (SLA).

Various aspects of Trans-European information Systems imply some considerations relating to the use of the CCN2 Platform. They should be taken into account in the early stages of the TES development lifecycle, by identifying various requirements (see §5.2, Planning the usage of CCN2).

5.2 Planning the usage of CCN2

When developing Trans-European Systems, stakeholders must take into account the communications occurring in the Common Domain and therefore the infrastructure supporting them. The CCN2 Platform is established as the canonical communication channel to support and manage the various electronic interactions between TES actors in the Common Domain. Therefore, some considerations need to be addressed during the initial phase of TES development, including:

- The identification and registration of CCN2 Partners as organisational and autonomous entities encompassing their respective users (humans and systems) of the CCN2 Platform (see 5.2.1);

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- The registration of the individuals intended to use the CCN2 Platform governance facilities (typically analysts and architects) at design-time;
- The identification of TES interactions occurring in the Common Domain and intended to be supported by the CCN2 Platform (see §5.2.2);
- The identification of security requirements subjected to the CCN2 Platform;

5.2.1 Registering CCN2 Partners

Before any user can access the CCN2 Platform, he must be identified as a member of a CCN2 Partner's organisation. The result of the identification of a new CCN2 Partner is recorded in the CCN2 Oracle Identity Management (OIM) tool. A logical identity repository is created per CCN2 Partner as per the required Segregation of Duties and the adopted delegation model. At least one user account is created for the related CCN2 Partner with the required roles and permissions to fully manage the content of the CCN2 Partner's identity repository according to the RBAC model.

Note that when a new CCN2 Partner comes in place, he should take part of conformance tests relating to the connectivity to the CCN2 Platform.

5.2.2 Identifying CCN2 Interactions Requirements

- As far as the CCN2 Platform is concerned, TES developments need to consider the way the related CCN2 Partner's applications will interact through the Common Domain, including: Designing Service-Oriented System-to-System Interactions (see §5.3);
- Designing Web-based User-to-System Interactions (see §5.4).

5.2.3 Specifying Web Applications

As far as the CCN2 Platform is concerned, it consists of the definition of coarse-grained authorisation policies enforced at runtime by the CCN2 Oracle Access Manager (see §4.11.3). It is supported by the identification of business roles (see §5.2.4.3) that will be assigned to CCN2 users (in this case human users) and the definition of the associated roles (see §5.2.4.4) to execute operations on the web application resources (see §5.2.4.1).

5.2.4 Identifying Security Requirements

The identified interactions between TES applications that will occur through the CCN2 Platform (see §5.2.2) are subjected to security enforcement according to requirements to be identified by:

- Identifying the CCN2 Partner's resources (i.e. services or web applications) that will be exposed through the CCN2 Platform (see §5.2.4.1);
- Defining the coarse-grained permissions to be enforced through the CCN2 Platform to restrict the access to the exposed resources (see §5.2.4.2);
- Defining the business roles that the future CCN2 users (i.e. human and system) will play (see §5.2.4.3);
- Defining security policies (see §5.2.4.4) to be applied at runtime such as access control, integrity, confidentiality, etc.

5.2.4.1 Identifying Exposed Resources

The identification of CCN2 Partner's resources exposed through the CCN2 Platform drives the way the security requirements need to be considered. Indeed, each exposed resource is made available in the Common Domain through a CCN2 endpoint that represents its official interface. The access to

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

such interface must be securely controlled according to the roles (see §5.2.4.3) of potential business users. Therefore, the granular identification of services and web applications is a key development step to drive the way functional capabilities will be grouped and roles and permissions to access them defined (see §5.2.4.2).

In order to communicate the identified resources, the CCN2 Platform defines a table format. Such table is used as an input to the CCN2 Authorisation Management Process. An example is shown below.

Name	CCN2.Service.Customs.Default.SYSX.ServiceA
Description	Some optional description.
Operations	OP1 (Some operation #1 description) OP2 (Some operation #2 description)

Example 5-5: Describing Exposed Resources

5.2.4.2 Defining Permissions

5.2.4.1 According to the Role-Based Access Control (RBAC) model adopted by the CCN2 Platform, roles and permissions represent the rights to access a set of operations on a resource (see §5.2.4.1). In U2S, roles are used directly (see §5.2.4.3). In S2S, permissions (associated to roles) are used.

In order to communicate the permissions relating to specific resources and operations, the CCN2 Platform defines a table format. Such table is used as an input to the CCN2 Authorisation Management Process. An example is shown below.

Name	CCN2.Perm.SYSA.ServiceA.OP1
Description	Some optional description.
Resource name	CCN2.Service.Customs.Default.SYSX.ServiceA
Operation name	OP1
Disjoint permissions	CCN2.Perm.SYSA.ServiceA.OP1

Example 5-6: Describing Permissions²⁹

5.2.4.3 Defining User Roles

The CCN2 Platform adopts a Role-Based Access Control (RBAC) model in which roles are the foundation to perform authorisation. A user that is trying to reach a certain resource will need to have the correct role or permission (see §5.2.4.2) in order to gain access.

Here, the notion of role refers to the authorisation to perform operations on specific resources and does not relate directly to an organisational/hierarchical role.

²⁹ The Functional Specification defines that a permission contains a ResourceId and an OperationId. However these IDs are only generated within the IAM at creation time. In this case, i.e. at design time, the definition must contain the name rather than the IDs.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

In order to communicate the description of roles, the CCN2 Platform defines a Role table format. Such table is used as an input to the CCN2 Authorisation Management Process. An example is shown below.

Name	CCN2.Role.SYSA.Role1
Description	Some optional description.
Disjoint roles	CCN2.Role.SYSA.Role2
Permission name	CCN2.Perm.SYSA.ServiceA.OP1

Example 5-7: Describing Roles³⁰

5.2.4.4 Defining Security Policies

When identifying security requirements, a set of measures can be defined as offered by the CCN2 Platform. Those measures are described through the definition of policies using various techniques. In addition to the authorisation policies expressed through the concepts described below (i.e. RBAC), some of them are directly referenced in the service contracts at design-time (see §5.3.3.2) and therefore explicitly constraining the service consumers at implementation-time (see §6.4, Integrating CCN2 Security). They relate to authentication, confidentiality and integrity requirements.

The CCN2 OIM tool supporting the Security Governance also allows the definition and application of the following policies:

- **Password policy** describing the key control measures and password guidelines for setting a password;
- **Segregation of duty** policies to identify and resolve potential risks associated with access right conflicts;
- **User Access policy** indicating the timing constraint in which the access to the CCN2 Platform of the specific owner of the account is either allowed or forbidden.

5.3 Designing Service-Oriented System-to-System Interactions

5.3.1 Contract-First Approach

When developing service interactions, there are two development styles: *Contract-Last* and *Contract-First*. When using a contract-last approach, you start with the programming language code, and let the Web service contract (i.e. WSDL) be generated from that. When using contract-first, you start with the WSDL contract, and use a programming language to implement it.

When developing WSDL and XSD artefacts, OSB restrictions on folder names must be respected: folder names are limited to 64 characters and must follow the OSB resource naming restrictions.

The CCN2 Platform promotes the contract-first approach as a best practice. Consumers of services exposed by the CCN2 Platform can rely on WSDLs, elaborated during the design-time, to start their implementation. It is very similar to the current TES development approach where interfaces (e.g.

³⁰ The Functional Specification defines that a role contains a PermissionID. However these IDs are only generated within the IAM at creation time. In this case, i.e. at design time, the definition must contain the name rather than the IDs.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

messages) are defined first during the specification phase of the current TES development lifecycle³¹.

The following steps are performed at design-time:

- Specification of planned services (see §5.3.2) including the description of the functional service contracts;
- Design of specified services (see §5.3.3) including the description of the endpoints exposed by the CCN2 Platform.

5.3.2 Specifying Services

The development of functional and technical specifications will drive the implementation of the services exposed on the CCN2 Platform. As far as the CCN2 Platform is concerned, it consists of:

- The description of the organisational structure (see §5.3.2.1);
- The description of business data (see §5.3.2.2);
- The description of business service contracts (see §5.3.2.3);
- The definition of the versioning policy (see §5.3.2.4).

The artefacts supporting the specification of services are subject to functional and technical validations.

5.3.2.1 Describing the Organisational Structure

The description of the organisation structure driving the elaboration of Trans-European Systems allows the definition of elements relevant for the future implementation and usage of the CCN2 Platform, namely:

- The identification of involved CCN2 Partners as consumers and/or providers of the planned services (see 5.2.1);
- The identification of business roles (see §5.2.4.3) that will be assigned to CCN2 users (human and systems) and the definition of the associated permissions (only S2S; see §5.2.4.2) to execute operations on the exposed resources (see §5.2.4.1);
- The definition of the security policy (see §5.2.4.4) that will be applied.

5.3.2.2 Describing the Business Data

The definition of business data exchanged through Trans-European Systems is relevant for the usage CCN2 Platform when it crosses the Common Domain because it drives the way data will be described in the service contracts (see §5.3.2.3) through XSD artefacts, possibly reused by multiple service descriptions as canonical schemas.

5.3.2.3 Describing the Functional Service Contracts

As far as the CCN2 Platform is concerned, the specification of services by the Business System Owner mainly consists in the elaboration of the abstract part of the service contracts (see §4.9.3.1) that define the business interface of the planned services.

At this stage, the CCN2 Platform imposes a limited set of conventions, namely:

- The abstract description must be defined in a separate WSDL file and named according to CCN2 conventions (see §C.2.1), as shown in the example below:

```
CCN2.Service.Customs.Default.SYSA.ServiceA_1.0.0_0.1.0.wsdl
```

³¹ As defined by TEMPO.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

The elements in the convention are used as follows:

- [Service ID] defined according to the CCN2 naming convention (see §C.1.2);
- [Service Version] of the related service, defined according to the CCN2 convention.
- [Artefact Version] to support change management according to the CCN2 convention.
- WSDL 1.1 specification (see §4.4.4) must be used.

```
<wsdl:definitions xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"...>
```

This functional description of the service contract as a *WSDL (abstract part)* asset is under the control of the Business System Owner. It will be subsequently referenced by other CCN2 Partners identified as service providers. Other assets are also complementing the functional service description, namely:

- XSD assets relating to the definition of identified business data (see §5.3.2.2);
- Interface asset representing the business interface of the service;
- Documentation asset referring to the TES specification documents.

5.3.2.4 Defining Versioning Policies

SOA best practices recommend the definition of new endpoints when a service contract is amended, enabling flexible transitions.

5.3.3 Designing Services

Once functional service contracts are specified (see §5.3.2), the way they will be exposed to the service consumers can be designed. This step refers to

- The identification of applicable Message Exchange Pattern (MEP, see §5.3.3.1);
- The description of the CCN2 endpoints (see §5.3.3.2).

The artefacts supporting the description of CCN2 endpoints are subject to technical validation.

5.3.3.1 Selecting MEPs

The way service interactions will occur through the CCN2 Platform is defined according to Message Exchange Patterns (MEP) supported by the CCN2 Platform (see §4.9.4), namely:

- Synchronous Request/Response MEP (see §4.9.4.3), when service operations send back, in a short timeframe, business data to the service consumers;
- Asynchronous One-Way/FF MEP (see §4.9.4.5), when the service operations (as defined by the related business process) do not send back business data (one possibility is as business acknowledgment) to the service consumers. It often relates to business notifications;
- Asynchronous Request/Callback (see §4.9.4.6), when service operations send back business data to the service consumers after long-running processing;

5.3.3.2 Describing the CCN2 Endpoints of Services

As far as the CCN2 Platform is concerned, the design of services by the Business System Owner mainly consists in the elaboration of the concrete part of the service contracts that defines the CCN2 Endpoint of the related services (see §5.3.3), specifying the technical communication interface and the applicable policies (e.g. security policies).

For each business service contract exposed through the CCN2 Platform, a CCN2 Endpoint (see §4.9.3.6) must be defined by the Business System Owner. The service consumers will use this endpoint to interact with the service providers.

The concrete part of a WSDL (see §4.9.3.1) becomes of first importance when service endpoints are

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

exposed through the CCN2 Platform. Moreover, the following set of conventions is defined:

- The concrete description must be defined in a separate WSDL file and named according to CCN2 conventions (see §C.2.2), as shown in the below example :

```
CCN2.Service.Customs.Default.SYSA.ServiceA_1.0.0_CCN2_0.1.0.wsdl
```

The elements in the convention are used as follows:

- [Service ID] and [Service Version] relating to the abstract description (see §5.3.2.3);
- “_CCN2” suffix that identifies the CCN2 endpoint description for the service;
- [Artefact Version] to support change management.
- SOAP 1.2 Specification (see §4.4.5) must be used to define the technical bindings in the WSDL as follows:

```
<soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
```

In the concrete part of the WSDL, the related endpoint reference (see §4.9.3.5) must be specified using “WSDL Endpoint Extension” allowing the insertion of additional metadata in the service contract. An example is shown below.

```
<wsdl:definitions...>
  <!-- reference to the abstract part of the service contract -->
  <wsdl:import namespace="..."
    location="CCN2.Service.Customs.Default.SYSA.ServiceA_1.0.0_0.1.0.wsdl"/>
  <!-- reference to the CCN2 policies -->
  <wsdl:import namespace="http://ccn2.ec.eu/Policies"
    location="ccn2_policies.wsdl"/>

  <wsdl:binding name="ServiceA-Binding" type="ServiceA-Port">
    <!-- the SOAP binding -->
    <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <!-- the authentication policy assertion at CCN2 Endpoint level -->
    <wsp:PolicyReference URI="#wss10_username_token_mutual_authn_sign_encrypt"/>
    <wsdl:operation name="OP1">
      <soap:operation soapAction="CCN2.Service.Customs.Default.SYSA.ServiceA/OP1"/>
      <wsdl:input>
        <!-- the conditionality policy assertion at CCN2 Endpoint level -->
        <wsp:PolicyReference URI="#encrypt_body"/>
        <!-- the integrity policy assertion at CCN2 Endpoint level -->
        <wsp:PolicyReference URI="#sign_body"/>
        <soap:body parts="param" use="literal"/>
        ...
      </wsdl:input>
      <wsdl:output>...</wsdl:output>
      <wsdl:fault name="fault">...</wsdl:fault>
    </wsdl:operation>
  </wsdl:binding>

  <wsdl:service name="ServiceA">
    <wsdl:port name="ServiceA-Port" binding="ServiceA-Binding">
      <!-- the physical address of the CCN2 Endpoint -->
      <soap:address location="URL"/>
      <!--
      <wsa:EndpointReference>
        <!-- the physical address of the CCN2 Endpoint -->
        <wsa:Address>URL</wsa:Address>
        <wsa:Metadata>
          <!-- the reference to the service contract -->
          <ccn2:ServiceID>
            CCN2.Service.Customs.Default.SYSA.ServiceA
          </ccn2:ServiceID>
          <ccn2:ServiceName>Service A</ccn2:ServiceName>
          <ccn2:ServiceDescription>...</ccn2:ServiceDescription>
          <ccn2:ServiceVersion>http://ccn2.ec.eu/Version/1.0.1</ccn2:ServiceVersion>
        </wsa:Metadata>
      </wsa:EndpointReference>
    </wsdl:port>
  </wsdl:service>
</wsdl:definitions>
```

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Example 5-8: CCN2 Endpoint Description

- **/wsdl:import:** The standard WSDL construct that allows to refer to the abstract part of the service contract as well as to the applicable WS-Policies as predefined by the CCN2 Platform in a separate file;
- **/wsdl:binding/soap:binding:** The standard WSDL construct that allows to describe the technical binding to the service endpoint. It refers to the protocol to be used, i.e. SOAP (see §4.4.5) for the CCN2 Platform;
- **/wsdl:binding/wsp:PolicyReference:** The standard WS-Policy (see §4.4.6) Attachment construct that allows to reference a CCN2 policy applicable at the service endpoint level. In this example above, this refers to:
 - [wss10_username_token_mutual_authn_sign_encrypt] Authentication Policy indicating the usage of WS-Security see §4.9.3.8).
- **/wsdl:binding/wSDL:operation/soap:operation:** The standard WSDL SOAP Binding construct that allows to specify the name of the operation action. By CCN2 convention, it is composed using the Service ID and Operation Name as follows:

[Service ID]/[Operation Name]
- **/wsdl:binding/wSDL:operation/wsp:PolicyReference:** The standard WS-Policy (see §4.4.6) Attachment construct that allows to reference a CCN2 policy applicable at the service operation level.
- **/wsdl:binding/wSDL:operation/wSDL:input/wsp:PolicyReference:** The standard WS-Policy (see §4.4.6) Attachment construct that allows to reference a CCN2 policy applicable at the message level. In this example above, it refers to:
 - [encrypt_body] Confidentiality Policy;
 - [sign_body] Integrity Policy.
- **/wsdl:service/wSDL:port/wsa:EndpointReference:** The standard WS-Addressing (see §4.4.7) construct that allows to describe EPR (see §4.9.3.3);
- **/wsdl:service/wSDL:port/wsa:EndpointReference/wsa:Address:** The standard WS-Addressing (see §4.4.7) construct used to specify the physical address of the CCN2 Endpoint;
- **/wsdl:service/wSDL:port/wsa:EndpointReference/wsa:Metadata:** The standard WS-Addressing (see §4.4.7) construct that allows describing the service endpoint metadata, including in the example above:
 - The reference to the business service and its version;

5.4 Designing Web-based User-to-System Interactions

5.4.1 Designing Web Applications

The way Web applications are exposed to the users requires the description of the CCN2 Frontend (i.e. proxy, see §4.11.1). An example is shown below.

```
<ccn2:WebApplication>
  <ccn2:Name>CCN2.Service.Customs.Default.SYSA.WebApp1</ccn2:Name>    <ccn2:Description>...
</ccn2:Description> ?
  <ccn2:Version>http://ccn2.ec.eu/Version/1.0.1</ccn2:Version>
  <ccn2:OrganisationID>CCN2.Partner.EU.Customs.P1</ccn2:OrganisationID>
  <ccn2:Resources>
    <ccn2:Resource>
      <ccn2:Name>CCN2.Service.Customs.Default.SYSA.WebRsc1</ccn2:Name>
      <!-- CCN2 Front-end URL -->
      <ccn2:URL>URL</ccn2:URL>
    
```

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```

<!-- Partner's Backend URL -->
<ccn2:PartnerURL>URL</ccn2:PartnerURL>
</ccn2:Resource>
...
</ccn2:Resources>
</ccn2:WebApplication>

```

Example 5-9: CCN2 Web Application Front-end Description

It is subject to review by the CCN2 Operations team.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

6. Implementation-Time

6.1 Introduction

Once the specifications and design of a Trans-European System are available, the involved CCN2 Partners must implement the related application logic through:

- The implementation of web services (see §6.2) according to the service contracts produced at design-time (see §6.2);
- The implementation of web applications (see §6.3) relating to user-to-system interactions.

The adopted approach to integrate the CCN2 Platform to the CCN2 Partner's developments is not intrusive, allowing the implementation and unit testing of applications in isolation, without the presence of the mediation capabilities of the CCN2 Platform. However, as far as integration tests are concerned, it is required to rely on an environment offering a context to execute end-to-end scenarios including the activation of CCN2 Platform capabilities.

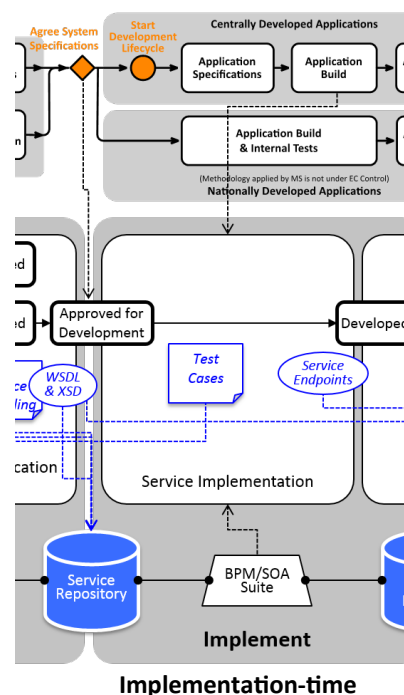


Figure 6-37: Implementation-time

Therefore, as soon as possible, it is required to deploy the necessary artefacts to allow the execution of the related interactions through the CCN2 Platform (see Chapter 7.).

6.2 Implementing Web Services

Most development tools offer features to apply the contract-first approach (see §5.3.1). Typically, for every port type defined in the WSDL, a corresponding service endpoint interface is generated. Each operation defined in the WSDL port type maps to a corresponding method in the service endpoint interface. Once generated, the stub code can be used to implement the service consumer's logic (see §6.2.2) or the service provider's logic (see §6.2.5).

The security aspects are described in §6.4.

6.2.1 Obtaining the Target Service Contract (WSDL)

As per the contract-first approach (see §5.3.1), the WSDL describing the service contract is the key element driving the implementation of service interactions.

6.2.2 Consuming a Service Exposed by the CCN2 Platform

In order to consume a service, and according to the "Contract-First" approach (see §5.3.1), a CCN2 Partner must:

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- Obtain the related WSDL (see §6.2.1) in order to produce the required implementation interface and identify the CCN2 Endpoint to access the service at runtime (see §6.2.2.1);
- Submit SOAP messages according to the WSDL definition. This definition includes a concrete part that drives the technical exchanges (according to the applied message exchange pattern, see §4.9.4):
 - Synchronously (see §6.2.2.2);
 - Or asynchronously (see §6.2.2.3).

6.2.2.1 Obtaining the CCN2 Endpoint of the Target Service

In order to invoke a service, a consumer must know the endpoint to physically address as well as details of the related contract in order to be able to implement the invocation logic.

6.2.2.2 Invoking a Synchronous Service

When invoking a Web service synchronously, the client application waits for the response before it can continue with its work³².

The CCN2 Platform supports the mediation of service interactions applying a synchronous request-response MEP (see §4.9.4.3). According to the CCN2 Service Connectivity Service principles (see §4.9), a consumer of a service exposed by the CCN2 Platform does not directly access the target endpoint offered by the service provider. Instead, it relies on the official CCN2 endpoint exposed by the platform, as depicted in Figure 6-38.

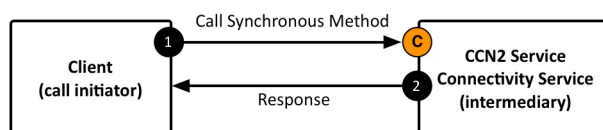


Figure 6-38: Invoking a Synchronous Service

1. The client calls the synchronous request-response service operation according to the enforced (addressing and security) policies (see also Chapter Annex A.). An example is shown below.

```

<soap12:Envelope>
  <soap12:Header>
    <!-- Addressing SOAP Headers -->
    <wsa:From>
      <wsa:Address>partner:CCN2.Partner.EU.Customs.P1/SYSX.SVC1</wsa:Address>
    </wsa:From>
    <wsa:To>partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1</wsa:To>
    <wsa:Action>CCN2.Service.Customs.Default.SYSX.ServiceA/OP1</wsa:Action>
    <!-- Unique message identifier assigned by the CCN2 Partner -->
    <wsa:MessageID>urn:uuid:941fc049-455f-4e6d-a202-486196b85393</wsa:MessageID>
    <!-- Optional -->
    <wsa:ReplyTo>
      <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous</wsa:Address>
    </wsa:ReplyTo>
    <!-- CCN2 Security SOAP Headers to be added here -->
    <!-- Specific Application SOAP Headers (if needed) to be added here -->
  </soap12:Header>
  <soap12:Body>...</soap12:Body>
</soap12:Envelope>
  
```

Example 6-10: Submitted Synchronous Service Request

2. The result of such invocation includes a (functional) response as defined by the related WSDL operation. The CCN2 Platform synchronously returns the SOAP response containing a HTTP status code 200. It contains the result of the invocation of the target Partner's service endpoint. An

³² Please refer also to the “jRequestResponseClient” reference application

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

example is shown below.

```
<soap12:Envelope>
  <soap12:Header>
    <!-- Addressing SOAP Headers -->
    <wsa:From>
      <wsa:Address>partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1</wsa:Address>
    </wsa:From>
    <wsa:To>http://www.w3.org/2005/08/addressing/anonymous</wsa:To>
    <wsa:Action>CCN2.Service.Customs.Default.SYSX.ServiceA/OP1</wsa:Action>
    <!-- Unique message identifier assigned by the service provider -->
    <wsa:MessageID>urn:uuid:b6f4d700-ac76-41d4-bec1-01d9801b2ebf</wsa:MessageID>
    <!-- The message identifier of the initial request -->
    <wsa:RelatesTo>941fc049-455f-4e6d-a202-486196b85393</wsa:RelatesTo>
    <!-- Specific Application SOAP Headers (if needed) to be added here -->
  </soap12:Header>
  <soap12:Body>...</soap12:Body>
</soap12:Envelope>
```

Example 6-11: Received Synchronous Service Response

In case of an exception, a SOAP Fault is synchronously returned reporting a failure during the acceptance of the SOAP message by the CCN2 Platform, during its transmission or during the synchronous invocation of the target service.

6.2.2.3 Invoking an Asynchronous Service

Because the processing of a service request can be time-consuming and delayed, it is often useful for the client application to continue its work and handle the response later on. By calling a Web service asynchronously, the client can continue his processing, without delay. The CCN2 Platform supports the mediation of service interactions applying two types of asynchronous MEPs, namely:

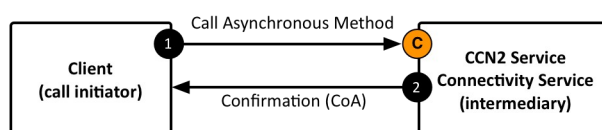
- **One-Way MEP** (also called Fire-and-Forget, see §4.9.4.5) in which the service does not reply with a functional response³³. However, in this case, the consumer can specify he wants to receive a positive or negative acknowledgment relating to the delivery of the request to the target service (see §6.2.3);
- **Request-Callback MEP** (see §4.9.4.6) in which the service is expected to reply with an asynchronous functional response or fault³⁴. In this case, CoD and CoE confirmations can also be requested.

According to the CCN2 Service Connectivity Service principles (see §4.9), a consumer of a service exposed by the CCN2 Platform does not directly access the target endpoint offered by the service provider. Instead, it relies on the official CCN2 endpoint exposed by the platform.

The CCN2 Platform can notify the client application regarding the delivery of an asynchronous message via CoD and CoE messages. The *wsa:ReplyTo* SOAP header indicates to the CCN2 Platform the destination of the business response to the initial asynchronous request.

In case of an exception during the asynchronous transmission of a message, an asynchronous negative acknowledgement (i.e. CoE) is sent back to the initial caller, as specified by the *wsa:FaultTo* SOAP Header of the request message.

Figure 6-39 depicts the sequence of exchanges relating to the submission of an asynchronous service request.



³³ Please refer also to the “jOneWayClient” reference application

³⁴ Please refer also to the “jRequestCallbackClient” reference application

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Figure 6-39: Invoking an Asynchronous

1. The client calls the asynchronous service operation according to the enforced (addressing and security) policies. An example is shown below.

```

<soap12:Envelope>
  <soap12:Header>
    <!-- Addressing SOAP Headers -->
    <wsa:From>
      <wsa:Address>partner:CCN2.Partner.EU.Customs.P1/SYSX.SVC1</wsa:Address>
    </wsa:From>
    <wsa:To>partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1</wsa:To>
    <wsa:Action>CCN2.Service.Customs.Default.SYSX.ServiceA/OP2</wsa:Action>
    <!-- Unique message identifier assigned by the CCN2 Partner -->
    <wsa:MessageID>urn:uuid:676fda12-438b-4d9f-9a4e-49cff128e691</wsa:MessageID>
    <!-- Required to receive asynchronous replies -->
    <wsa:ReplyTo>
      <wsa:Address>partner:CCN2.Partner.EU.Customs.P1/SYSX.SVC1</wsa:Address>
    </wsa:ReplyTo>
    <!-- CCN2 Security SOAP Headers to be added here -->
    <!-- Specific Application SOAP Headers (if needed) to be added here -->
    <!-- CCN2 Custom Header -->
    <ccn2:RequestCoD>false</ccn2:RequestCoD>
  </soap12:Header>
  <soap12:Body>...</soap12:Body>
</soap12:Envelope>

```

Example 6-12: Submitted Asynchronous Service Request

2. Compared to the synchronous MEP, the immediate result of such invocation does not include a (functional) response. Instead, the CCN2 Platform synchronously sends back a technical acknowledgment to the client through a HTTP 202. Note that this HTTP response does not include any additional information. Such confirmation guarantees that the CCN2 Platform has safely stored the message for differed processing.

In case of an exception, a SOAP Fault is synchronously returned reporting a failure during the acceptance of the SOAP message by the CCN2 Platform.

6.2.3 Accepting Asynchronous Acknowledgement

When invoking a service asynchronously (see §6.2.2.3), a service consumer is able to specify that he wants to receive information about the effective delivery of the related message by setting appropriate header flag to “true” (*ccn2:RequestCoD*) (see §4.9.5.1, Delivery Acknowledgements). In case a service consumer wants to receive negative acknowledgements reporting an exception, a *wsa:FaultTo* must be specified.

The Acknowledgment Service must be made available by the consumer, behaving in this case also as a service provider (as depicted in Figure 6-40 below). Such endpoints are registered, as any other service endpoints, through the CCN2 service registration process (see §7.3).

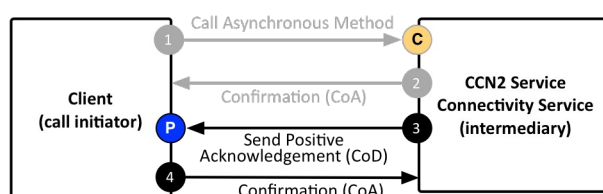


Figure 6-40: Accepting an Asynchronous Acknowledgement

3. Once the CCN2 Platform has successfully achieved the asynchronous transmission of the service request message to the target service endpoint and the CoD flag is set to true, it notifies the call initiator about its delivery.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

According to the result of such transmission, the CCN2 Platform calls back the call initiator using:

- The was:From from request, in case of a successful message delivery;
- The Fault (Acknowledgement) Endpoint in case of negative acknowledgement reporting an exception. A standard CCN2 Exception Report construct is used to describe the nature of the related exception.

Such an acknowledgement message includes a specific WS-Addressing SOAP Header attribute describing its relationship with the initial service request (i.e. *wsa:RelatesTo*, for correlation purpose), including the initial request message ID. An example of such an acknowledgement message generated by the CCN2 Platform is shown below.

```
<soap12:Envelope>
  <soap12:Header>
    <!-- Addressing SOAP Headers -->
    <wsa:From>
      <wsa:Address>partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1</wsa:Address>
    </wsa:From>
    <!-- The (logical) address specified by ReplyTo in the request -->
    <wsa:To>partner:CCN2.Partner.EU.Customs.P1/SYSX.SVC1</wsa:To>
    <wsa:Action>CCN2.Service.Platform.AcknowledgementService/CoD</wsa:Action>
    <!-- Unique message identifier generated by the CCN2 Platform -->
    <wsa:MessageID>urn:uuid:188558ec-cf8d-48f6-8a3a-5862de2101c5</wsa:MessageID>
    <!-- The message identifier of the initial request -->
    <wsa:RelatesTo RelationshipType=" http://ccn2.ec.eu/addressing/ack">
      urn:uuid:676fda12-438b-4d9f-9a4e-49cff128e691
    </wsa:RelatesTo>
    <!-- CCN2 Security SOAP Headers added here -->
  </soap12:Header>
  <soap12:Body>
    <ccn2ack:CoD>
      <ccn2ack:EventTimestamp>2025-05-18T21:32:52</ccn2ack:EventTimestamp>
    </ccn2ack:CoD>
  </soap12:Body>
</soap12:Envelope>
```

Example 6-13: Received Asynchronous Acknowledgment

The *RelationshipType* indicates the nature of the reply, namely:

- Confirmation of Delivery: *http://ccn2.ec.eu/addressing/ack*;
 - Exception Report: *http://ccn2.ec.eu/addressing/err*.
4. The call initiator synchronously sends back an acknowledgment to the CCN2 Platform. As any other asynchronous exchanges, asynchronous acknowledgments are subjected to the “No-Message-Lost-Assurance” (see §4.9.5.2).

6.2.4 Accepting Asynchronous Service Callback

When invoking a service asynchronously (see §6.2.2.3), a service consumer needs to specify the reply endpoint (*wsa:ReplyTo*) and/or fault endpoint (*wsa:FaultTo*) in the initial request, in order to receive the functional result of the target service invocation.

Those endpoints must be made available by the service consumer, behaving in this case also as a service provider (as depicted in Figure 6-41). Such endpoints must be registered, like any other service endpoints, through the CCN2 service registration process (see § 7.3).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

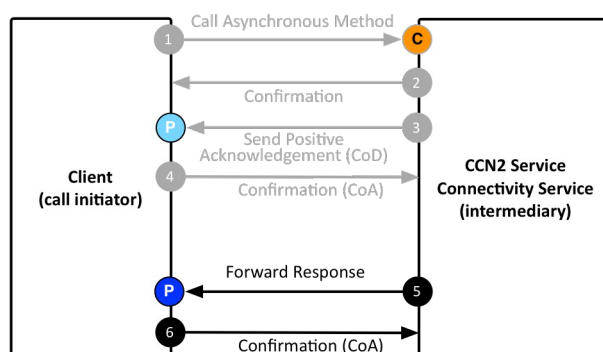


Figure 6-41: Accepting an Asynchronous Service Callback

- Once the target service has executed the requested action and submitted the response to the CCN2 Platform, the related message is sent back to the initial service caller using:

- The Reply Endpoint in case of a regular SOAP Response.
- The Fault Endpoint in case of a SOAP Fault.

Such a reply message includes a specific WS-Addressing SOAP Header attribute describing its relationship with the initial service request (i.e. *wsa:RelatesTo*, for correlation purpose), including the initial request message ID. An example is shown below.

```

<soap12:Envelope>
  <soap12:Header>
    <!-- Addressing SOAP Headers -->
    <wsa:From>
      <wsa:Address>partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1</wsa:Address>
    </wsa:From>
    <!-- The (logical) address specified by ReplyTo in the request -->
    <wsa:To>partner:CCN2.Partner.EU.Customs.P1/SYSX.SVC1</wsa:To>
    <wsa:Action>CCN2.Service.Customs.Default.SYSX.ServiceA/OP2</wsa:Action>
    <!-- Unique message identifier assigned by the service provider -->
    <wsa:MessageID>urn:uuid:b6f4d700-ac76-41d4-bec1-01d9801b2ebf</wsa:MessageID>
    <!-- The message identifier of the initial request -->
    <wsa:RelatesTo RelationshipType="http://ccn2.ec.eu/addressing/ack">
      676fda12-438b-4d9f-9a4e-49cff128e691
    </wsa:RelatesTo>
    <!-- CCN2 Security SOAP Headers to be added here -->
    <!-- Specific Application SOAP Headers (if needed) to be added here -->
  </soap12:Header>
  <soap12:Body>...</soap12:Body>
</soap12:Envelope>
  
```

Example 6-14: Received Asynchronous Service Response

- The call initiator synchronously returns a callback response to the CCN2 Platform.

6.2.5 Providing a service through the CCN2 Platform

In order to provide a service, a CCN2 Partner must:

- Register a service endpoint (see §7.3.2) referring to the concrete part of a WSDL;
- Accept SOAP messages according to the WSDL definition. This definition includes a concrete part that drives the technical exchanges (according to the applied message exchange pattern, see §4.9.4):
 - Synchronously (see §6.2.5.1);
 - Or asynchronously (see §6.2.5.2).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

6.2.5.1 Replying to a Synchronous Service Request

The CCN2 Platform supports the mediation of service interactions applying a synchronous request-response MEP (see §4.9.4.3). According to the CCN2 Service Connectivity Service principles (see §4.9), a service provider is not directly invoked by the CCN2 Partners³⁵. To reply to a service request synchronously, the service application must accept SOAP messages coming from the CCN2 Platform, as depicted in Figure 6-42 below.

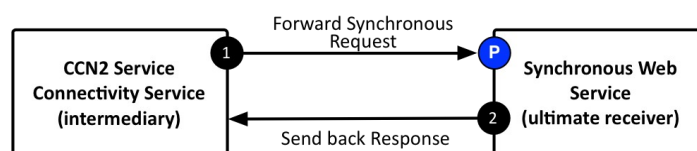


Figure 6-42: Replying to a Synchronous Service Request

1. The service receives a service request according to the enforced (addressing and security) policies. An example is shown below.

```
<soap12:Envelope>
  <soap12:Header>
    <!-- Addressing SOAP Headers -->
    <wsa:From>
      <wsa:Address>partner:CCN2.Partner.EU.Customs.P1/SYSX.SVC1</wsa:Address>
    </wsa:From>
    <wsa:To>partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1</wsa:To>
    <!-- Action as specified by the service consumer -->
    <wsa:Action>CCN2.Service.Customs.Default.SYSX.ServiceA/OP1</wsa:Action>
    <!-- Unique message identifier assigned by the service consumer -->
    <wsa:MessageID>urn:uuid:941fc049-455f-4e6d-a202-486196b85393</wsa:MessageID>
    <wsa:ReplyTo>
      <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous</wsa:Address>
    </wsa:ReplyTo>
    <!-- CCN2 Security SOAP Headers to be added here -->
    <!-- Specific Application SOAP Headers (if needed) to be added here -->
  </soap12:Header>
  <soap12:Body>...</soap12:Body>
</soap12:Envelope>
```

Example 6-15: Received Synchronous Service Request

2. The service executes the request and synchronously sends back the (functional) response as defined by the related WSDL operation. An example is shown below.

```
<soap12:Envelope>
  <soap12:Header>
    <!-- Addressing SOAP Headers -->
    <wsa:From>
      <wsa:Address>partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1</wsa:Address>
    </wsa:From>
    <wsa:To>http://www.w3.org/2005/08/addressing/anonymous</wsa:To>
    <wsa:Action>CCN2.Service.Customs.Default.SYSX.ServiceA/OP1</wsa:Action>
    <!-- Unique message identifier assigned by the service provider -->
    <wsa:MessageID>urn:uuid:b6f4d700-ac76-41d4-bec1-01d9801b2ebf</wsa:MessageID>
    <!-- The message identifier of the initial request -->
    <wsa:RelatesTo>941fc049-455f-4e6d-a202-486196b85393</wsa:RelatesTo>
    <!-- Specific Application SOAP Headers (if needed) to be added here -->
  </soap12:Header>
  <soap12:Body>...</soap12:Body>
</soap12:Envelope>
```

Example 6-16: Submitted Synchronous Service Response

In case the service execution fails, a SOAP Fault must be returned synchronously.

The service providers are also able to enforce the security by relying on the consumer's propagated

³⁵ Please refer to the “jRequestResponseServer” reference application

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

CCN2 identity (see §6.4.2, Implementing Fine-Grained Authorisation).

Note that additional SOAP Header could be present that relate to specific application requirements.

6.2.5.2 Replying to an Asynchronous Service Request

The CCN2 Platform supports the mediation of service interactions applying asynchronous MEPs (see §4.9.4.5 and §4.9.4.6). According to the CCN2 Service Connectivity Service principles (see §4.9), a service provider is not directly invoked by the CCN2 Partners³⁶. To reply to a service request asynchronously, the service application must accept SOAP messages coming from the CCN2 Platform, as depicted in Figure 6-43.

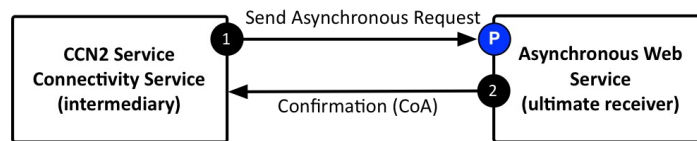


Figure 6-43: Replying to an Asynchronous Service Request

1. The service receives a service request according to the enforced (addressing and security) policies. An example is shown below.

```
<soap12:Envelope>
  <soap12:Header>
    <!-- Addressing SOAP Headers -->
    <wsa:From>
      <wsa:Address>partner:CCN2.Partner.EU.Customs.P1/SYSX.SVC1</wsa:Address>
    </wsa:From>
    <wsa:To>partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1</wsa:To>
    <!-- Action as specified by the service consumer -->
    <wsa:Action>CCN2.Service.Customs.Default.SYSX.ServiceA/OP2</wsa:Action>
    <!-- Unique message identifier assigned by the service consumer -->
    <wsa:MessageID>urn:uuid:676fda12-438b-4d9f-9a4e-49cff128e691</wsa:MessageID>
    <!-- for request-callback MEP -->
    <wsa:ReplyTo>
      <wsa:Address>partner:CCN2.Partner.EU.Customs.P1/SYSX.SVC1</wsa:Address>
    </wsa:ReplyTo>
    <!-- CCN2 Security SOAP Headers to be added here -->
    <!-- Specific Application SOAP Headers (if needed) to be added here -->
  </soap12:Header>
  <soap12:Body>...</soap12:Body>
</soap12:Envelope>
```

Example 6-17: Received Asynchronous Service Request

2. The service safely stores the request message and synchronously acknowledges it. Then, it asynchronously executes the service processing logic.
3. Some asynchronous services may provide functional responses (also called 'callback'). In such cases, the service must send back the service response as depicted in Figure 6-44.

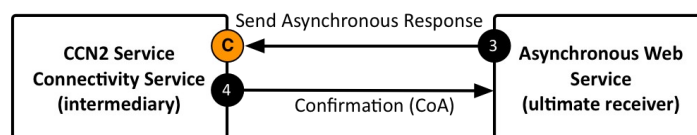


Figure 6-44: Send an Asynchronous Service Response

The service sends the response, according to the enforced (addressing and security) policies, to the CCN2 service endpoint. An example is shown below.

```
<soap12:Envelope>
```

³⁶ Please refer also to the “jOneWayServer“ or “jRequestCallbackServer” reference applications

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```
<soap12:Header>
  <!-- Addressing SOAP Headers -->
  <wsa:From>
    <wsa:Address>partner:CCN2.Partner.BE.Customs.P2/SYSX.SVC1</wsa:Address>
  </wsa:From>
  <!-- The (logical) address specified by ReplyTo in the request -->
  <wsa:To>partner:CCN2.Partner.EU.Customs.P1/SYSX.SVC1</wsa:To>
  <!-- Action as specified by the service provider -->
  <wsa:Action>CCN2.Service.Customs.Default.SYSX.ServiceA/OP2</wsa:Action>
  <!-- Unique message identifier assigned by the service provider -->
  <wsa:MessageID>urn:uuid:b6f4d700-ac76-41d4-bec1-01d9801b2ebf</wsa:MessageID>
  <!-- The message identifier of the initial request -->
  <wsa:RelatesTo RelationshipType=" http://ccn2.ec.eu/addressing/ack">
    676fda12-438b-4d9f-9a4e-49cff128e691
  </wsa:RelatesTo>
  <!-- CCN2 Security SOAP Headers to be added here -->
  <!-- Specific Application SOAP Headers (if needed) to be added here -->
</soap12:Header>
<soap12:Body>...</soap12:Body>
</soap12:Envelope>
```

Example 6-18: Submitted Asynchronous Service Response

4. The CCN2 Platform synchronously sends back an acknowledgment to the service.

6.3 Implementing Web Applications

As far as the CCN2 Platform is concerned, the implementation of web application logic³⁷ is subjected to the following constraints:

- Compatibility with the proxy mechanism of the CCN2 Oracle Access Manager (OAM, see §4.11.1);
- Application of the CCN2 Identity Propagation mechanism (see §4.11.4). It relates to the possible implementation of fine-grained authorisation enforcements by the CCN2 Partners' applications (see §6.4.2). Such enforcements are typically subjected to business rules. Therefore, they cannot be achieved by the CCN2 Platform itself due to the business-agnostic nature of its capabilities.

6.4 Integrating CCN2 Security

6.4.1 Applying User Authentication

When a CCN2 Partner's user (human or system) accesses a resource exposed by the CCN2 Platform, he must identify himself by asserting his identity in the interactions controlled by the CCN2 Platform (see §4.8.1). The CCN2 authentication process is executed according to the type of accessed resources, namely:

- Web resources hosted by web applications (i.e. user-to-system interactions, see §4.11.2);
- Web services exposed through CCN2 service endpoints (i.e. system-to-system interactions, see §4.9.6.2).

According to the provided user identity, the CCN2 Platform enforces the authorisation to access the requested resources (see §4.8.4) by controlling the user's roles and, for S2S, the associated permissions (as per the RBAC model)

The Partner's application providing the resources can obtain the identity of the requesting user and its attributes by using the propagated CCN2 security token (see §4.8.2).

³⁷ Please refer to the "jWeb" reference application.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Note that this only refers to the user identities as managed and controlled by the CCN2 Platform. Other identity assertions, controlled by third parties, are opaque for the CCN2 Platform (see §4.9.6.4).

6.4.1.1 Specifying a User's Identity when accessing web resources

When accessing a resource hosted by a web application (through user-to-system interactions), the user's authentication process is handled by the user agent and the CCN2 Oracle Access Manager (see §4.11) to achieve the offered Single Sign-On (SSO, see §4.11.2) mechanism. The CCN2 Platform allows the users to enter their credentials only once in order to access multiple exposed applications. It authenticates the users for all the applications they have been given permissions to and eliminates further prompts when they switch applications during a particular session.

6.4.1.2 Specifying a User's Identity when accessing web services

When accessing a web service through a CCN2 service endpoint (i.e. system-to-system interactions), the related SOAP message must contain the authentication information (see §4.9.6.2) under the form of a Username Token or X.509 Certificate. The CCN2 Platform requires that such a token must be specified according to the WS-Security specification (see §4.9.6.1). In addition, it must target the CCN2 Platform by the specification of role attribute (i.e. *soap12:role="CCN2.Platform"*) and built according to the predefined CCN2 security policy selected at the service registration time (see §5.3.3.2).

The presence of the "role" attribute in the SOAP headers enables the CCN2 Platform to process only headers that target the CCN2 Platform and implement propagation of identity in the messages forwarded to the receiving CCN2 Partners (see technical reference §4.9.6.4).

The example³⁸ shown below is depicted according to the application of the [CCN2.Policy.Platform.Auth.PlainTextPwd] authentication policy (see §A.1.1).

```
<soap12:Header>
  <wsse:Security soap12:mustUnderstand="true" soap12:role="CCN2.Platform">
    <wsse:UsernameToken
      wsu:Id="UsernameToken-78d8a587-2cff-432f-9805-df6439923a69">
      <wsse:Username>SYSX_BE_USER1</wsse:Username>
      <wsse:Password Type="...#PasswordText">PASSWORD</wsse:Password>
    </wsse:UsernameToken>
  </wsse:Security>
  ...
</soap12:Header>
```

Example 6-19: WS-Security Plain Text Username Token

The "Username" element must contain the value of the "Username ID" element provided at the user's registration time (i.e. User Declaration)

Applying the encryption and digital signature capabilities offered by the CCN2 Platform will enforce the confidentiality and the integrity of such a Username Token. To do so, the [wss10_username_token_mutual_authn_sign_encrypt] authentication policy must be selected at service registration time. The example shown below is depicted according to the application of this policy.

```
<soap12:Header>
  <wsse:Security soap12:mustUnderstand="true" soap12:role="CCN2.Platform">
    <xenc:EncryptedData xmlns:xenc="http://www.w3.org/2001/04/xmldsig#"
      Id="ED-af0a49d2-667e-4756-8427-0119b5ebfc07"
      Type="http://www.w3.org/2001/04/xmldsig#Element">
      <xenc:EncryptionMethod Algorithm="...#aes256-cbc"/>
    </xenc:EncryptedData>
    <ds:KeyInfo xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
      <wsse:SecurityTokenReference wss11:TokenType="...#EncryptedKey">

```

³⁸ Please refer to chapter Error: Reference source not found for a complete example of a web service request containing the security token.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```

        <wsse:Reference URI="#EK-4af96e1d-7557-4c27-b9c3-f95ce144321b"/>
      </wsse:SecurityTokenReference>
    </ds:KeyInfo>
    <xenc:CipherData><xenc:CipherValue>RjHJX6g...</xenc:CipherValue></xenc:CipherData>
  </xenc:EncryptedData>
  ...
</wsse:Security>
...
</soap12:Header>

```

Example 6-20: WS-Security Signed and Encrypted Username Token

The mechanism and algorithm to be used for signing and encrypting a Username Token, are the ones applicable to respectively sign (see §4.8.7.1) and encrypt (see §4.8.6.1) other parts of the exchanged messages.

Once authorised, a CCN2 user request is forwarded to the CCN2 Partner's application. The Username Token initially provided is filtered and replaced by the CCN2 Security Token asserting the user's identity. The CCN2 Security Token is defined according to the SAML specification (see §4.8.3) and contains identity information such the user roles.

As far as web applications exposed by the CCN2 Platform are concerned, the SAML 2.0 Web Browser SSO Profile is used (see §4.11.4.1). The CCN2 Platform will provide access to the CCN2 Identity Provider (as per the SAML specification definition) to obtain the CCN2 Security SAML Token.

As far as services exposed by the CCN2 Platform are concerned, the propagation of the CCN2 Security SAML Token through the forwarded messages (see §4.9.6.3) is subjected to the application of a specific policy by the CCN2 Partner's endpoints (i.e. [wss11_saml20_sendervouches_token_mutual_authn_sign_encrypt], see §A.1.1). As a result, the CCN2 Security SAML Token is included in the SOAP Header of the transmitted message.

Whatever the techniques used to obtain the CCN2 Security SAML Token, it can be used to enforce roles and permissions in the Partner's application by relying on the asserted roles specified by the SAML "AttributeStatement" elements.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

6.4.2 Implementing Fine-Grained Authorisation

According to the CCN2 Authentication enforcement mechanism (see §4.8.1), a Partner's application exposed through the CCN2 Platform received the propagated identity (see §4.8.2) of the requesters (see §4.8.3), as shown in the example below.

```
<soap12:Envelope>
  <soap12:Header>
    <!-- CCN2 Security Token -->
    <wsse:Security [...]>
      <wsu:Timestamp [...]>...</wsu:Timestamp>
      <wsse:BinarySecurityToken [...]>...</wsse:BinarySecurityToken>
      <saml:Assertion ID="..." IssueInstant="xs:dateTime" Version="2.0">
        <saml:Issuer>...</saml:Issuer>
        <saml:Subject>
          <saml:NameID>SYSX_BE_USER1</saml:NameID>
          <saml:SubjectConfirmation>...</saml:SubjectConfirmation>
        </saml:Subject>
        <saml:Conditions [...]>...</saml:Conditions>
        <saml:AuthnStatement [...]>...</saml:AuthnStatement>
        <saml:AttributeStatement>
          <saml:Attribute NameFormat="urn:vordel:attribute:1.0" Name="uid">
            <saml:AttributeValue>ccn2trs.user1be</saml:AttributeValue>
          </saml:Attribute>
          <saml:Attribute Name="partnerName">
            <saml:AttributeValue>CCN2.Partner.BE.Customs.P1</saml:AttributeValue>
          </saml:Attribute>
          <saml:Attribute Name="c">
            <saml:AttributeValue>BE</saml:AttributeValue>
          </saml:Attribute>
          <saml:Attribute Name="role">
            <saml:AttributeValue>CCN2.Role.SYSA.Role1</saml:AttributeValue>
            <saml:AttributeValue>CCN2.Role.SYSB.Role2</saml:AttributeValue>
          </saml:Attribute>
        </saml:AttributeStatement>
      </saml:Assertion>
      <ds:Signature>...</ds:Signature>
    </wsse:Security>
  </soap12:Header>
</soap12:Body>
```

Example 6-21: SAML Assertion

Such identity assertion allows trusting the user's identity and getting some of its attributes as recorded in the CCN2 User Directory

By relying on those attributes, the CCN2 Partner' application can apply fine-grained permissions in order to enforce the controlled access to business data and operations according to specific business rules (which is not applicable by the CCN2 Platform capabilities).

6.4.3 Applying Encryption and Decryption

The CCN2 Platform offers capabilities relating to point-to-point encryption at message level to preserve the confidentiality of the messages exchanged between the CCN2 Partners and the CCN2 Platform (see §4.9.6.6).

Applying encryption in service interactions is part of the security policies (see §A.1.1) specified at the service endpoint registration time (see §5.3.3.2).

The CCN2 Platform uses the Key Encapsulation Mechanism (MEP, see §4.8.6.2). In such scenarios, the PKI is used to establish the asymmetric keys. The sender can come up with the symmetric key, used to encrypt message data, and encrypt it using the public key of the recipient. Then the recipient can decrypt this encrypted key with his private key and find out the symmetric key that is used for the message data encryption.

The encrypted key information is communicated to the recipient in the WS-Security SOAP Header

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

construct through the *xenc:EncryptedKey* element, as shown in the example below.

```
<soap12:Envelope>
  <soap12:Header>
    ...
    <!-- CCN2 Security Token -->
    <wsse:Security soap12:mustUnderstand="true" soap12:role="CCN2.Platform">
      ...
      <xenc:EncryptedKey Id="EK-2f748707-c1d1-4c8e-9732-fe5ab8c88e75">
        <xenc:EncryptionMethod Algorithm="...#rsa-oaep-mgf1p"/>
        <ds:KeyInfo>
          <wsse:SecurityTokenReference>
            <wsse:KeyIdentifier EncodingType="...#Base64Binary"
              ValueType="...#X509SubjectKeyIdentifier">
                RhJAar7ZCZCXz6tN1CTbTwPQkx8=
            </wsse:KeyIdentifier>
          </wsse:SecurityTokenReference>
        </ds:KeyInfo>
        <xenc:CipherData>
          <xenc:CipherValue>ofAWA2C...</xenc:CipherValue>
        </xenc:CipherData>
        <xenc:ReferenceList>
          <xenc:DataReference URI="#ED-31768ab2-cd89-43ca-9b64-cde8f0947c49"/>
        </xenc:ReferenceList>
      </xenc:EncryptedKey>
      ...
    </wsse:Security>
    ...
  </soap12:Header>
  <soap12:Body>
    <xenc:EncryptedData Id="ED-31768ab2-cd89-43ca-9b64-cde8f0947c49"
      Type="http://www.w3.org/2001/04/xmlenc#Content">
      ...
    </xenc:EncryptedData>
  </soap12:Body>
</soap12:Envelope>
```

Example 6-22: WS-Security Encrypted Key

It includes in particular the reference (*xenc:DataReference*) to the encrypted data element.

The encrypted data element (*xenc:EncryptedData*) replaces the original message data elements in the message, either in the SOAP Body (as shown in the example below), the SOAP Header or both.

In addition to the encrypted data itself (*xenc:CipherData*), it includes in particular the reference to the encryption key (*wsse:SecurityTokenReference*).

```
<soap12:Envelope>
  <soap12:Header>
    ...
    <!-- CCN2 Security Token -->
    <wsse:Security soap12:mustUnderstand="true" soap12:role="CCN2.Platform">
      ...
      <xenc:EncryptedKey Id="EK-2f748707-c1d1-4c8e-9732-fe5ab8c88e75">
        ...
      </xenc:EncryptedKey>
      ...
    </wsse:Security>
    ...
  </soap12:Header>
  <soap12:Body>
    <xenc:EncryptedData Id="ED-31768ab2-cd89-43ca-9b64-cde8f0947c49"
      Type="http://www.w3.org/2001/04/xmlenc#Content">
      <xenc:EncryptionMethod Algorithm="...#aes256-cbc"/>
      <ds:KeyInfo>
        <wsse:SecurityTokenReference wsse11:TokenType="...#EncryptedKey">
          <wsse:Reference URI="#EK-2f748707-c1d1-4c8e-9732-fe5ab8c88e75"/>
        </wsse:SecurityTokenReference>
      </ds:KeyInfo>
      <xenc:CipherData>
        <xenc:CipherValue>6bzJ0R...</xenc:CipherValue>
      </xenc:CipherData>
    </xenc:EncryptedData>
  </soap12:Body>
</soap12:Envelope>
```

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```
</xenc:EncryptedData>
</soap12:Body>
</soap12:Envelope>
```

Example 6-23: WS-Security Encrypted Data

6.4.4 Applying Digital Signatures

The CCN2 Platform offers capabilities relating to point-to-point digital signature at message level to preserve the integrity of the exchanged messages between the CCN2 Partners and the CCN2 Platform (see §4.9.6.7).

Applying encryption in service interactions is part of the security policies (see §A.1.1) specified at the service endpoint registration time (see §5.3.3.2).

The digital signature for SOAP messages, supported by CCN2, is implemented in accordance with the XML Signature specification (see §4.8.7.2 Digital Signature Creation Process). A *ds:Signature* XML element containing all information about signature is created during XML Digital signature process. The *ds:Signature* XML element is inserted in a *wsse:Security* SOAP Header element according to the WS-Security specification. An example is shown below.

```
<soap12:Envelope>
  <soap12:Header>
    <wsse:Security soap12:mustUnderstand="true" soap12:role="CCN2.Platform">
      <wsu:Timestamp wsu:Id="TS-ab5bcdaa-c68f-4993-9901-d04f7ddbdc88">
        <wsu:Created>2015-05-07T10:02:42.607Z</wsu:Created>
        <wsu:Expires>2015-05-07T10:07:42.607Z</wsu:Expires>
      </wsu:Timestamp>
      ...
      <ds:Signature Id="SIG-5d163de9-bb60-4e47-a0b3-a2ec6a7c94b4">
        <ds:SignedInfo xmlns:ec="http://www.w3.org/2001/10/xml-exc-c14n#">
          <ds:CanonicalizationMethod Algorithm="...xml-exc-c14n#">
            <ec:InclusiveNamespaces PrefixList="soap12"/>
          </ds:CanonicalizationMethod>
          <ds:SignatureMethod Algorithm="...#rsa-sha1"/>
          <ds:Reference URI="#TS-ab5bcdaa-c68f-4993-9901-d04f7ddbdc88">
            <ds:Transforms>
              <ds:Transform Algorithm="...xml-exc-c14n#">
                <ec:InclusiveNamespaces PrefixList="wsse soap12"/>
              </ds:Transform>
            </ds:Transforms>
            <ds:DigestMethod Algorithm="...#sha256"/>
            <ds:DigestValue>OMc7rX0...</ds:DigestValue>
          </ds:Reference>
          <ds:Reference URI="#_13ca1f07-0de4-46b0-84ab-814ee3ebdbe6">
            <ds:Transforms>
              <ds:Transform Algorithm="...xml-exc-c14n#">
                <ec:InclusiveNamespaces PrefixList=""/>
              </ds:Transform>
            </ds:Transforms>
            <ds:DigestMethod Algorithm="...#sha256"/>
            <ds:DigestValue>BeT6lQa...</ds:DigestValue>
          </ds:Reference>
        </ds:SignedInfo>
        <ds:SignatureValue>S43apAv...</ds:SignatureValue>
        <ds:KeyInfo Id="KI-92571a1e-1d08-424c-b2d0-1eeb0ff3f9e6">
          <wsse:SecurityTokenReference
            wsu:Id="STR-f6370cd1-4b8a-4388-ade2-cd653ed9f631">
            <wsse:KeyIdentifier EncodingType="...#Base64Binary"
              ValueType="...#X509SubjectKeyIdentifier">3Tw9fJfNmlniwfmhWtEddnWhBF8=
            </wsse:KeyIdentifier>
          </wsse:SecurityTokenReference>
        </ds:KeyInfo>
      </ds:Signature>
      ...
    </wsse:Security>
    ...
  </soap12:Header>
  <soap12:Body wsu:Id="_13ca1f07-0de4-46b0-84ab-814ee3ebdbe6">...</soap12:Body>
```

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```
</soap12:Envelope>
```

Example 6-24: WS-Security Digital Signature

When receiving such a WS-Security construct in the SOAP Header, the recipient should validate it using the verification process (see §4.8.7.3 Digital Signature Verification Process).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

7. Deployment-Time

7.1 Introduction

Once CCN2 Partners want to publish resources (i.e. services or web applications) through the CCN2 Platform to make them available for consumption, they need to request the deployment of required artefacts on the CCN2 Platform.

Such deployment can be requested for different reasons, namely:

- Testing activities at various stages of the TES development lifecycle includes:
 - Implementation-time (see Chapter 6.) when developers need to perform unit tests implying CCN2 Platform capabilities;
 - Factory Acceptance Test (FAT) when the integration of developed applications must be tested using end-to-end scenarios;
 - Site Acceptance Test (SAT) when DG TAXUD-hosted applications are validated by operational contractor;
 - Conformance Test when tested applications need to be ultimately certified.
- Production rollout to run the certified system in the operational environment.

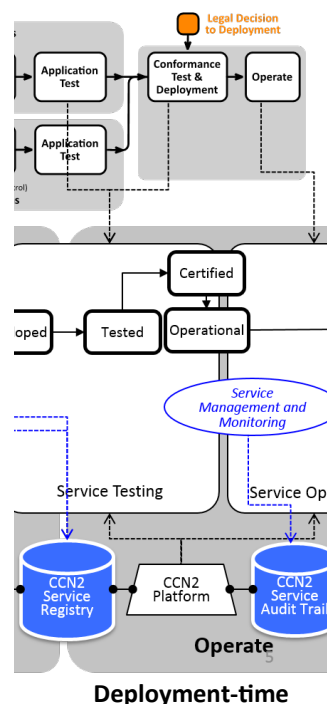


Figure 7-45: Deployment-time

7.2 CCN2 Environments

The CCN2 Platform offers segregated environments to isolate the testing activities from the operational ones. Each environment includes its own user directory and service registry.

7.3 Exposing a Web Service through the CCN2 Platform

In order to expose a business service through the CCN2 Platform, two steps must be executed by different actors, namely:

- The deployment of the CCN2 Endpoints (see §7.3.1) exposed to service consumers by the CCN2 Platform according to the CCN2 Service Connectivity Service principle (see §4.9);
- The deployment of the CCN2 Partner's Endpoints (see §7.3.2) exposed by the service providers to the CCN2 Platform only.

7.3.1 Deployment of CCN2 Endpoints

The development activities executed at design-time produce the description of CCN2 endpoints as a result of the execution of the following steps:

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- The identification and specification of business services, and their functional descriptions in the abstract part of WSDLs (see §5.3.2) provided in separate files;
- The description of the roles and permissions according to the identified security requirements provided in separate files, and referenced in the CCN2 OIM to drive the definition of authorisation policies;
- The description of CCN2 endpoints (see §5.3.3.2) in the concrete part of WSDLs provided in separate files, including the metadata (see §4.9.3.5) driving the configuration of the CCN2 mediation capabilities by the CCN2 Operations Teams;
- On request, CCN2 Operations Teams deploy and configure the required artefacts in the target runtime environment (see §7.2);

Because a CCN2 Endpoint does not require other specific implementation, it can be deployed (e.g. in the testing environment) at an early stage, before any another CCN2 Partner has provided his business logic implementation. Of course, at this stage any request to the business service will fail since the CCN2 Platform does not yet have a service provider to contact. However, this makes it possible to at least test the connectivity aspects.

7.3.2 Deployment of Partner's Endpoints by the Service Providers

The technical application of the service connectivity services (see §4.9) provides a level of indirection between the consumer of a service and its provider. The consumers of services do not directly access the target service endpoints offered by the providers. Instead, they rely only on (official) endpoints exposed by the CCN2 Platform (see §7.3.1). Partners' endpoints are only interfaced by the CCN2 Platform itself.

Once the Service Provider has implemented his service logic, he therefore needs to provide the endpoint (see §4.9.3.7) with which the CCN2 Platform will interact. This consists mainly in the concrete part of the service contract (i.e. WSDL), specifying the technical communication interface and the applicable policies at service provider's side (e.g. security policies), provided in a separate file.

It is the basis to expose the Partner's service at deployment-time. From a consumer point-of-view, they will represent different services as per business view, the technical implementation being virtualised.

The concrete part of a WSDL refers to the abstract part, produced and registered by the Business System Owner (see §7.3.1), in order to form a complete WSDL. Moreover, the following set of conventions is defined:

- The concrete description must be named according to CCN2 conventions (see §C.2.2), for example as follows:

```
CCN2.Service.Customs.Default.SYSA.ServiceA_1.0.0_BE.Customs.SYSX_0.1.0.wsdl
```

- [Service ID] and [Service Version] relating to the abstract description;
- [Destination ID] identifying the logical address of the endpoint (see §4.9.3.4);
- [Artefact Version] to support change management.
- SOAP 1.2 Specification (see §4.4.5) must be used to define the technical bindings in the WSDL, for example as follows:

```
<soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
```

In the concrete part of the WSDL as provided by the Service Provider, the related endpoint reference (see §4.9.3.5) must be specified using "WSDL Endpoint Extension" allowing the insertion of additional metadata in the service contract. An example is shown below.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```

<wsdl:definitions...>
  <!-- reference to the abstract part of the service contract -->
  <wsdl:import namespace="..."
    location="CCN2.Service.Customs.Default.SYSA.ServiceA_1.0.0_0.1.0.wsdl"/>
  <!-- reference to the CCN2 policies -->
  <wsdl:import namespace="http://ccn2.ec.eu/Policies"
    location="ccn2_policies.wsdl"/>

  <wsdl:binding name="ServiceA-Binding" type="ServiceA-Port">
    <!-- the SOAP binding -->
    <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <!-- the authentication policy assertion at Partner's Endpoint level -->
    <wsp:PolicyReference
      URI="#wss11_saml20_sendervouches_token_mutual_authn_sign_encrypt"/>
    <wsdl:operation name="OP1">
      <soap:operation soapAction="CCN2.Service.Customs.Default.SYSA.ServiceA/OP1"/>
      <wsdl:input>
        <!-- the conditionality policy assertion at Partner's Endpoint level -->
        <wsp:PolicyReference URI="#encrypt_body"/>
        <!-- the integrity policy assertion at Partner's Endpoint level -->
        <wsp:PolicyReference URI="#sign_body"/>
        <soap:body parts="param" use="literal"/>
        ...
      </wsdl:input>
      <wsdl:output>...</wsdl:output>
      <wsdl:fault name="fault">...</wsdl:fault>
    </wsdl:operation>
  </wsdl:binding>

  <wsdl:service name="ServiceA">
    <wsdl:port name="ServiceA-Port" binding="ServiceA-Binding">
      <!-- the physical address of the Partner's Endpoint -->
      <soap:address location="URL"/>
      <!--
      <wsa:EndpointReference>
        <!-- the physical address of the Partner's Endpoint -->
        <wsa:Address>URL</wsa:Address>
        <wsa:Metadata>
          <!-- the reference to the service contract -->
          <ccn2:ServiceID>
            CCN2.Service.Customs.Default.SYSA.ServiceA
          </ccn2:ServiceID>
          <ccn2:ServiceName>Service A</ccn2:ServiceName>
          <ccn2:ServiceDescription>...</ccn2:ServiceDescription>
          <ccn2:ServiceVersion>http://ccn2.ec.eu/Version/1.0.1</ccn2:ServiceVersion>
          <!-- the logical address of the partner's endpoint -->
          <ccn2:DestinationID>
            CCN2.Partner.BE.Customs.P2/SYSX.SVC1
          </ccn2:DestinationID>
          <ccn2:OrganisationID>CCN2.Partner.BE.Customs.P2</ccn2:OrganisationID>
          <ccn2:DestinationName>...</ccn2:DestinationName> ?
          <ccn2:DestinationDescription>...</ccn2:DestinationDescription>
          <!-- configuration of the data transformation mediation capability -->
          <ccn2:DataTransformation ccn2:Default="true"/>
        </wsa:Metadata>
      </wsa:EndpointReference>
    </wsdl:port>
  </wsdl:service>
</wsdl:definitions>

```

Example 7-25: Partner's Endpoint Description

- **/wsdl:import:** The standard WSDL construct that allows to refer to the abstract part of the service contract as well as to the applicable WS-Policies as predefined by the CCN2 Platform in a separate file;
- **/wsdl:binding/soap:binding:** The standard WSDL construct that allows to describe the technical binding to the service endpoint. It refers to the protocol to be used, i.e. SOAP (see § 4.4.5) for the CCN2 Platform;

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

- **/wsdl:binding/wsp:PolicyReference**: The standard WS-Policy (see §4.4.6) Attachment construct that allows to reference a CCN2 policy applicable at the service endpoint level. In this example above, this refers to:
 - [wss11_saml20_sendervouches_token_mutual_authn_sign_encrypt] Authentication Policy indicating the usage of WS-Security see §4.9.3.8) and in this case SAML (see §4.9.6.3).
- **/wsdl:binding/wsd:operation/soap:operation**: The standard WSDL SOAP Binding construct that allows to specify the name of the operation action. By CCN2 convention, it is composed with the [Service ID]/[Operation Name];
- **/wsdl:binding/wsd:operation/wsp:PolicyReference**: The standard WS-Policy (see §4.4.6) Attachment construct that allows to reference a CCN2 policy applicable at the service operation level.
- **/wsdl:binding/wsd:operation/wsd:input/wsp:PolicyReference**: The standard WS-Policy (see §4.4.6) Attachment construct that allows to reference a CCN2 policy applicable at the message level. In this example above, it refers to:
 - [encrypt_body] Confidentiality Policy;
 - [sign_body] Integrity Policy.
- **/wsdl:service/wsd:port/wsa:EndpointReference**: The standard WS-Addressing (see §4.4.7) construct that allows to describe EPR (see §4.9.3.3);
- **/wsdl:service/wsd:port/wsa:EndpointReference/wsa:Address**: The standard WS-Addressing (see §4.4.7) construct used to specify the physical address of the Partner's service endpoint used by the CCN2 Platform;
- **/wsdl:service/wsd:port/wsa:EndpointReference/wsa:Metadata**: The standard WS-Addressing (see §4.4.7) construct that allows to describe the service endpoint metadata, including in the example above:
 - The reference to the business service and its version;
 - **ccn2:DestinationID**: A Value (of type xs:string) uniquely identifying the logical destination (see §C.1.3) used by the service consumers to address the Partner's endpoint;
 - The combination of *ccn2:ServiceID* and *ccn2:DestinationID* drives the resolution of the physical address of this endpoint exposed by this specific CCN2 Partner's organisation. It is applied when the CCN2 Platform needs to route a service message according to a logical destination specified by the service consumer (in the *wsa:To* SOAP Header) addressing a CCN2 endpoint;
 - The textual description of the Partner's organisation and logical destination.

At runtime, and in conformance with the "Service Abstraction" SOA design principle, the exposed WSDLs do not include the *wsa:EndpointReference* XML construct and the related metadata that are filtered during the deployment process.

7.3.3 Requesting a Service Endpoint Deployment

Once all artefacts have been prepared by a CCN2 Partner (i.e. the Business System Owner, see §7.3.1, or the Service Providers, see §7.3.2) and validated, the CCN2 Operations Team deploys and configures the endpoint in the CCN2 Platform, making it available for consumption by service consumers:

- Directly as far as a CCN2 Endpoint is concerned, using its physical address;
- Indirectly as far as a Partner's Endpoint is concerned, using its logical address.

At this stage, testing activities are executed and reported in order to validate the service interactions.

Once a service and its endpoint are fully and successfully tested and certified, its deployment can be

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

requested in the operational environment (see §7.2). Accordingly, the CCN2 Operations Team deploys and configures the related artefacts in the operational environment.

7.4 Exposing a Web Application Through the CCN2 Platform

CCN2 Platform Governance is currently being reworked. The section below is currently not applicable

The Request from a Partner for Registering a Web Application consists of a Synergia Ticket (to be determined by DG TAXUD). The Partner must send the Request to the Operational Contractor (see section 7.5). This applies to the PGS, SAT, CONF and PROD environments.

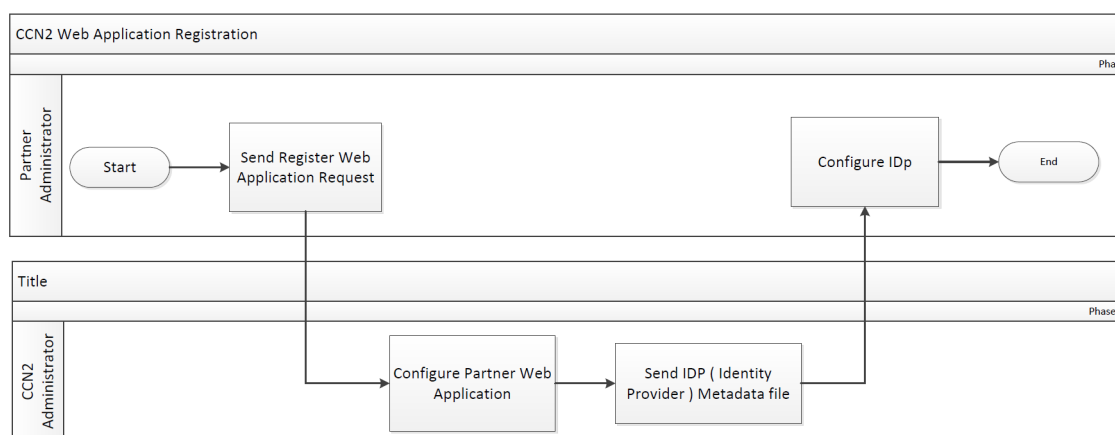


Figure 7-46: BPMN swimlane diagram of the process

The Request for Registering a Web Application must contain the following **2 Mandatory** and **1 Optional** Metadata items.

Mandatory Metadata files:

1. CCN2 Web Application Metadata (see section 5.5.3)

- Name
- Description
- Version
- WelcomeURL

This is the URL of the Partner Web Application and must include protocol (for example, **http://**, **https://**) and port numbers if they differ from the default values. The Default Port value for **HTTP** is **80** and **HTTPS** is **443**. Note that the use of the secure protocol is highly recommended.

- Logout URL (optional)

This is the Logout URL of the Partner Web Application and an optional Attribute. If it is provided, the WebApplication will be joined to the Single Log-Out (SLO) of CCN2.

2. List of Roles/Permissions

This is the list of URLs associated with the web application and the list of roles that are granted access to those URLs.

In section 7.5, you can find an example in the form of an Excel file.

Optional Metadata:

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

This optional metadata needs to be provided if partners want to have identity propagation.

CCN2 supports:

- SAML2.0 Web Browser SSO Profile
- Identity Propagation by HTTP Header

If the Partner chooses the HTTP Header method, then they need to mention this as an optional 3rd Metadata item in the Request for Registering a Web Application.

Please refer to section 4.11.4.2 for details about how CCN2 will insert this info into the HTTP header and how Partners can extract identity information from the HTTP header.

If a Partner chooses SAML2.0 Web Browser SSO Profile, they need to send Service Providers (SP) Metadata as a 3rd Metadata item in the Request for Registering a Web Application. In the Service Provider metadata file, only the Assertion Consumer Service attribute is required.

```
<md:AssertionConsumerService Binding=
"urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"
Location="http://ccn2samplepartner.webapp.eu:80/saml"
index="1" />
```

Here, the binding is **HTTP-POST**:

- HTTP-POST(default): urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST

The location refers to the Partner URL to which CCN2 will post the SAML assertion.

1. The Operational Contractor sends the generated SAML IDP metadata to the CCN2 Partner. An example is shown below (only the beginning is shown as the whole document is lengthy).

```
1      <md:EntityDescriptor xmlns:md="urn:oasis:names:tc:SAML:2.0:metadata"
2      xmlns:dsig="http://www.w3.org/2000/09/xmldsig#"
3      xmlns:enc="http://www.w3.org/2001/04/xmenc#"
4      xmlns:mdattr="urn:oasis:names:tc:SAML:metadata:attribute"
5      xmlns:mdext="urn:oasis:names:tc:SAML:metadata:extension"
6      xmlns:ns10="urn:oasis:names:tc:SAML:profiles:vm1metadata"
7      xmlns:query="urn:oasis:names:tc:SAML:metadata:ext:query"
8      xmlns:saml="urn:oasis:names:tc:SAML:2.0:assertion"
9      xmlns:x500="urn:oasis:names:tc:SAML:2.0:profiles:attribute:X500"
10     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" ID="id-zJNwTN-
11     hMmvkHh5lNOGeUqFJn813sXgI4jJm2ANA" cacheDuration="P30DT0H0M0S" entityID="https://ohs-
12     service.pubvip.dc0.fat1.ccn2.taxud:443/oam/fed" validUntil="2027-04-15T11:17:57Z">
13     <dsig:Signature>
14     <dsig:SignedInfo>
15     <dsig:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
16     <dsig:SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-
17     sha1" />
18     <dsig:Reference URI="#id-zJNwTN-hMmvkHh5lNOGeUqFJn813sXgI4jJm2ANA">
19     <dsig:Transforms>
20     <dsig:Transform
21     Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature" />
22     <dsig:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-
23     c14n#" />
24     </dsig:Transforms>
25     <dsig:DigestMethod
26     Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
27     <dsig:DigestValue>TGh2hOmlWKA4eH8cKa77vqTCpgg=</dsig:DigestValue>
28     </dsig:Reference>
29     </dsig:SignedInfo>
30     <dsig:SignatureValue>IveQLCUx2xd7YZwgx9Iik82HkT6+KwHsOZ4VHZWqY3LZgDXTz14gDizh+rj1LVCTsX
31     eAC36PsK6vON35xeww6G19eqNLfZl/MuTbDDaZCAQkCaKc/
32     PtWdsfAjGsNGnSu64lJFglAKQXV0kNw164WqjHf0pN7PndGQhGZUppyLc=</dsig:SignatureValue>
```

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```

16      <dsig:KeyInfo>
17          <dsig:X509Data>
18      <dsig:X509Certificate>MIICIjCCAYugAwIBAgIBCjANBgkqhkiG9w0BAQQFADA2MTQwMgYDVQQDEytkMS1mY
XQxLWFuMDJvYW0tMDEuYXAwMi5kYzEuZmF0MS5jY24yLnRheHVkMB4XDTE3MDQxNzExMTc1N1oXDTI3MDQxNTE3
MTC1N1owNjE0MDIGA1UEAxMrZDEtZmF0MS1hb2FtLTAxLmFwMDIuZGMxLmZhdDEuY2NuMi50YXh1ZDCBnzA
NBgkqhkiG9w0BAQEFAAOBjQAwgYkCgYEAkvJTOKi4c2P0nHZ1XvRfY9gGkVMxXkop9Id7xqWan0o7BGt72L7VvB
vjlPLGWJOPXTOKUPkymRh4yuGmm7yi1OoRC8Zpjh6TzDwZQshwghv1G3Su/YGQvgilbwW+W1DQkTq/
A6m0m3DN7sQkKb7SzKxgplAibkZqSQ4Z0XC5X9cCAwEAAaNAMd4wDAYDVROTAQH/
BAIwADAPBgNVHQ8BAf8EBQMDB9gAMB0GA1UdDgQWBBSfM/
5iBFi+uADmVthKbLcCPjJxzjANBgkqhkiG9w0BAQQFAAOBgQCDswH0lzYFLTQUUV3MMUijechDCRBu3kk1enuOPG
LhLeGs75aJzaJQ7qOVp/
A64s0DnYy90h8+dONnknE0VAUC2dFdJia8xq4weFhYfOv4VCcm8KtQzUIMCX5xxpHJ7EV6Tw1jbJagLqqThGN1Y
nQoBkrJNsZuFDBGpZgoaQsrg2Q==</dsig:X509Certificate>
19      </dsig:X509Data>
20      </dsig:KeyInfo>
21      </dsig:Signature>
22      <md:IDPSSODescriptor          WantAuthnRequestsSigned="false"
protocolSupportEnumeration="urn:oasis:names:tc:SAML:2.0:protocol">
23          <md:KeyDescriptor use="signing">
24              <dsig:KeyInfo>
25                  <dsig:X509Data>
26      <dsig:X509Certificate>MIICIjCCAYugAwIBAgIBCjANBgkqhkiG9w0BAQQFADA2MTQwMgYDVQQDEytkMS1mY
XQxLWFuMDJvYW0tMDEuYXAwMi5kYzEuZmF0MS5jY24yLnRheHVkMB4XDTE3MDQxNzExMTc1N1oXDTI3MDQxNTE3
MTC1N1owNjE0MDIGA1UEAxMrZDEtZmF0MS1hb2FtLTAxLmFwMDIuZGMxLmZhdDEuY2NuMi50YXh1ZDCBnzA
NBgkqhkiG9w0BAQEFAAOBjQAwgYkCgYEAkvJTOKi4c2P0nHZ1XvRfY9gGkVMxXkop9Id7xqWan0o7BGt72L7VvB
vjlPLGWJOPXTOKUPkymRh4yuGmm7yi1OoRC8Zpjh6TzDwZQshwghv1G3Su/YGQvgilbwW+W1DQkTq/
A6m0m3DN7sQkKb7SzKxgplAibkZqSQ4Z0XC5X9cCAwEAAaNAMd4wDAYDVROTAQH/
BAIwADAPBgNVHQ8BAf8EBQMDB9gAMB0GA1UdDgQWBBSfM/
5iBFi+uADmVthKbLcCPjJxzjANBgkqhkiG9w0BAQQFAAOBgQCDswH0lzYFLTQUUV3MMUijechDCRBu3kk1enuOPG
LhLeGs75aJzaJQ7qOVp/
A64s0DnYy90h8+dONnknE0VAUC2dFdJia8xq4weFhYfOv4VCcm8KtQzUIMCX5xxpHJ7EV6Tw1jbJagLqqThGN1Y
nQoBkrJNsZuFDBGpZgoaQsrg2Q==</dsig:X509Certificate>
27          <dsig:X509IssuerSerial>
28              <dsig:X509IssuerName>CN=d1-fat1-an02oam-
01.ap02.dcl.fat1.ccn2.taxud</dsig:X509IssuerName>
29              <dsig:X509SerialNumber>10</dsig:X509SerialNumber>
30          </dsig:X509IssuerSerial>
31          <dsig:X509SubjectName>CN=d1-fat1-an02oam-
01.ap02.dcl.fat1.ccn2.taxud</dsig:X509SubjectName>
32          </dsig:X509Data>
33      </dsig:KeyInfo>
34      </md:KeyDescriptor>
35      <md:KeyDescriptor use="encryption">
36          <dsig:KeyInfo>
37              <dsig:X509Data>
38      <dsig:X509Certificate>MIICIjCCAYugAwIBAgIBCjANBgkqhkiG9w0BAQQFADA2MTQwMgYDVQQDEytkMS1mY
XQxLWFuMDJvYW0tMDEuYXAwMi5kYzEuZmF0MS5jY24yLnRheHVkMB4XDTE3MDQxNzExMTc1N1oXDTI3MDQxNTE3
MTC1N1owNjE0MDIGA1UEAxMrZDEtZmF0MS1hb2FtLTAxLmFwMDIuZGMxLmZhdDEuY2NuMi50YXh1ZDCBnzA
NBgkqhkiG9w0BAQEFAAOBjQAwgYkCgYEAkvJTOKi4c2P0nHZ1XvRfY9gGkVMxXkop9Id7xqWan0o7BGt72L7VvB
vjlPLGWJOPXTOKUPkymRh4yuGmm7yi1OoRC8Zpjh6TzDwZQshwghv1G3Su/YGQvgilbwW+W1DQkTq/
A6m0m3DN7sQkKb7SzKxgplAibkZqSQ4Z0XC5X9cCAwEAAaNAMd4wDAYDVROTAQH/
BAIwADAPBgNVHQ8BAf8EBQMDB9gAMB0GA1UdDgQWBBSfM/
5iBFi+uADmVthKbLcCPjJxzjANBgkqhkiG9w0BAQQFAAOBgQCDswH0lzYFLTQUUV3MMUijechDCRBu3kk1enuOPG
LhLeGs75aJzaJQ7qOVp/
A64s0DnYy90h8+dONnknE0VAUC2dFdJia8xq4weFhYfOv4VCcm8KtQzUIMCX5xxpHJ7EV6Tw1jbJagLqqThGN1Y
nQoBkrJNsZuFDBGpZgoaQsrg2Q==</dsig:X509Certificate>
39          <dsig:X509IssuerSerial>
40              <dsig:X509IssuerName>CN=d1-fat1-an02oam-
01.ap02.dcl.fat1.ccn2.taxud</dsig:X509IssuerName>
41              <dsig:X509SerialNumber>10</dsig:X509SerialNumber>
42          </dsig:X509IssuerSerial>
43          <dsig:X509SubjectName>CN=d1-fat1-an02oam-
01.ap02.dcl.fat1.ccn2.taxud</dsig:X509SubjectName>
44          </dsig:X509Data>
45      </dsig:KeyInfo>
46      <md:EncryptionMethod Algorithm="http://www.w3.org/2001/04/xmlenc#rsa-
1_5"/>
47      <md:EncryptionMethod Algorithm="http://www.w3.org/2001/04/xmlenc#aes128-
cbc"/>
48      <md:EncryptionMethod Algorithm="http://www.w3.org/2001/04/xmlenc#aes192-
cbc"/>

```

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

```

49      <md:EncryptionMethod Algorithm="http://www.w3.org/2001/04/xmlenc#aes256-
cbc"/>
50      <md:EncryptionMethod
Algorithm="http://www.w3.org/2001/04/xmlenc#tripleDES-cbc"/>
51      </md:KeyDescriptor>
52      <md:ArtifactResolutionService
Binding="urn:oasis:names:tc:SAML:2.0:bindings:SOAP"
Location="https://ohs-
service.pubvip.dc0.fat1.ccn2.taxud/oamfed/idp/soap" index="1" isDefault="true"/>
53      <md:SingleLogoutService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-
POST" Location="https://ohs-service.pubvip.dc0.fat1.ccn2.taxud/oamfed/idp/samlv20"
ResponseLocation="https://ohs-service.pubvip.dc0.fat1.ccn2.taxud/oamfed/idp/samlv20"/>
54      <md:SingleLogoutService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-
Redirect" Location="https://ohs-service.pubvip.dc0.fat1.ccn2.taxud/oamfed/idp/samlv20"
ResponseLocation="https://ohs-service.pubvip.dc0.fat1.ccn2.taxud/oamfed/idp/samlv20"/>
55      <md:SingleSignOnService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-
Redirect" Location="https://ohs-service.pubvip.dc0.fat1.ccn2.taxud/oamfed/idp/
samlv20"/>
56      </md:IDPSSODescriptor>
(...)

```

Line 55 is the HTTP redirect URL.

ITSM will provide the correct URL for the different environments.

2. The CCN2 Partner receives the CCN2 certificates by E-mail (if so desired);
3. The CCN2 Partner imports the received SAML IdP metadata into its Web Application configuration.

In case of use of certificates, the SAML token will be signed by the CCN2 Platform. In such case, the CCN2 Partner needs also to configure the CCN2 certificate in its Web Application.

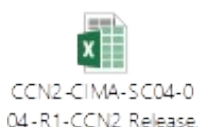
The CCN2 Partner can then request the exposure of the Web application. Once all related artefacts have been provided and validated, the Operational Contractor deploys and configures the CCN2 Frontend proxy in the CCN2 Platform, making it available for consumption by user agent.

At this stage, testing activities are executed and reported in order to validate the user-to-system interactions. Once a Web application is fully and successfully tested and certified, the CCN2 Partner can request its deployment in the operational environment (see §7.2). Accordingly, the Operational Contractor deploys and configures the related artefacts in the operational environment.

7.5 Final Submission Check List

At Partner service deployment-time, the CCN2 Operations team must have received all metadata (see also Annex E. - Endpoint Reference Metadata) needed to expose the Partner Endpoints as well as the CCN2 Endpoints enabling CCN2 Partners to consume the related services.

Moreover, an alternate medium of communication is provided to the Business System Owners (see the Excel file attached below) in order to wrap up all definitions of a service metadata that have taken place during the development lifecycle, and summarised hereafter.



7.5.1 Request Creation of Partner, Organisation and Users

In the Excel file, the tabs “PARTNER” and “ORGANISATION” are available as templates to request the creation of CCN2 Partners and their organisations. Such metadata is typically provided at design-time by the Business System Owner responsible for the definition of the organisational structure of a Trans-European System.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Moreover, the tab “USER” can be used as a template to request the creation of initial users.

7.5.2 Request Creation of Roles and Permissions

In the Excel, the tabs “ROLE” and “PERMISSION” are available as templates to request the creation of roles and permissions. Such metadata is typically provided at design-time by the Business System Owner responsible for the functional definition of service contracts and web application interfaces exposed through the CCN2 Platform.

7.5.3 Request Deployment of a Service Endpoint

The deployment of service endpoints is finally defined through KPS Outbound metadata as well as metadata (see §E.5) included in the concrete part of the WSDLs communicated by the CCN2 Partners, respectively:

- For the definition of a CCN2 Endpoint by the Business System Owner (see §7.3.1), exposing a service interface (as a proxy) to be used by all consumers;
- For the definition of a Partner’s Endpoint exposing the service logic implemented by a specific CCN2 Partner (see §7.3.2) and exclusively used by the CCN2 Platform itself as an intermediary.

Each concrete part of a WSDL must refer to the abstract part as commonly defined and communicated (with the related XSD) at design-time by TES specification.

7.5.4 Request Deployment of a Web Application

Requesting the deployment of a web application happens in a slightly different way (see §7.4). In the Excel file, the tab “WEB APPLICATION” can be used as a template to request the deployment of a web application (see also §4.11.1).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

8. Runtime

8.1 Introduction

The CCN2 Platform offers capabilities that need to be considered at runtime, when CCN2 Partners' resources are exposed through it and made available for consumption by CCN2 Partner's users.

This mainly relates to web applications some business users and Operations Team members need to access in the context of Trans-European Systems as well as the way they get the required access rights to do it.

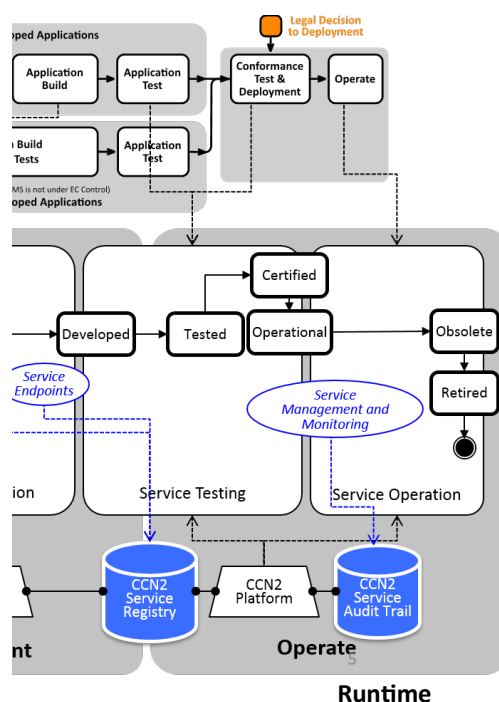


Figure 8-47: Service Lifecycle - Runtime

8.2 Accessing Web Applications Through the CCN2 Platform

Before accessing web applications through the CCN2 Platform, any CCN2 Partner's user must be duly registered. To achieve such a registration, he needs to contact the local team, who will execute the required process (see §8.3.1). Once the registration process is successfully executed, the user receives an E-mail with temporary credentials that enable him to successfully log on to the CCN2 Platform (see §8.2.1).

The first time a CCN2 user is authenticated (or when his password is expired), he must change his password (see §8.2.3). If he forgot his password, the user can reset it through the CCN2 Oracle Self-Services (see §8.2.4).

Depending on the web applications the user wants to access, he must get the access rights related to the specific business roles he needs to use within a Trans-European System. Basically, any registered user is assigned the "CCN2 Partner's Standard User" role by default. Additional roles can be assigned by the CCN2 Partner's User Administrator through the defined process (see §8.3.1.5).

8.2.1 CCN2 Oracle Access Manager Authentication

When accessing web applications through the CCN2 Platform, any user must be authenticated by means of his credentials. According to the CCN2 OHS/WebGate principle (see §4.11), the CCN2

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Platform acts as a proxy in front of all web applications made available by other CCN2 Partners, applying a Single Sign-On (SSO) mechanism (see §4.11.2). Such a mechanism avoids to be prompted for authentication each time the user accesses different applications through the CCN2 Platform. Figure 8 -48 below shows the web page displayed when the CCN2 OAM authenticates the user. According to the authentication method selected, the user must follow the subsequent instructions (e.g. enter his user's name and password). Once successfully authenticated, the user's agent (i.e. the web browser) is redirected to the initially requested URL.



Figure 8-48: CCN2 U2S Authentication Interface

8.2.2 Generation of Passwords at User Creation Time

When creating a new CCN2 user, a default temporary password is generated and communicated to the user. According to the CCN2 security policies, when a user connects to the CCN2 Platform for the first time, he must change his default password before being able to access other functionality.

8.2.3 Changing Password

Changing passwords can be required for one of the following reasons:

- Enforcement by the CCN2 Platform the first time the user is authenticated;
- Enforcement by the CCN2 Platform as a result of password expiry;
- When the user decides to change his password and he still knows the current one.

The mechanism to change passwords is accessible through the CCN2 OIM Portal depicted in Figure 8 -49 and available at the following URL³⁹:

<http://ccn2.ec.eu/ap/Portal>

³⁹ Disclaimer: this URL is still subjected to change.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

The screenshot shows the 'Identity Self Service' interface for user 'ccn2gov user1be'. The top navigation bar includes the European Commission logo, 'Identity Self Service' title, and buttons for 'Self Service', 'Compliance', and 'Manage'. The user's session is identified as 'CCN2GOV.USER1BE'.

The main content area is titled 'ccn2gov user1be' and includes a '* Required fields' note. It contains two sections:

- Basic User Information:** This section includes fields for 'First Name' (ccn2gov), 'Middle Name' (empty), '*Last Name' (user1be), 'E-mail' (ccn2gov.user1be@ccn2.eu), '* Display Name' (ccn2gov.user1be), 'Manager' (empty), 'User Login' (CCN2GOV.USER1BE), 'Telephone' (empty), 'Locale' (dropdown), and 'Timezone' (dropdown). 'Apply' and 'Cancel' buttons are present.
- Change Password:** This section includes fields for '* Old Password', '* New Password' (with a password strength indicator), and '* Confirm New Password'. A note '* Indicates Required Fields' and 'Apply'/'Cancel' buttons are also shown.

Figure 8-49: CCN2 OIM Change password interface

It requires the user to be authenticated (see §8.2.1) prior to reaching it and to enter his current active password, the new one and a confirmation to rule out errors. After a successful validation of all input fields, the password will be updated.

This screenshot shows the 'Change Password' and 'Challenge Questions' sections of the CCN2 OIM interface. The 'Change Password' section has fields for '* Old Password', '* New Password' (with a password strength indicator), and '* Confirm New Password', along with 'Apply' and 'Cancel' buttons. The 'Challenge Questions' section includes a note: 'Your secret questions and answers are already set. However, you can use the below form to set them new.' and three rows of questions and answers:

- Question1: 'What is your mother's maiden' / Answer1: 'a'
- Question2: 'What is the city of your birth' / Answer2: (empty)
- Question3: 'What is your favourite colour' / Answer3: (empty)

'Apply' and 'Cancel' buttons are also present for the challenge questions. At the bottom, there is a 'Direct Reports' link.

Figure 8-50: CCN2 OIM Password management interface, displayed to the user at first log-in

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

8.2.4 Resetting Password

When a user has forgotten his password, he can access the CCN2 OIM web page (see §8.2.3) to reset it. The reset mechanism requires providing the user's user name.

When the entered user name is successfully recognised, a temporary code with a new password is sent by E-mail to the related user and a web form to collect it, is displayed. Once, within a defined timeframe, the user has successfully entered the received code as well as the new password in line with the applicable policy, the password is changed.

8.3 Accessing CCN2 Platform Governance Facilities

Some governance facilities are offered by the CCN2 Platform to support the CCN2 Partner's Operations Teams in their tasks once the Trans-European Systems are running, including the management of CCN2 User Accounts (see §8.3.1).

8.3.1 Managing CCN2 User Accounts

Before CCN2 Partners' users can access web applications exposed through the CCN2 Platform, they must have been duly registered (see §8.3.1.1) and granted some roles (see §8.3.1.5), by the CCN2 Partner's User Administrators, according to the Role-Based Access Control model (RBAC) adopted by the CCN2 Platform. Those tasks are executed according to the CCN2 User Account Management process and the CCN2 Authorisation Management process using the Oracle Identity Self-service application, accessible through the following URL⁴⁰:

<https://u2s.prod.ccn2.taxud/identity> (Production)
<https://u2s.conf.ccn2.taxud/identity> (Conformance environment)

Once successfully logged on to the CCN2 OIM (see §8.2) as a CCN2 Partner's User Administrator (i.e. Role ID "*partnerAdminRoleDECustomsCDM*"), Operations Team members are able to perform the following actions for their organisations:

- Create new CCN2 User Accounts (see §8.3.1.1);
- Modify or delete existing CCN2 User Accounts (see §8.3.1.2);
- Activating, reactivating or deactivating CCN2 User Accounts (see §8.3.1.3);
- Granting access rights to CCN2 User Accounts (see §8.3.1.5).

Any user is subject of personal data protection.

8.3.1.1 Creating new CCN2 User Accounts

To create a new CCN2 User Account, a CCN2 Partner User Administrator can access a "User Creation" web-form by selecting the button "Manage" in the top-right of the CCN2 Oracle Identity Self Service interface, then by clicking on the icon "Users" and finally by pressing the button "Create". By doing so, the CCN2 Partner's User Administrator will see Create User interface, as shown in Figure 8 -51.

⁴⁰ Disclaimer: this URL is still subjected to change.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Create User

Request Information

Effective Date:

Justification:

Basic Information

Description:

Password Policy:

User change password at next login?: ☐

Role In Organisation:

Subject DN:

* Partner Name:

* CCN2 User Type:

* First Name:

Middle Name:

* Last Name:

* E-mail:

Superior:

* CCN2 Partner:

Display Name:

Account Settings

* User Login:

Password:

* Confirm Password:

Buttons: Submit, Save As..., Cancel

Figure 8-51: CCN2 OIM Create User interface

All required fields for creating a user must be fully completed before submission according to the rules of the applicable policy (see §A.2.2). The following rules should be used when setting the value of user attributes:

- “User Login” - by default it should be set to: “First Name”.”Last Name”. Note that OIM imposes a unique constraint on the login name.
- “Common Name” - this attribute must be unique for Users. If not populated, OIM will default to set this attribute to value: “First Name” ”Last Name” ie without a dot in the middle, which is expected in User Login by CCN2 standard hence the following Attention: for S2S users (i.e. when attribute "USR_USER_TYPE" is set to "S2S"), make sure that this attribute has the same value as "User Login". No checking is performed. If this rule is not adhered to, then S2S users will not be able to log on to the system.
- “CCN2 Partner” and “Partner Name” - set identical values for these attributes. It is preferable to first select the value for "CCN2 Partner" from the list of Partners, and then copy it to the attribute "Partner Name",
- “Country” – a Country Code value should be selected from the list.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

The screenshot displays the 'Users' management interface in the CCN2 OIM system. At the top, there's a header with the European Commission logo and 'Identity Self Service' text. Navigation buttons for 'Self Service', 'Compliance', and 'Manage' are visible. The main content area shows a list of users with columns for Display Name, First Name, User Login, Last Name, Organization, Tel Nu, E-r, Identity Status, and A. The table lists various users, including Adrian Sanchez, ccn2aud.user1be, ccn2biz.user1be, and others, all with 'Active' status.

Display Name	First Name	User Login	Last Name	Organization	Tel Nu	E-r	Identity Status	A
Adrian Sanchez	Adrian	ADRIAN.SANCHEZ	Sanchez	CCN2.Partner.BE.GenericTest.Default		set	Active	U
ccn2aud.user1be	ccn2aud	CCN2AUD.USER1BE	user1be	CCN2.Partner.BE.OtherTest.Default		ccn	Active	U
ccn2biz.user1be	ccn2biz	CCN2BIZ.USER1BE	user1be	CCN2.Partner.BE.CustomsTest.CustomsSy...		ccn	Active	U
ccn2biz.user2be	ccn2biz	CCN2BIZ.USER2BE	user2be	CCN2.Partner.BE.CustomsTest.CustomsSy...		ccn	Active	U
ccn2biz.user3be	ccn2biz	CCN2BIZ.USER3BE	user3be	CCN2.Partner.BE.CustomsTest.CustomsSy...		ccn	Active	U
ccn2biz.user4be	ccn2biz	CCN2BIZ.USER4BE	user4be	CCN2.Partner.BE.CustomsTest.CustomsSy...		ccn	Active	U
ccn2biz.user5be	ccn2biz	CCN2BIZ.USER5BE	user5be	CCN2.Partner.BE.CustomsTest.CustomsSy...		ccn	Active	U
ccn2biz.user6be	ccn2biz	CCN2BIZ.USER6BE	user6be	CCN2.Partner.BE.CustomsTest.CustomsSy...		ccn	Active	U
ccn2biz.user7be	ccn2biz	CCN2BIZ.USER7BE	user7be	CCN2.Partner.BE.CustomsTest.CustomsSy...		ccn	Active	U
ccn2biz.user8be	ccn2biz	CCN2BIZ.USER8BE	user8be	CCN2.Partner.BE.CustomsTest.CustomsSy...		ccn	Active	U
ccn2biz.user9be	ccn2biz	CCN2BIZ.USER9BE	user9be	CCN2.Partner.BE.CustomsTest.CustomsSy...		ccn	Active	U
ccn2cat.user1be	ccn2cat	CCN2CAT.USER1BE	user1be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2con.user1be	ccn2con	CCN2CON.USER1BE	user1be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2con.user2be	ccn2con	CCN2CON.USER2BE	user2be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2drc.userbe	ccn2drc	CCN2DRC.USERBE	userbe	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2err.user1be	ccn2err	CCN2ERR.USER1BE	user1be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2err.user2be	ccn2err	CCN2ERR.USER2BE	user2be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2err.user3be	ccn2err	CCN2ERR.USER3BE	user3be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2gov.user1be	ccn2gov	CCN2GOV.USER1BE	user1be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2gov.user2be	ccn2gov	CCN2GOV.USER2BE	user2be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2idt.user1be	ccn2idt	CCN2IDT.USER1BE	user1be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2idt.user2be	ccn2idt	CCN2IDT.USER2BE	user2be	CCN2.Partner.BE.GenericTest.Default		ccn	Active	U
ccn2imt.user1be	ccn2imt	CCN2IMT.USER1BE	user1be	CCN2.Partner.BE.OtherTest.Default	12'	ccn	Active	U
ccn2imt.user1be_tc1001	ccn2imt	CCN2IMT.USER1BE_TC1001	user1be_tc1001	CCN2.Partner.BE.OtherTest.Default		joa	Active	U

Figure 8-52: CCN2 OIM Users interface

8.3.1.2 Updating or Deleting CCN2 User Accounts

Once a CCN2 User Account exists, a CCN2 Partner's User Administrator can update or delete it through the CCN2 OIM interface as follows:

1. Browse to the Oracle Identity Self Service.
2. Click the “**Manage**” button in the top right of the window.
3. On the Home page click “**Users**”.
4. Do either a **field-based** quick Search or an **Advanced** Search.
5. Select the User.
6. In the **User Details** page, click the “**Modify**” button.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Figure 8-53: CCN2 OIM User account interface

- Note that the field Common Name cannot be changed after creation; Trying to do so will result in an error (IAM-3010190). The reason for this is that this field represents a unique key in the OUD.
- After you have edited the field(s), click the green **Submit** button to save your changes.

Figure 8-54: CCN2 OIM Modify user interface

After the program has saved the change(s), a notification message appears, to confirm that the operation was successful.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

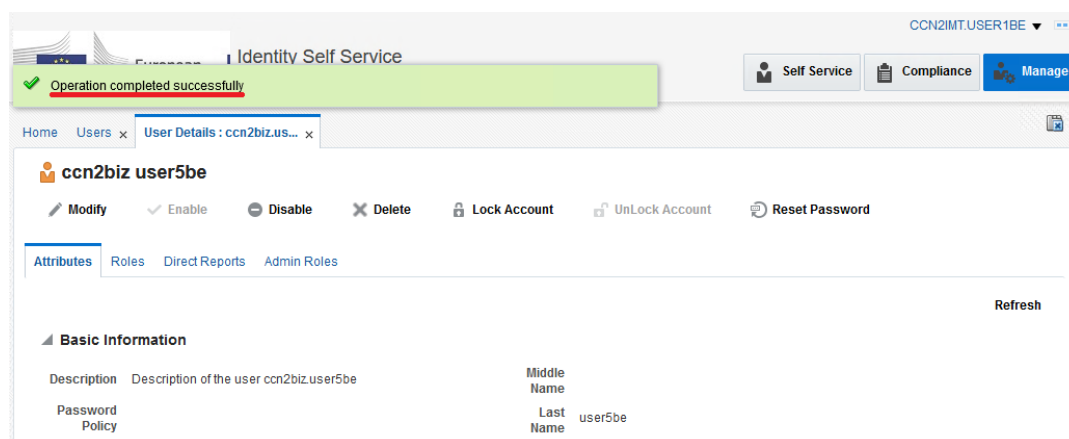


Figure 8-55: CCN2 OIM User account interface with success notification

8.3.1.3 Enabling or Disabling CCN2 User Accounts

For various reasons, a CCN2 User Account can be *Enabled* or *Disabled*. To change the state of a user's account, a CCN2 Partner User Administrator can update the related field (see §8.3.1.2, Updating or Deleting CCN2 User Accounts).

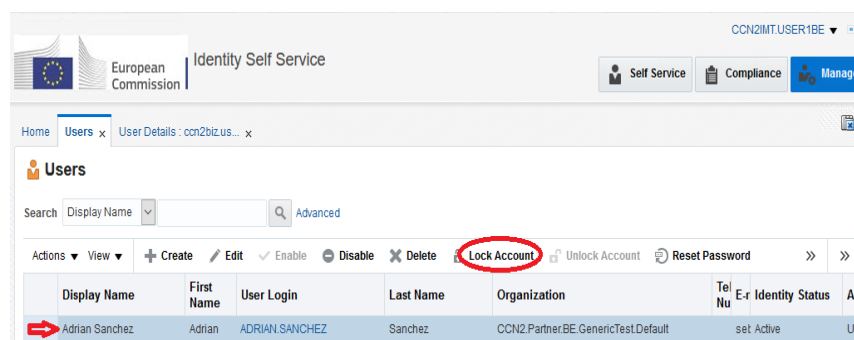
8.3.1.4 Locking or Unlocking CCN2 User Accounts

A CCN2 User Account can also be Locked, Unlocked, or Password Change Required.

When the account is locked, the user can unlock the account himself. If you want to prevent the user from unlocking his account, you need to disable it, because only Administrators can **Enable** a disabled user account.

The difference between locking a user account and disabling a CCN2 User account is that locking the User Account only the user password is being locked meaning he can unlock himself by using the Forgot Password procedure whereas a disabled user can only be made active by the Partner Administrator or by the CCN2 Administrator.

1. Browse to the Oracle Identity Self Service.
2. Click the “**Manage**” button in the top right of the window.
3. On the Home page click “**Users**”.
4. Do either a **field-based** quick Search or an **Advanced** Search.
5. Select the User.



DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Figure 8-56: CCN2 OIM User accounts interface

- After you have selected the user account, click the **Lock Account** button and then it is locked.
- If, at a later point in time, you need to unlock the account, you can do so in a similar manner as detailed in step 1 through 5 and then click the **Unlock Account** button.

8.3.1.5 Granting Access Rights

In order for a user to have access to specific resources exposed by the CCN2 Platform, he needs to get the required rights according to the defined procedure.

A CCN2 Partner User Administrator can grant access to roles and permissions by assigning roles to the users involved. To change the list of roles assigned to a user account, the administrator can update his related information (see §8.3.1.2, Updating or Deleting CCN2 User Accounts).

Once approved, the new list of roles allows the related user to execute operations on resources subjected to the associated permissions.

A CCN2 Partner User Administrator can grant access to resources by assigning roles to the users involved.

In order to assign a role to a user account, you:

- Browse to the Oracle Identity Self Service.
- Click the “**Manage**” button in the top right of the window.
- On the Home page click “**Users**”.
- Do either a **field-based** quick Search or an **Advanced** Search.
- Select the User.

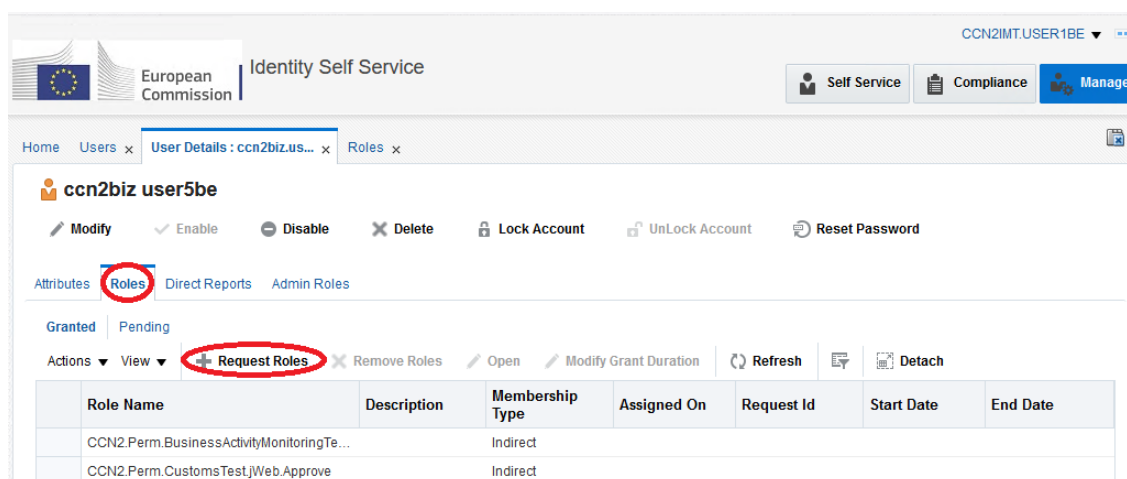


Figure 8-57: CCN2 OIM User-Roles interface

- Next, you click the Roles tab and then the Request Roles button, as shown in the screen shot above.
- The next step consists of **searching** and **selecting** the role you want to assign to the previously selected user. To find the role, click the “**Catalog**” tab, enter its name in the Search field and then click the green “**Search**” button.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

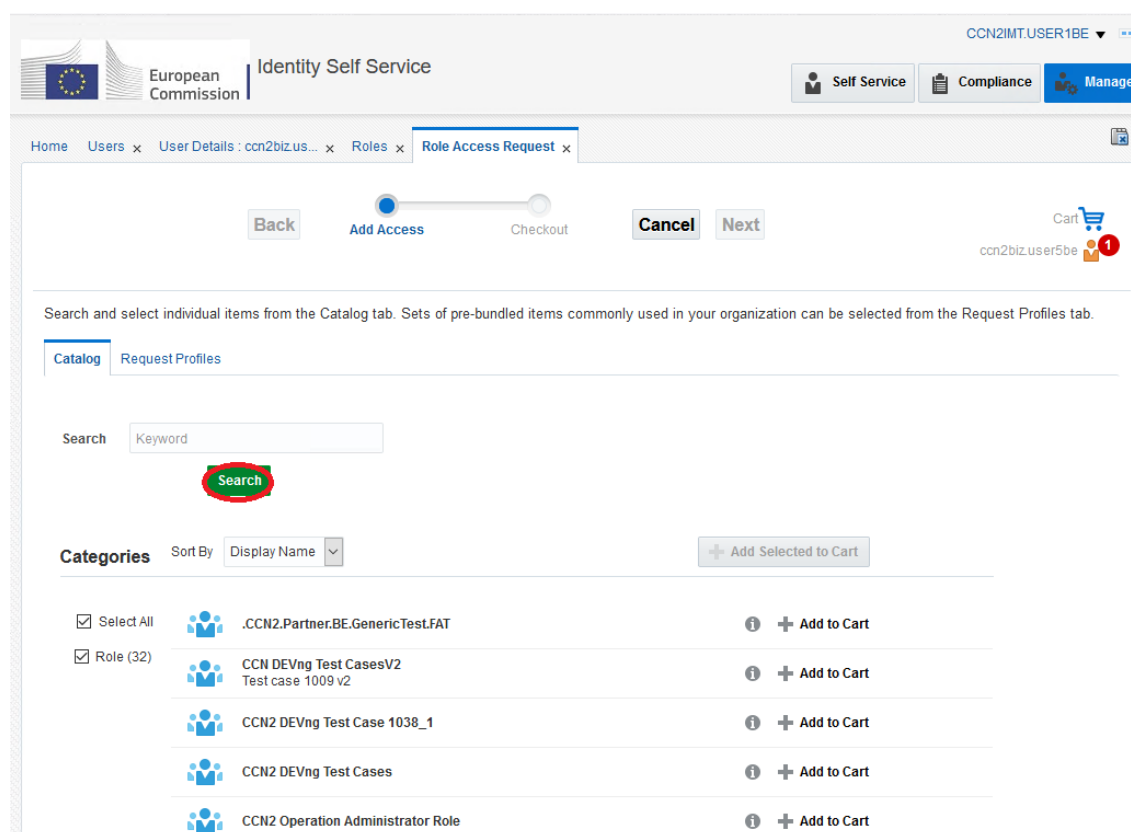


Figure 8-58: CCN2 OIM Search for Role

- The defined roles are listed and from the list above, we will select the desired role and Click the Add Selected to Cart button to add the role to users' shopping cart.as the role we are going to assign to the user that was selected in a previous step.

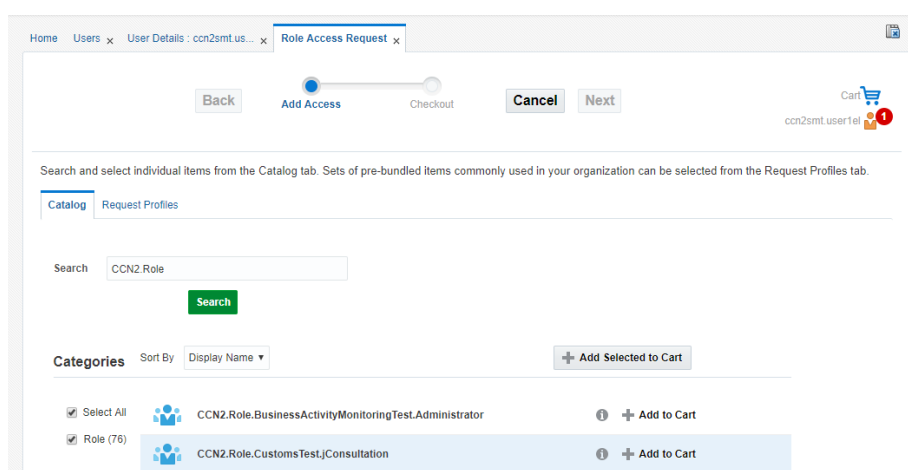


Figure 8-59: CCN2 OIM Roles search results

Since we won't be assigning more roles to this user for now, we can continue with the next step. In the top-right of the screen you can see the symbols and the red circles, which indicate that a role has been assigned to a user. Also the Role will have the message "In Cart".

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

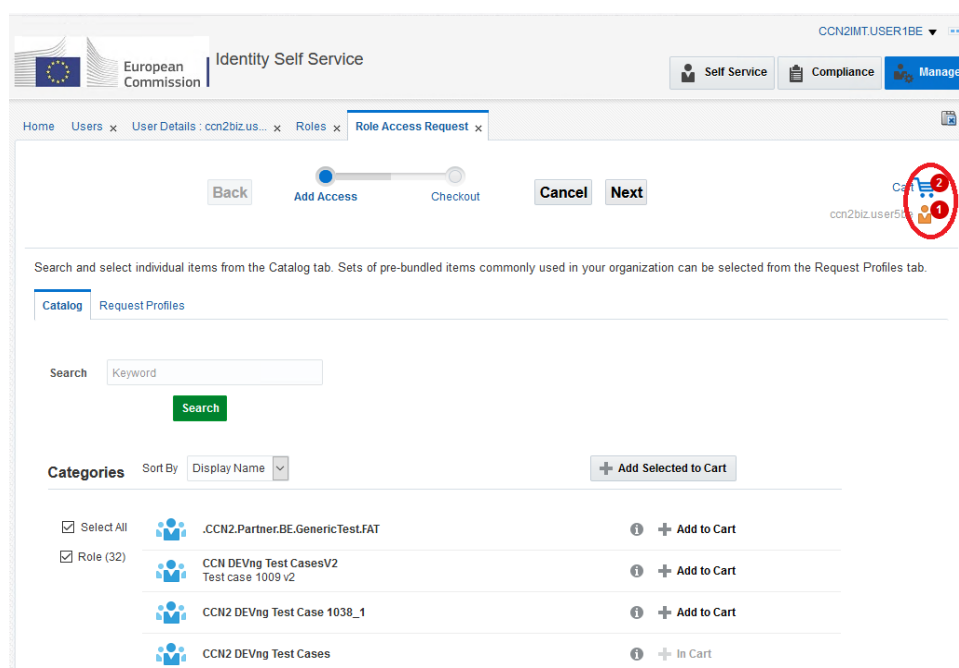


Figure 8-60: CCN2 OIM Assigned roles

9. Click the “**Next**” button.

The screen that appears now, contains an overview of what is in the shopping cart and you can configure a few other settings.

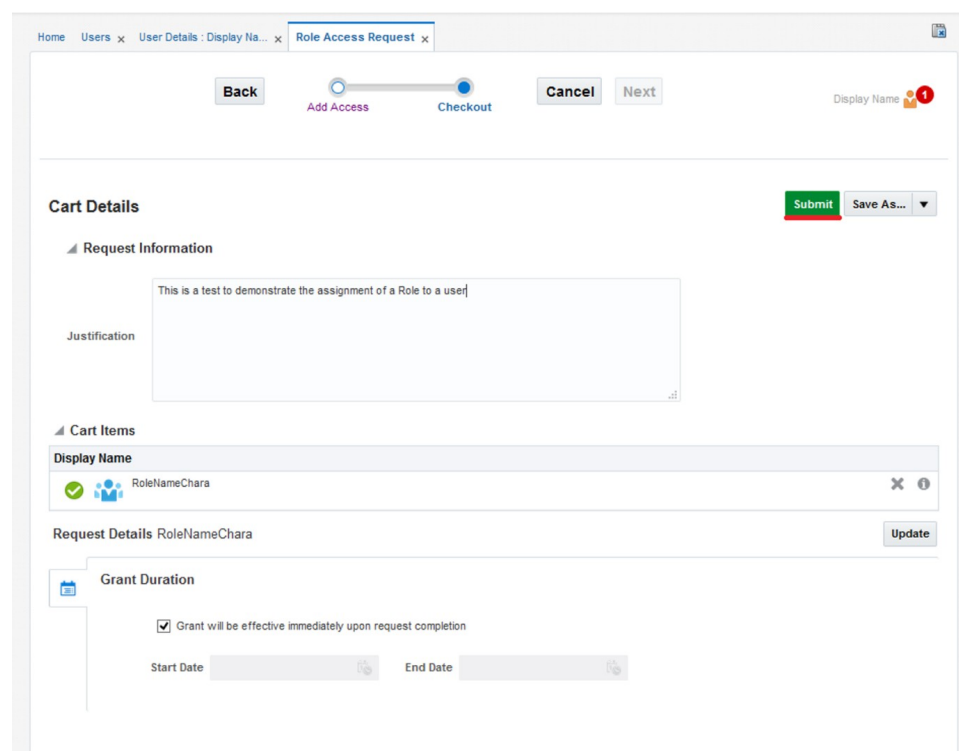


Figure 8-61: CCN2 OIM Submit role assignment request interface

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

10. After you have reviewed the information, click the green **Submit** button to let the system process your Role Access Request.

11. The Roles were successfully added.

When a user will do different work within the organization, it may be necessary to remove one or more roles from his user account.

You can do this as follows:

1. Browse to the Oracle Identity Self Service.
2. Click the Manage button in the top right of the window.
3. On the Home page, click Users.
4. Do either a field-based quick Search or an Advanced Search.
5. Select the User.
6. Next, you first click the Roles tab, then the Granted tab and then the Remove Roles button, as shown in the screen shot below. Note that only directly assigned roles can be removed (indirectly assigned roles are permissions, which are themselves assigned to a directly assigned role)

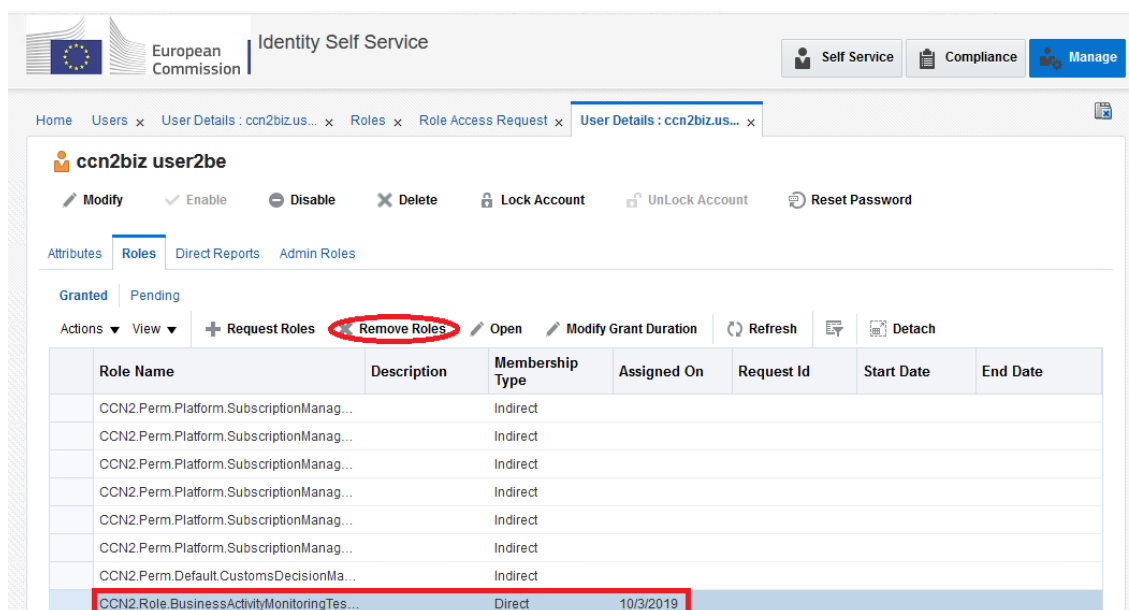


Figure 8-62: CCN2 OIM User-Roles interface

7. Select the role you want to remove by clicking on it so that it gets highlighted and then click the **Remove Roles** tab.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Identity Self Service

CCN2IMT.USER1BE

Self Service Compliance Manage

User Details : con2biz.us... Roles Role Access Request User Details : con2biz.us... Remove Roles User D

Remove Roles

Target Users

Name

Adrian Sanchez

Request Information

Justification

Cart Items

Display Name

CCN2 Partner Standard User Role

Submit Save As...

Figure 8-63: CCN2 OIM Role to be removed.

8. Click the green Submit button and the system will remove the role from the user account.

Identity Self Service

Operation completed successfully

Self Service Compliance Manage

Home Users User Details : MARC 52637...

MARC 52637.5

Modify Enable Disable Delete Lock Account Unlock Account Reset Password

Attributes Roles Entitlements Accounts Direct Reports Organizations Admin Roles

Granted Pending

Actions View Request Roles Remove Roles Open Modify Grant Duration Refresh Detach

Role Name	Description	Membership Type	Assigned On	Request Id	Start Date	End Date
ALL USERS	Default role for a...	Direct	4/24/2020			
CCN2 Partner Standard User Role		Direct	5/14/2020	15003	05/14/2020 14:...	

CCN2 Partner Standard User Role : Details

Figure 8-64: CCN2 OIM Confirmation of role assignment removal

8.3.1.6 Inbound provisioning (oimLoader utility)

The bulk utility enables CCN2 Partners to:

- Import to the CCN2 Platform many user accounts simultaneously;
- Assign many user accounts to roles simultaneously;
- Assign permissions to roles;
- Create roles and permissions.

For each case, a separate CSV file must be used, containing the information of the user accounts that will be created. The templates for those can be found in §F.1.

- Comma (,) is the field separator. No spaces shall be put around the commas.
- Double quotes (") is the quote character. If a field name or value contains one or more comma

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

(,) characters, then it must be encapsulated by double quotes.

- Either CR+LF or LF can be used as line separators.

The first line of the file must contain the names of the columns. The columns corresponding to the optional fields may be excluded from the CSV file; empty values in optional fields are removed during entity creation. The loader does not impose constraints on the content of the fields, but the values are validated by the OIM according to the configuration therein.

The submission of these CSV files is done to the ITSM helpdesk.

User creation bulk utility: §(F.1.1)

For user account creation, the following fields must be provided:

Field Name	Description	Permitted values/ Constraints	Mandatory
User Login	The user login. If not given, defaults to "First Name"."Last Name"; note that OIM imposes a uniqueness constraint on the login name. For S2S users (i.e. when field "USR_USER_TYPE" is set to "S2S"), make sure that this field has the same value as field "Common Name". No checking is performed. If this rule is not adhered to, then S2S users will not be able to log on to the system.	Max. length 256 Unique value	No
Last Name	Last name of the user.	Max. length 80	Yes
First Name	First name of the user. The user login is formed by concatenating "Last Name"."First Name".	Max. length 80	Yes
Display Name	The display name shown by the OIM. If the field is not specified, the default behaviour of OIM is invoked which is <First Name> + " " + <Last Name>	Max. length 382	No
Email	The email address of the user.	Max. length 256	Yes
Country	The country of the user.	Following ISO 3166-1 alpha-2, capital letters, with the exception of Greece (EL)	Yes

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Field Name	Description	Permitted values/ Constraints	Mandatory
		and the United Kingdom (GB)	
Common Name	The common name of the user must be unique for S2S users (i.e. when field "USR_USER_TYPE" is set to "S2S") and have the same value as field "User Login". No checking is performed. If this rule is not adhered to, then S2S users will not be able to log on to the system. OIM by default set this field to value: "First Name" "Last Name" ie without a dot in the middle, which is expected in User Login by CCN2 standard	Max. length 240 Unique value	No
Domain	The domain of the user.	Max. length 40	Yes
Partnername	The name of the partner requesting the upload (e.g. DG TAXUD). Please refer to §C.1.1 for Partner naming conventions.	Max. length 100 Must be identical to Organization field.	Yes
usr_user_type	The CCN2 user type. The OIM will ensure the value belongs to the allowed set of values (e.g. U2S).	Allowed values: • S2S • U2S	Yes
CCN2 Partner	The organization the user belongs to. Please refer to §C.1.1 for Partner naming conventions.	Must refer to an existing partner. Must be identical to Partnername field.	Yes
usr_password	The password of the user in plain text ⁴¹ .	OIM will impose constraints on the quality of the password.	No
Department	The department number associated with	Max. length 80	No

⁴¹ Password must be reset after first login.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Field Name	Description	Permitted values/ Constraints	Mandatory
Number	the user.		
Home Postal Address	The address of the user.	Max. length 256	No
Mobile	The mobile phone number of the user.	Max. length 20	No
Description	A description displayed for the user by OIM.	Max. length 2000	No
Manager Login	The login name of the manager of the user.	Must refer to an existing user.	No

Optional fields can be omitted by providing an empty value at the specific field.

```
User Login,Last Name,First Name,Display Name,Email,Country,Common
Name,Domain,Partnername,usr_user_type, CCN2 Partner,usr_password,Department Number,Home Postal
Address,Mobile,Description,Manager Login
APITester_login1,APITester,OIMC_Tester1,OIMC_Tester_Display1,OIMC_email1@trilili.be,be,OIMC_Te
ster1,Domain,CCN2.Partner.DK.GenericTest.Default,U2S,
CCN2.Partner.DK.GenericTest.Default,Pas#.sw0rd,Test,Test address 1,123456,This is a test
user,CCN2.ADMIN
APITester_login2,APITester,OIMC_Tester2,OIMC_Tester_Display2,OIMC_email2@trilili.be,be,OIMC_Te
ster2,Domain,CCN2.Partner.DK.GenericTest.Default,U2S,
CCN2.Partner.DK.GenericTest.Default,Pas#.sw0rd,Test,Test address 1,123456,This is a test user,
```

Example : User account creation CSV

As displayed in the example, when field names (first line) or values (subsequent lines) contain spaces, they are encapsulated in double quotes. One can also see that the User Login info is omitted in the second user account entry, where an empty value is present before the first comma.

IMPORTANT NOTICE: When specifying a value for the “Manager Login” field of a new user, the manager account must already exist in the system or at least have been created earlier in the CSV file.

Creation of Roles and Permissions: (§F.1.2)

For the assignment of Roles to user accounts, the following fields must be provided:

Field Name	Description	Mandatory
Role Name	The name of the Role or Permission to be created	Yes
usr_role_type	Either “Permission” or “Role”	Yes
Role Display Name	The display name of the Role or Permissions	Yes
RoleCategory	Either “U2S” or “S2S”.	No

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Assignment of Roles to user accounts: (§F.1.3)

For the assignment of Roles to user accounts, the following fields must be provided:

Field Name	Description	Mandatory
User Login	The user login.	Yes
Role Name	The name of the role that must be assigned to this user account.	Yes

IMPORTANT NOTICE: Roles can be assigned to user accounts that either already exist or are already included in the User account creation CSV file.

If multiple Roles are to be assigned to the same user account, then each assignment must be done in a separate line, repeating the User Login along with each Role.

Assignment of Permissions to Roles: (§F.1.4)

For the assignment of permissions to roles, the following fields must be provided:

Field Name	Description	Mandatory
Child Name	The role.	Yes
Parent Name	The permission which will be assigned to the role.	Yes

IMPORTANT NOTICE: Permissions can be assigned to roles that either already exist or are already included in the Role / Permission creation CSV file.

If multiple permissions are to be assigned to the same role, then each assignment must be done in a separate line, repeating the permission along with each role.

Note that the role is the child and the permission is the parent, i.e. the role must always be specified in the first column and the permission in the second column.

8.4 Connecting to the CCN2 Platform

8.4.1 Member States access

It is important to emphasize that for security reason, the CCN2 Platform is only accessible via the CCN main network (CCN WAN). Thus, to have access to the CCN2 platform, the Member States will have to configure connectivity to this network as pre-requisite.

To further illustrate the above explanation, the schema below provides an overview of this setup:

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

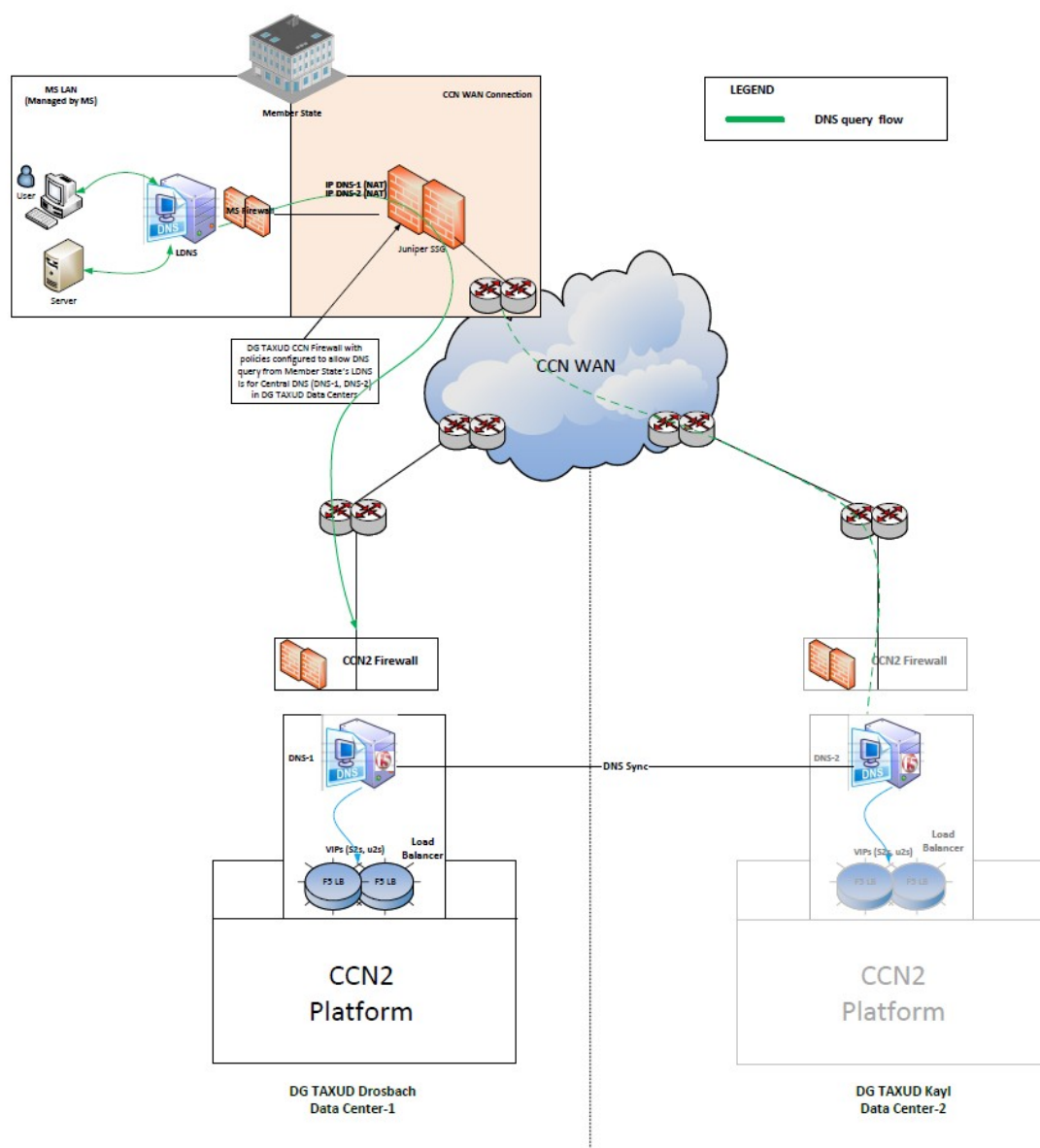


Figure 8-65: Connectivity Overview

As shown in the picture above, connectivity to the CCN2 Platform is only possible via the CCN WAN and it is assumed here that the connectivity between the Member States system and the CCN WAN backbone is already in place. There then remains the configuration of the firewall on both sides, the Member States firewall and the CCN2 firewall.

To access to the CCN2 Platform, the first step is to contact the CCN2 Platform help desk to request it. Then, two actions:

- The source IPs (networks) from which the connectivity tests will be executed must be provided to the CCN2 Platform operator. The best option is to include all the subnets in your country/site from which CCN2 services will be used in the future.
- Dedicated IP addresses will be provided securely for u2s (user to the system) and s2s (system to the system) access respectively.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Based on the connectivity details received by the operator of the CCN2 platform, please follow the following instructions using the information in the table below where the URL of the different platform environments are provided.

Env.	FQDN	IP address provided by the CCN2 Platform Operator
PROD	u2s.prod.ccn2.taxud	u2s PROD IP address
PROD	s2s.prod.ccn2.taxud	s2s PROD IP address
CONF	u2s.conf.ccn2.taxud	u2s CONF IP address
CONF	s2s.conf.ccn2.taxud	s2s CONF IP address
PGS	https://ap.pgs.ccn2.taxud:8443	u2s PGS IP address
PGS	https://ap.pgs.ccn2.taxud:8441	s2s PGS IP address

Table 20: CCN2 Platform – connectivity details

- Update the Local DNS or “hosts” file on local computers/servers with the necessary entries depending on which environment the access is required, for example, with production environment:
u2s.prod.ccn2.taxud <u2s PROD IP address>
s2s.prod.ccn2.taxud <s2s PROD IP address>
- Member State’s Network administrator must configure firewalls (policies, routings) to allow traffic, for example, with production environment:
HTTPS (TCP 443) towards <u2s PROD IP address> ⁴²
HTTPS (TCP 8441) towards <s2s PROD IP address>
- Import CCN2 intermediate CA certificate:
To make a proper SSL handshake with the CCN2 Platform, please import the public key “CCN2Platform.cer” provided within the IMA ZIP package (See Annex D.) into your trust store. This is the CCN2 CA certificate, which has signed our CCN2 platform certificates, for both user to system and system to system communication.
- Execute the tests as described in §F.1.

8.4.2 X-DEV access

The configuration linked to X-DEV access is simpler than that described in the previous section but strictly limited to PGS environment. Indeed, as the X-DEV environments are entirely controlled by the same operator as the CCN2 platform, as such, it is only necessary to open a ticket for the helpdesk of the CCN2 platform and to provide the IPs of the machines that needs to be connected. The operations team will then configure the necessary connectivity and inform the X-DEV when it is complete.

⁴² Except for PGS environment where the port number is 8443.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Finally, please execute the steps 3 and 4 from previous section.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

9. References

9.1 Glossary of Terms

Term	Definition
Role	Due to the size and specialized nature of the CCN2 system, expertise in various technical areas is required. The Silo approach for administration of the system divides the required skills and know-how into different hardware- and software-related areas. For each area there are specialists and Engineers who take care of their own area of responsibility, while communicating with the other Administrators and Engineers.
Permission	Added to the role in the OUD permits to have access to certain area in CCN2 platform (applicable only in S2S)
Artefact	Assets that are needed to describe the service due to the process of Service Deployment (WSDL, XSD, Role, Permission).
Exchange Patterns	- Synchronous “Request/Response”: This Service Connectivity Service allows a Partner application to use the synchronous “Request/Response” pattern over the CCN2 Platform. The main advantage of this pattern is simplicity: it is close to a programmatic function call and the request/response correlation is implicit as the response is expected over the same technical connection. - Asynchronous “One-Way”: This Service Connectivity Service makes usage of the asynchronous “One-Way” patterns and covers the CCN2 Platform interaction for which the Partner Application sends a request to a service provider and expects no answer. - Asynchronous “Request/Callback”: This Service Connectivity Service allows a Partner Application to use the asynchronous “Request/Callback” pattern over the CCN2 Platform. An key aspect is that requests and responses can be intermixed, meaning that requests can be sent while responses are still to be received and that the order in which these responses are received is not linked to the order in which the requests were sent.
CCN2 Ecosystem	The CCN2 ecosystem related to all building blocks (e.g. actors, services, processes, IT components, etc.) interacting with/through the CCN2 Platform. It is currently limited to the network of organisations that drive the creation and delivery of Trans-European System (TES) components in relation with the Common Domain.
Partner	A Partner is an entity participating in the CCN2 Platform either by offering services to the CCN2 Platform or by consuming services offered by the CCN2 Platform. Currently, Partners are National Administrations (NA) in Member States (MS), Candidate Countries (CC), EFTA countries, internal EC Directorates such as DG TAXUD, DG AGRI, DG MARE and OLAF, and

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

	EC contractors such as the operation contractors of DG TAXUD. Other types of Partners could be introduced in the future.
Platform	A Platform is a combination of hardware, software and possibly appliances and network equipment intended to fulfil specific requirements.
Regular Expression	A regular expression (often abbreviated regex) is a sequence of characters that forms a search pattern, mainly for use in pattern matching with strings. This document uses the XML Schema flavour.
Access Point (AP)	Member state and third party organisation interface to the CCN2 Platform, providing all communications to and from it.
Component	A Component is a basic building block such as a software package, a Web service, or a hardware appliance that encapsulates a set of related functions (or data).
Java Message Service	The standard Java API for message-oriented middleware (MOM). Because it is only an API standard, it provides portability (allowing the usage of different middlewares while keeping the interfaces) but not intrinsic interoperability (allowing the usage of different MOM implementations).
Main Hub (Hub)	The Main Hub is the physical location of the CCN2 Platform hosting the complete set of the CCN2 Platform common functionalities.
Service-Oriented Architecture	SOA establishes an architectural model that aims to enhance the efficiency, agility, and productivity of an enterprise by positioning services as the primary means through which solution logic is represented in support of the realization of the strategic goals associated with service-oriented computing.
Web Services	A set of industry standards that serves as one possible way of realising a SOA implementation. Initially started with the core standards XML, HTTP, WSDL, SOAP and UDDI, it now contains over 60 standards and profiles developed and maintained by different standardisation organisations, such as W3C and OASIS.
Business Service	In context of the CCN2 Platform by Business Service we understand Partner Application web service exposed in the Access Point DMZ zone.
Business Tailored Filter	A Business Tailored Filter represents a custom built filter step in the AAG, specifically created to fulfil the needs of a business application connecting to the CCN2 Platform.
Calling Partner Application	A Partner Application which calls the CCN2 Platform service (service consumer).
Component	A Component is a basic building block such as a software package, a Web service, or a hardware appliance that encapsulates a set of related functions (or data).
Destination Partner Application	A Partner who is called by the Calling Partner Application using the CCN2 Platform service (service provider).
Generic Routing Service	The Generic Routing Service is the Message Broker Proxy Service responsible for routing to the logical Destination Access Point and the

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

	service provider (Destination Partner Application).
Incident	An incident is a unit containing a single, or closely correlated set of events that identify an issue that needs administrator attention.
inetOrgPerson	inetOrgPerson refers to a standard LDAP Object Class (RFC 2798). The inetOrgPerson object class is a general purpose object class that holds attributes about people.
Interaction	Series of data exchange between one or more Partners and the CCN2 Platform.
Internal Service	In context of the CCN2 Platform by Internal Service we understand “Any SOAP” endpoints exposed by the Message Broker Generic Routing Service.
Java Message Service	The standard Java API for message-oriented middleware (MOM). Because it is only an API standard, it provides portability (allowing the usage of different middleware’s while keeping the interfaces) but not intrinsic interoperability (allowing the usage of different MOM implementations).
Local Account Store	Local Account Store managed by each COTS that contains local / privileged accounts for specific administration purposes (example of accounts: root, admin, oracle, weblogic). Technical storage relies upon COTS proprietary storage.
Main Hub (Hub)	The Main Hub represents the logically centralised part of the CCN2 Platform architecture.
Message Exchange Pattern (MEP)	A definition of the sequence of messages in service calls or service operation. This sequence includes the order, direction, and cardinality of the messages sent around until a specific service operation is done.
Module	A Module is a collection of Components that provides a set of logically related functionalities of the Platform.
AAG Filter	A filter is an executable rule that performs a specific type of processing on a message. It is a block of logic that is part of an execution flow known as a policy.
AAG Policy	An AAG Policy is a network of message filters in which each filter is a modular unit that processes a message. A message can traverse different paths through the policy, depending on which filters succeed or fail. A policy can also contain other policies, which enables to build modular reusable policies.
OOD Account Store	OOD schema that contains the provisioned accounts and credentials for security enforcement purposes. Technical storage relies upon CCN2 Platform User LDAP schema (OOD).
Service	A service is a logical representation of a repeatable business activity that has a specified outcome (e.g., check customer credit; provide weather data, consolidate drilling reports, etc.) and: • Is self-contained; • May be composed of other services; • Is a “black box” to consumers of the service (describes the 'what', not

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

	the 'how'). CCN2 Platform acts as intermediary between providers and consumers of Business Services, and provides platform services by itself.
Service Contract	A service contract is comprised of one or more published documents (called service description documents) that express meta information about a service. The fundamental part of a service contract consists of the service description documents that express its technical interface. These form the technical service contract which essentially establishes an API into the functionality offered by the service.
System-to-system connectivity	Any interaction between two automated systems. E.g. a system calling a web-service.
User-to-system connectivity	Any interactions between a physical user leveraging a browser and a web-based application.

Table 21: Glossary of Terms

9.2 Acronyms and Abbreviations

For a better understanding of the present document, the list of abbreviations and acronyms can be found in [R02] and [R04].

This list is available on the "[Project Portal](#)"

9.3 Reference Documents

Ref.	Title	Originator	Version	Date ⁴³
R01	CCN2-CFSS-CCN2 Platform System Functional Specifications	CCNEB	18/01/2022	14.00
R02	TEMPO List of Acronyms	DG TAXUD	N/A	01/2020
R03	TEMPO glossary	DG TAXUD	N/A	01/2020
R04	CCNEB-CFQP-AX07-GLO-Abbreviations and Definitions	CCNEB	1.00	

Table 22: Reference Documents

Please see also the list of references §4.4 relating to the industry standards adopted by the CCN2 Platform.

9.4 Applicable Documents

An applicable document is a document of which the content is binding for the contractor in the context of this document.

⁴³ Empty date relates to documents for which the referenced version (SfA version) is still in progress

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Ref.	Title	Originator	Version	Date
A01	Framework Contract TAXUD/2020/CC/161: CCN-Evolution: Specification, development, maintenance and 3rd level support of TAXUD IT platforms – Lot B: Evolution services for the CCN2(ng), SPEED2(ng), CDCO/TSOAP and SSV platforms	Atos	N/A	04/08/2020
A02	EN-2019_0006_a0_Tender Specifications - Part 1 - Administrative Specifications	DG TAXUD	N/A	29/11/2019
A03	EN-2019_0006_a0_Tender Specifications - Part 2 - Terms of Reference	DG TAXUD	N/A	29/11/2019
A04	EN-2019_0006_a0_Tender Specifications - Part 3 - Technical Annex	DG TAXUD	N/A	29/11/2019
A05	Specific Contract n° 04 – TAXUD/2021/DE/112	DG TAXUD	N/A	04/06/2021

Table 23: Applicable Documents

9.5 Document Conventions

9.5.1 Graphical Notations

Symbol	Description
	CCN2 Service Endpoint.
	Partner's Service Endpoint.
	Store in queue.
	Get from queue.

Table 24: Document Conventions

9.5.2 XML Infoset Notation

When describing abstract data models, this specification uses the notational convention used by the XML Information Set (Infoset) specification⁴⁴. Its purpose is to provide a consistent set of definitions for use in other specifications that need to refer to the information in a well-formed XML document.

⁴⁴ <https://www.w3.org/TR/2004/REC-xml-infoset-20040204/>

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

10. Document History

Edi.	Rev.	Date	Description	Action ⁴⁵	Pages/Chapter
<i>Document history of versions of the document older than version 14.00, can be found in version 15.00 on CIRCABC.</i>					
16	00	22/02/2022	Document submitted for acceptance (SfA)	U	History
15	41	28/01/2022	Implementing received comments (QC44332)	U	See APO
15	40	21/01/2022	Document submitted for review (SfR)	U	History
15	32	21/01/2022	Internal Quality Review	Review	All
15	31	20/01/2022	Changes related to RFA004 (CCN2 ng-2.0)	U, I	4.4.1, 4.9.4.3
15	30	16/11/2021	Document submitted for acceptance (SfA)	U	History
15	21	29/09/2021	Implementing received comments (QC42747)	U	See APO
15	20	10/09/2021	Document submitted for review (SfR)	U	History
15	12	10/09/2021	Internal Quality Review	Review	All
15	11	09/09/2021	Changes related to RFA001 (CCN2 ng-1.2.2)	R	4.9.3.4, 4.9.4.1, 4.9.4.4, 4.9.4.5, 4.9.5.1, 6.2.2.3, 6.2.3
15	10	05/02/2021	Re-Submitted for Acceptance	R	4.7.1 10
15	00	04/02/2021	Submitted for Acceptance	R	
14	10	29/01/2021	Submitted for Review		
			RTC 55047	R I	7.5 E.5
			RTC 56813	R	4.9.4.5
			RTC 56403	R	8.3.1.6 8.3.1.1 updated version of users_example.csv
			RTC 56741	R	4.4.7 4.9.4.1 4.9.5.1 6.2.2.2 6.2.3

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Edi.	Rev.	Date	Description	Action	Pages/Chapter
					6.2.4 6.2.5.1 6.2.5.2
			RTC 56785	R	4.9.4.2 4.9.4.4 4.9.4.5
			RTC 50606	R	4.8.5
			RTC 56786	R	Modification of WSDL and XSD attachments
14	10	26/01/2021	RTC 45336	I/R/D	As per CCO
			QC27197-SC05_CCN2-CTRM-011-How to develop for CCN2 Training Material (RTC: 45071): Comment #12	D	6.2.2.2 6.2.2.3 6.2.3 6.2.4 6.2.5.1 6.2.5.2 -- removed conditional
			QC27250-SC05_CCN2-CTRM-012-How to secure applications for CCN2 (RTC: 45123): Comment #5	R	4.7.1 -- edited image
			Comment #7	R	4.7.2 -- replaced image
14	10	26/01/2021	QC27250-SC05_CCN2-CTRM-012-How to secure applications for CCN2 (RTC: 45123): Comment #8	D	4.7.5 -- removed image
			Comment #11	R	4.11, 4.11.2 4.11.3 -- edited images
			Comment #12	R/D	4.8.3 6.4.2 -- edited saml signatures 4.8.6.1 -- removed saml desc

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
4 - Guidance	Issue Date: 22/02/2022

Edi.	Rev.	Date	Description	Action	Pages/Chapter
			Comment #17	I	4.8.5 -- inserted certs desc
			Comment #31	I	4.9.6.6 4.9.6.7 -- inserted cross-ref
			Comment #39	I	4.8.7.2 -- inserted image 6.4.4 -- inserted cross-refs
14	00	16/06/2020	Submitted for Acceptance	I/R/D	As per CCO.

Table 25: Document History

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

ANNEXES

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Annex A. CCN2 Predefined Policies

A.1 CCN2 Web Service Policies

This set of policies is subject to extensions according to the scope of Release 1.3 and other future requirements. It currently relates to the Security (see §A.1.1).

A.1.1 Security Policies

Reference	Description	Applicable to		Policy name
		CCN2 Endpoint	Partner's Endpoint	
Authentication				
username_supporting_token_plaintext_password	The client must authenticate with a WS-Security UsernameToken with a plaintext password. It is applicable to the WSDL Binding subject by referring to it as follows: <wsp:PolicyReference URI="#"#username_supporting_token_plaintext_password" />	Yes	No	CCN2.Policy.Platform.Auth.PlainTextPwd
wss10_username_token_mutual_authn_sign_encrypt	The service endpoint exposes an AsymmetricBinding where the client and server use their respective X.509v3 tokens. A signed and encrypted UsernameToken with plaintext password must be included in all messages from the client to the service endpoint. The applicable Algorithm Suite is “Basic256Sha256”. It implements the Key Encapsulation Mechanism (KEM) applying the “KwRsaOaep” Asymmetric Key Wrap (AsymKW) and “AES-256“ Symmetric Key algorithms. It is applicable to the WSDL Binding subject by referring to it as follows: <wsp:PolicyReference URI="#"#wss10_username_token_mutual_authn_sign_encrypt" />	Yes	No	CCN2.Policy.Platform.Auth.SignEncrypt

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Reference	Description	Applicable to		Policy name
		CCN2 Endpoint	Partner's Endpoint	
wss11_saml20_sendervouches_token_mutual_authn_sign_encrypt		No	Yes	CCN2.Policy.Platform.Auth.SAML-SignEncrypt
	It is applicable to the WSDL Binding subject by referring to it as follows: <pre><wsp:PolicyReference URI="#wss11_saml20_sendervouches_token_mutual_authn_sign_encrypt" /></pre>			
wss10_mutual_authn_with_x509_certificates_sign_encrypt		Yes	No	CCN2.Policy.Platform.Auth.SignEncrypt
	The service endpoint exposes an AsymmetricBinding where the client and server use their respective X.509v3 tokens. A signed and encrypted Certificate with plaintext password must be included in all messages from the client to the service endpoint. The applicable Algorithm Suite is "Basic256Sha256". It implements the Key Encapsulation Mechanism (KEM) applying the "KwRsaOaep" Asymmetric Key Wrap (AsymKW) and "AES-256" Symmetric Key algorithms. It is applicable to the WSDL Binding subject by referring to it as follows: <pre><wsp:PolicyReference URI="#wss10_mutual_authn_with_x509_certificates_sign_encrypt" /></pre>			

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Confidentiality			
encrypt_body	Yes	Yes	CCN2.Policy.Platform.Conf.Body
This WS-Policy expression defines an assertion to encrypt the SOAP Body of a message. It must be associated to a policy defining the cryptography Algorithm Suite for the corresponding WSDL Binding subject. It is applicable to the WSDL binding operation message (input or output) subject by referring to it as follows: <pre><wsp:PolicyReference URI="# encrypt_body" /></pre>			
Integrity			
sign_body	Yes	Yes	CCN2.Policy.Platform.Inte.Body
This WS-Policy expression defines an assertion to sign the SOAP Body of a message. It must be associated to a policy defining the cryptography Algorithm Suite for the corresponding WSDL Binding subject. It is applicable to the WSDL binding operation message (input or output) subject by referring to it as follows: <pre><wsp:PolicyReference URI="#sign_body" /></pre>			

Table 26: CCN2 Predefined Security Policies

It is worth mentioning that signing, and encrypting the header or header and body can be done in the service security policy. By default, platform offers encrypting/signing body only.

A.2 CCN2 Platform Configuration Policies

A.2.1 Configuration Entity Policies

Reference	Description			
CCN2.Policy.Platform.Conf.General				
	This general policy defines how configuration entities are managed and how attributes are defined. It defines rules that are applicable to each configuration entity. Each configuration entity itself might have an additional entity policy.			
	ID	Rule	Validation	Validator

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Reference	Description			
	POL-GEN-DES-1	Each description field, if entered, must be written in English.	Manual	Service Owner Platform administrator
	POL-GEN-EML-1	Each E-mail field, if entered, must be a valid E-mail format.	Automatic	Applicable Module (e.g. OIM Module for User Entity)
	POL-GEN-DAT-1	Each date/time field, if entered, must contain a valid date. The CCN2 Platform supports the definition of a date/time up to a granularity of a second, unless otherwise specified by a particular operation. Data format is: “dd/mm/yyyy”.	Automatic	Applicable Module (e.g. OIM Module for User Entity)
	POL-GEN-PHO-1	Each phone number field, if entered, must contain a valid phone number, including the international country designation code. Phone number format is: “+XX/...” or “00XX/...”, where “XX” is international country designation.	Manual	Service Owner Platform administrator
	POL-GEN-MAN-1	Each field, marked as mandatory in the related data model must contain a value when used.	Automatic	Platform
CCN2.Policy.Platform.Conf.Partner				
	This policy defines how the “Partner” is managed and how the attributes are defined.			
	ID	Rule	Validation	Validator
	POL-PAR-PK-1	The Partner Key must contain a generic and unique key. The Partner Key must be specified as string with limitation: min length: 1, max length: 255.	Automatic	Platform
	POL-PAR-PN-1	The Partner name field must comply with the Partner naming conventions (§C.1.1) and contains a recognised and accepted Partner name.	Manual	Service Owner
	POL-PAR-PAS-1	The Partner Application Service field must contain a valid and unique identifier of an existing Partner Application Service (§C.1.2).	Manual	Service Owner

Table 27: Configuration Entity Policies

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

A.2.2 Identity and Access Management Policies

Reference	Description			
CCN2.Policy.Platform.IAM.User				
	This policy defines how user entities (i.e. accounts with a value of U2S or S2S as user type) are managed and how user attributes are defined.			
ID	Rule	Validation	Validator	
POL-USR-UNI-1	A User ID must be unique. Two User objects cannot have the same User ID.	Manual	Service Owner Platform administrator	
POL-USR-ADR-1	The address field, if entered, must contain an address that points to a valid address in the country specified in the “country of origin” field.	Manual	Service Owner Platform administrator (via ODSM)	
POL-USR-COO-1	The country of origin field must contain a valid country name, following ISO 3166-1 alpha-2, capital letters, with the exception of Greece (EL) and the United Kingdom (GB)	Manual	Service Owner Platform administrator	
POL-USR-FN-1	For U2S accounts, the first name field, must contain the one of the user as defined by an official document.	Manual	Service Owner Platform administrator	
POL-USR-LN-1	For U2S accounts, the last name field, must contain the one of the user as defined by an official document.	Manual	Service Owner Platform administrator	
POL-USR-NIL-1	The number of invalid login field must be a positive integer number. ⁴⁶	Automatic	Platform	
POL-USR-ORG-1	The organisation field must contain the value of recognised and accepted organisation name	Manual	Service Owner Platform administrator	
POL-USR-ORGD-EP-1	The organisation department field must contain a valid department name within the organisation defined by the “organisation” field.	Manual	Service Owner Platform administrator	
POL-USR-PN-1	The Partner name field must comply with the Partner naming conventions (§C.1.1) and contains a recognised and accepted Partner name.	Manual	Service Owner Platform administrator	

⁴⁶ Maximum Incorrect Login attempts counter is 3.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Reference	Description			
	POL- USR- PAS-1	The password field must comply with the Password Policy. ⁴⁷	Manual	Service Owner Platform administrator
	POL- USR- ROL-1	The role ID field, if entered, must contain 0 or more roles, each matching the IDs as defined in the Role Entity object.	Manual	Service Owner Platform administrator
	POL- USR- RIO-1	The role in organisation field, if entered, must contain a valid role inside the organisation specified in the “organisation” field.	Manual	Service Owner Platform administrator
	POL- USR- STA-1	The state field must contain one of the following values: • “activated”; • “deactivated”; • “deleted”; • “unlocked”; • “locked”.	Manual	Service Owner Platform administrator
	POL- USR- SUI-1	The superior User ID field, if entered, must contain a username ID linked to an existing User object.	Manual	Service Owner Platform administrator
	POL- USR- UID-1	The username ID field must contain a generic and unique ID.	Automatic	Platform
	POL- USR- TYP-1	The User type field must be set to U2S or S2S	Manual	Service Owner Platform administrator
CCN2.Policy.Platform.IAM.Role				
	This policy defines how the “Role” entity is managed and how the attributes are defined.			
	ID	Rule	Validation	Validator
	POL- ROLE- NAM-1	The role name must comply with the role naming conventions.	Manual	Service Owner Platform administrator
	POL- ROLE- PER-1	The permission field, if entered, must contain one or more permission matching the IDs as defined in the Permission Entity object.	Manual	Service Owner Platform administrator
			Automatic	Platform

⁴⁷ As defined in CCN2 Platform Functional Specification Section “7.2.2.2. Default Password Policy”.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Reference	Description			
	POL-ROLE-RID-1	The role ID field must contain a generic and unique ID.	Automatic	Platform
CCN2.Policy.Platform.IAM.Permission				
This policy defines how the “Permission” entity is managed and how the attributes are defined.				
	ID	Rule	Validation	Validator
	POL-PERM-PID-1	The permission ID field must contain a generic and unique ID.	Automatic	Platform
	POL-PERM-NAM-1	The name field must comply with the permission naming conventions.	Manual	Service Owner Platform administrator

Table 28: Identity and Access Management Policies

A.2.3 Security Policies

Reference	Description		
CCN2.Policy.Platform.UAcc.Default			
The Identity and Access Management tool of the CCN2 Platform allows the definition of user access policies applicable per registered identity. Such policy could indicate for instance the timing constraint in which the user access of the specific owner of the account is either allowed or forbidden. Note that it is unrelated to password expiration or user identity state. A default user access policy (CCN2.Policy.Platform.UAcc.Default) will be defined and applied when registering a new user in the CCN2 User Directory.			
ID	Rule	Validation	Validator
POL-USR-ACC-1	A CCN2 Platform Technical User has access 24/7 except scheduled maintenance period.	Automatic	System
POL-USR-ACC-2	A Partner Technical User has access 24/7 except scheduled maintenance period.	Automatic	System

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Reference	Description			
	POL-USR-ACC-3	A Partner User has access 24/7 except scheduled maintenance period.	Automatic	System
	POL-USR-ACC-4	A CCN2 Operations Team member has access 24/7.	Automatic	System
	POL-USR-ACC-5	A Governance Board User has access 24/7 except scheduled maintenance period.	Automatic	System
	POL-USR-ACC-6	The time that an account remains locked after the account lockout threshold is reached is infinite.	Automatic	System

CCN2.Policy.Platform.Pass.Default

The Identity and Access Management tool of the CCN2 Platform allows the definition of password policies applicable per registered identity.

The Functional Specifications describe the key control measures and password guidelines for setting a password.

A default password policy (CCN2.Policy.Platform.Pass.Default) will be defined and applied when registering a new user in the CCN2 User Directory.

ID	Rule	Validation	Validator
POL-PAS-INIT-1	The initial password must be randomly generated. The initial password is compliant with the password policy.	Automatic	System
POL-PAS-INIT-2	An initial password is set during account creation. All users are forced during the first authentication to change this password.	Automatic	System
POL-PAS-HIST-1	The number of kept password hashes is 5.	Automatic	System
POL-LOCK-1	The account is locked after 3 unsuccessful authentication attempts.	Automatic	System
POL-LOCK-2	The point in time when an account is locked, it is disabled (It cannot be used).	Automatic	System
POL-LOCK-3	The amount of unsuccessful authentication attempts will not expire over time.	Automatic	System

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Reference	Description			
	POL-PWD-LEN-1	The minimum password length, expressed in number of characters, is 8 characters.	Automatic	System
	POL-PWD-STR-1	The password shall contain at least 3 of the following 4 character classes: • Latin upper case letters (A, B, C, ... Z); • Latin lower case letters (a, b, c, ... z); • Numeric characters (0,1,2, ...9); • Special characters (;:*%!...).	Automatic	System
	POL-PWD-STR-2	Number of different characters that must exist between the old user password and the new one while attempting to change it. The value is 3.	Automatic	System
	POL-PWD-STR-3	Maximum number of repeated characters that can exist in a user password. This means not containing a trivial or repetitious pattern of characters e.g. aaaal111 or b1b2b3b4. The value is 3.	Automatic	System
	POL-PWD-AGE-1	Maximum amount in days that a password can be used is 365 days (for both S2S and U2S accounts). In case the password has expired, an administrator will need to update the password, before the account can use any resources protected by the CCN2 Platform again.	Automatic	System

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Reference	Description																		
CCN2.Policy.Platform.SoD.Default																			
	The CCN2 Platform implements segregation of duty (SoD) policies to identify and resolve potential risks associated with access right conflicts. These policies take into account the Roles and Permissions when they are being assigned to a User. The supported conflicts are: • A list of permissions that cannot be assigned to the same user; • A list of roles that cannot be assigned to the same user. The supported actions are: • Forbid the assignment of the role/permission; • Allow the assignment of the role/permission but with a warning message. In case of conflict, an appropriate action could be to update (e.g. remove) one of the Roles to resolve the conflict. This is managed via the IAM module tool. This policy defines the rules controlling the ability to link specified roles to the same user profile. <table><tr><th>ID</th><th>Rule</th><th>Validation</th><th>Validator</th></tr><tr><td>POL-SOD-1</td><td>The roles that cannot be assigned to the same user are outlined in Figure 7-2 of the CCN2 Platform Functional Specification They are marked by a red “X”.</td><td>Automatic</td><td>IAM tool</td></tr></table>			ID	Rule	Validation	Validator	POL-SOD-1	The roles that cannot be assigned to the same user are outlined in Figure 7-2 of the CCN2 Platform Functional Specification They are marked by a red “X”.	Automatic	IAM tool								
ID	Rule	Validation	Validator																
POL-SOD-1	The roles that cannot be assigned to the same user are outlined in Figure 7-2 of the CCN2 Platform Functional Specification They are marked by a red “X”.	Automatic	IAM tool																
CCN2.Policy.Platform.Security.Session																			
	This policy defines the rules controlling what the requirements are for a session. <table><tr><th>ID</th><th>Rule</th><th>Validation</th><th>Validator</th></tr><tr><td>POL-SESS-LEN-1</td><td>The maximum duration of an inactive session is 30 minutes.</td><td>Automatic</td><td>System</td></tr><tr><td>POL-SESS-LEN-2</td><td>The maximum duration of a session is 8 hours.</td><td>Automatic</td><td>System</td></tr><tr><td>POL-SESS-LEN-3</td><td>A session token cannot be reused once expired.</td><td>Automatic</td><td>System</td></tr></table>			ID	Rule	Validation	Validator	POL-SESS-LEN-1	The maximum duration of an inactive session is 30 minutes.	Automatic	System	POL-SESS-LEN-2	The maximum duration of a session is 8 hours.	Automatic	System	POL-SESS-LEN-3	A session token cannot be reused once expired.	Automatic	System
ID	Rule	Validation	Validator																
POL-SESS-LEN-1	The maximum duration of an inactive session is 30 minutes.	Automatic	System																
POL-SESS-LEN-2	The maximum duration of a session is 8 hours.	Automatic	System																
POL-SESS-LEN-3	A session token cannot be reused once expired.	Automatic	System																

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

A.2.4 Service Lifecycle Policies

Reference	Description		
CCN2.Policy.Platform.Service.Registration			
	This policy defines the rules controlling what artefacts are needed and how they are communicated in order for a service to be published. This policy has a link to needed roles, permissions, and other configuration needed for the service.		
ID	Rule	Validation	Validator
POL-SR-1	The registered service must stipulate and justify any roles required for this service.	Manual	CCN2 Operation Service Manager
POL-SR-2	The registered service must stipulate and justify any permission required for this service.	Manual	CCN2 Operation Service Manager
POL-SR-3	The registered service must stipulate and justify any policies required for this service.	Manual	CCN2 Operation Service Manager
POL-SR-4	The registered service must stipulate any additional monitoring metrics, complementary to the default ones, required for this service.	Manual	CCN2 Operation Service Manager
POL-SR-5	The registered service must stipulate and justify any additional configuration required on the CCN2 Platform for this service.	Manual	CCN2 Operation Service Manager
CCN2.Policy.Platform.Service.Compliance			
	This policy defines what are the rules/requirements that a service must comply to, so that it can be considered as a candidate for the CCN2 Platform. These rules are outlined in various policies and the service compliance policy itself is a stipulation to adhere to the service lifecycle governance process outlined in this document.		
ID	Rule	Validation	Validator
POL-SC-1	The services registered on the CCN2 Platform must comply with the policies outlined in this document, by following the service lifecycle governance process outlined in a paragraph now removed from the document.	Manual	[All]

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Reference	Description			
	POL-SC-2	The registered service must stipulate and justify any exceptions to the policies outlined for the CCN2 Platform.	Manual	[All Governance Board Members]
CCN2.Policy.Platform.Service.Design				
This policy defines the rules about the design constraints need to be placed on the registered service.				
	ID	Rule	Validation	Validator
	POL-SD-1	The services registered on the CCN2 Platform must be compliant with CCN2 Functional requirement as detailed in the CCN2 Platform Functional Specifications document [R5].	Manual	CCN2 Operation Service Manager

Table 29: Service Lifecycle Policies

A.2.5 Service Versioning Policy

As far as services offered by the CCN2 Platform are concerned, the following rules apply:

Version : [MAJOR].[MINOR].[PATCH]

- A major release (i.e. identified by the [MAJOR] element of the adopted pattern) refers to a set of changes, potentially functionally incompatible with the previous version (e.g. modified service logic);
- A minor release (i.e. identified by the [MINOR] element of the adopted pattern) refers to a set of limited functional changes introduced in a backwards-compatible manner (e.g. additional service capability).
- A patch release (i.e. identified by the [PATCH] element of the adopted pattern) refer to all other non-breaking changes.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Annex B. CCN2 Error Codes

For complete list of CCN2 Error Codes that are raised by CCN2 Platform and required to be handled by CCN2 Partner applications, please refer to the related documentation (FS).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Annex C. CCN2 Naming Conventions

C.1 Naming Conventions

C.1.1 Partner Naming Convention

The naming convention for a partner is based on the following pattern:

`CCN2.Partner.[Country Code].[Domain].[Entity Name]`

- **Country Code**⁴⁸ of the CCN2 Partner. As far as DG TAXUD is concerned, “EU” is used;
- **Domain** indicates (according to the `[a-z A-Z _]{3,100}` regular expression) the business domain (e.g. Customs or Taxation). Such a definition is under the sole responsibility of DG TAXUD. Its value can be "Default" if there is no need to specify more; Default is a keyword used when there is no need to provide more specific information for a field. This could be the case for several reasons, such as when there is only one entity in a country. Default is neither EU nor TAXUD. Default has been chosen as it is the most intuitive keyword for this case.
- **Entity Name** indicates (according to the `[a-z A-Z _]{3,100}` regular expression) the entity in the specific country in English. Such a definition is under the sole responsibility of DG TAXUD. Its value can be "Default" if there is only one reference entity.

E.g.: CCN2.Partner.EU.Customs.TAXUD

C.1.2 Service Naming Convention

The naming convention for a service is based on the following pattern:

`CCN2.Service.[Domain].[Partner Name].[System name].[Service Name]`

- **Domain** indicates (according to the `[a-z A-Z _]{3,100}` regular expression) the business domain (e.g. Customs or Taxation). Such a definition is under the sole responsibility of DG TAXUD. Its value can be "Default" if there is no need to specify more;
- **Partner Name** indicates (according to the `[a-z A-Z _]{3,100}` regular expression) the owner of the business service contract, responsible for its description (i.e. a Business System Owner). Its value can refer to an entity in a specific country in English or to DG TAXUD. Such a definition is under the sole responsibility of DG TAXUD. Its value can be "Default" if there is only one reference entity;
- **System Name** indicates (according to the `[a-z A-Z _]{2,100}` regular expression) the system or application (e.g. CDMS, COPIS, etc.). Its value is “Platform” if it relates to a resource offered by the CCN2 Platform itself;
- **Service Name** meaningfully identifies the service according to its type:
 - **Web Application**: a string defined according to the `[a-z A-Z _]{3,100}` regular expression;

⁴⁸ following ISO 3166-1 alpha-2, capital letters, with the exception of Greece (EL) and Great Britain (GB)

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

- **Web Service:** the service name as defined by the related Trans-European System specification according to the IPCIS guidelines.

When defining the Service Name, the size limitations of the Permission naming convention must be taken into consideration (§C.1.6).

E.g.: CCN2.Service.Customs.BE.CDMS.UpdateApplicationService

When deploying/registering multiple versions of the same service it is a good practice to append the major version to the service id e.g. []MyService_V1[] and []MyService_V2[].

C.1.3 Destination Naming Convention

The naming convention for a destination (see §4.9.3.4, Logical Destination Principle) is based on the following pattern:

partner:CCN2.Partner.[Country Code].[Domain].[Partner Name]/[System name].[Destination Name]

- **Country Code**⁴⁹ of the CCN2 Partner. As far as DG TAXUD is concerned, “EU” is used;
- **Domain** indicates (according to the `[a-z A-Z _]{3,100}` regular expression) the business domain (e.g. Customs or Taxation). Such a definition is under the sole responsibility of DG TAXUD. Its value can be "Default" if there is no need to specify more;
- **Partner Name** indicates (according to the `[a-z A-Z _]{3,100}` regular expression) the entity in the specific country in English. Such a definition is under the sole responsibility of DG TAXUD. Its value can be "Default" if there is only one reference entity;
- **System Name** indicates (according to the `[a-z A-Z _]{2,100}` regular expression) the system or application (e.g. CDMS, COPIS, etc.). Its value is “Platform” if it relates to a resource offered by the CCN2 Platform itself;
- **Destination Name** indicates (according to the `[a-z A-Z _]{3,100}` regular expression) the Destination.

E.g.:

CCN2.Partner.BE.Customs.BE/CDMS.PROD

CCN2.Partner.BE.Customs.BE/CDMS.TEST

C.1.4 Policy Naming Convention

The naming convention for policies is based on the following pattern:

CCN2.Policy.[Source].[Type].[Policy Name]

- **Source** indicates the value of a “Partner Name” (according to the `[a-z A-Z _]{3,100}` regular expression) the entity in the specific country in English. Such a definition is under the sole responsibility of DG TAXUD. Its value is "Platform" if it refers to a predefined CCN2 Platform Policy;
- **Type** indicates (according to the `[a-z A-Z _]{2,4}` regular expression) the type of policy;

⁴⁹ following ISO 3166-1 alpha-2, capital letters, with the exception of Greece (EL) and Great Britain (GB)

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

- **Policy Name** meaningfully identifies (according to the `[a-z A-Z _]{3,100}` regular expression) the name of the Policy.

E.g.: CCN2.Policy.Platform.Auth.CustomsDecisionsWebsite

C.1.5 Role Naming Convention

The naming convention for a role is based on the following pattern:

`CCN2.Role.[System Name].[Role Name]`

- **System Name** indicates (according to the `[a-z A-Z _]{2,100}` regular expression) the system or application (e.g. CDMS, COPIS, etc.). Its value is “Platform” if it relates to a resource offered by the CCN2 Platform itself;
- **Role Name** meaningfully identifies (according to the `[a-z A-Z _]{3,100}` regular expression) the name of the role.

The total length of a Role must not exceed 128 characters.

E.g.: CCN2.Role.CD.Manager

C.1.6 Permissions Naming Convention

The naming convention for permission is based on the following pattern:

`CCN2.Perm.[System Name].[Resource Name].[Operation Name]`

- **System Name** indicates (according to the `[a-z A-Z _]{2,100}` regular expression) the system or application (e.g. CDMS, COPIS, etc.). Its value is “Platform” if it relates to a resource offered by the CCN2 Platform itself;
- **Resource Name** meaningfully identifies the resource according to its type:
 - **Web Application**: a string defined according to the `[a-z A-Z _]{3,100}` regular expression;
 - **Web Service**: the service name as defined by the related Trans-European System specification according to the IPCIS guidelines;
- **Operation Name** meaningfully identifies the operation on the resource. It must be defined according to the `[a-z A-Z _]{3,100}` regular expression. The “Default” value means all operations, without listing them.

The total length of a Permission must not exceed 128 characters.

E.g.: CCN2.Perm.Platform.PubSub.CreateTopic

C.1.7 SOAP Action Naming Convention

The different naming conventions of the SOAP Action are based on the following patterns:

`[Service ID]/[Operation name]`

- **Service ID** uniquely identifies the service according to its naming convention.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

- **Operation name** uniquely identifies the service's operation you are trying to invoke. This operation name is specified in the service contract.
- Example:
<Action>CCN2.Service.Customs.Default.CDMS.ReceiveCustomsDecisionConsultationResponseBAS/ProcessMessage</Action>

[target namespace]/[port type name]/[input|output name]

- **target namespace** uniquely identifies the target namespace of that service. This is specified in the service contract.
- **port type name** uniquely identifies the port type name of that service. This is specified in the service contract.
- **input|output name** uniquely identifies the input or output of the action you want to perform. This is specified in the operation element of the service contract. If the name of the input or output element is not specified, you use the operation name with respectively "Request" and "Response" appended.
- Example:
http://xmlns.ec.eu/BusinessServices/ReceiveCustomsDecisionConsultationResponseBAS

For fault messages, the general form of an action URI is as follows:

[target namespace]/[port type name]/[operation name]/Fault/[fault name]

- **target namespace** uniquely identifies the target namespace of that service. This is specified in the service contract.
- **port type name** uniquely identifies the port type name of that service. This is specified in the service contract.
- **operation name** uniquely identifies the operation name. This is specified in the service contract.
- **fault name** uniquely identifies the fault name of the operation. This is specified in the service contract.
- Example:
http://xmlns.ec.eu/BusinessServices/CDMS/ReceiveCustomsDecisionConsultationResponseBAS/V1/ReceiveCustomsDecisionConsultationResponseBAS/ProcessMessage/Fault/serviceFault

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

C.2 Service Registration Artefact Naming Convention

Artefacts must be communicated with file names specified according to specific patterns including service metadata separated by “underscore” character (i.e. ASCII code 95).

The naming convention must have the format as follows :

```
[Service ID]_[Service Version]_[DestinationID]_[Artefact Version].wsdl
```

where [DestinationID] is following the format from C.1.3.

Example:

CSRD2 CONF, Destination ID should be :

"CCN2.Partner.NL.Customs.TAXUD/CSRD2.CONF"

and Partner's WSDL should have the name :

"CCN2.Service.Customs.Default.CSRD2.ReferenceDataSubscriptionReceiverCBS_2.0.0_CCN2.Partner.NL.Customs.TAXUD.CSRD2.CONF_2.0.0.wsdl"

C.2.1 WSDL Abstract Description

The abstract description must be defined in a separate WSDL file and named as follows:

```
[Service ID]_[Service Version]_[Artefact Version].wsdl
```

- [Service ID] defined according to the CCN2 naming convention (see §C.1.2);
- [Service Version] of the related service, defined according to the CCN2 convention
- [Artefact Version], defined according to the CCN2 convention to support change management.

C.2.2 WSDL CCN2 Concrete Description

The concrete description of a CCN2 service endpoint must be defined in a separate WSDL file and named as follows:

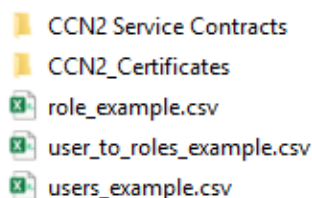
```
[Service ID]_[Service Version]_CCN2_[Artefact Version].wsdl
```

- [Service ID] and [Service Version] relating to the abstract description;
- “_CCN2” suffix that identifies the CCN2 endpoint description for the service;
- [Artefact Version], defined according to the CCN2 convention to support change management.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

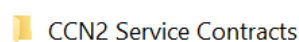
Annex D. IMA Zip Package content

The IMA document is in a ZIP package format where it can be found this document and some CCN2 artefacts structured as below:



At the **root** of the folder, the following artefacts are contained:

- **users_example.csv**
An example CSV file for user creation using the oimLoader (§8.3.1.6).
- **role_example.csv**
An example CSV file for roles and permissions creation using the oimLoader (§8.3.1.6).
- **user_to_roles_example.csv**
An example CSV file for assigning roles to user accounts using the oimLoader (§8.3.1.6).



In the **CCN2 Service Contracts** folder, the following artefacts are contained:

- **Partner Endpoint Templates** (folder)
- **xsd** (folder)
- **CCN2.Service.Platform.AcknowledgementService.wsdl**
The abstract part of the CCN2 Acknowledgement Service description (see §4.9.5.1) that can be implemented by the CCN2 Partners.
- **CCN2.Service.Platform.SecurityPolicies.wsdl**
The set of the predefined WS security policies (see §A.1.1).
- **Partner Endpoint Templates** folder:
The set of service endpoint definition templates supporting the registration of Partner's endpoints, namely:
 - CCN2.Service.Platform.AcknowledgementService_TEMPLATE.wsdl
- **xsd** folder:
The set of XML Schemas supporting the CCN2 service contract definitions, namely:
 - CCN2.Service.Platform.Acknowledgement.Schema.xsd

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

- CCN2.Service.Platform.Common.Schema.xsd⁵⁰
- CCN2.Service.Platform.GenericCommunication.Schema.xsd
- soap-envelope.xsd
- ws-addr.xsd
- xml.xsd

In the **CCN2 Certificates** folder, the following artefacts are contained:

-  CCN2Platform.cer
-  CCN2root.cer
-  TAXUD_ROOT.cer

⁵⁰ "SequenceId" and "OrderId" are used in the resequencer mechanism – one stands for the whole sequence, other is responsible for identifying particular elements in the sequence.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Annex E. Endpoint Reference Metadata

This annex provides an overview of all metadata that can be provided or used throughout the governance lifecycle.

E.1 Partner Metadata

A CCN2 Partner is the role of an organisation participating in the CCN2 Platform by offering services to the CCN2 Platform and/or by consuming services offered by the CCN2 Platform. The following shows the information to be communicated for any new Partner of the CCN2 Platform:

Partner	A mandatory value uniquely identifying a CCN2 Partner and defined according to the CCN2 naming convention (see §C.1.1).
Name	The mandatory name of the CCN2 Partner and defined according to the CCN2 naming convention (see §C.1.1).
Description	The optional description.
Contact	The mandatory CCN2 Partner's contact point.
Operator	The optional CCN2 Partner's responsible for operations related to the CCN2 Platform.

E.2 Organisation Metadata

The CCN2 Platform is used by CCN2 Partner organisation units that must be identified in a structured manner. The following shows the information to be communicated for any new organisation of the CCN2 Platform (using a ticket on Synergia).

Name	A mandatory value uniquely identifying an organisation and defined according to the CCN2 naming convention (i.e. same as Partner, see §C.1.1).
Description	The optional organisation description.
Partner	A mandatory value uniquely identifying the Partner to which the defined organisation belongs to (see §C.1.1).
Contact	The optional description of the organisation's contact point. If not present, the corresponding attribute of the Partner's definition.
Operator	The optional name of the organisation's responsible for operation of the service. If not present, the corresponding attribute of the Partner's definition is used (see below).

E.3 Endpoint Reference (EPR) Metadata

Web services are exposed through the CCN2 Platform by endpoints (see §4.9.3.5). These endpoints are defined either by the Business System Owner (see §4.9.3.6) to expose a CCN2 endpoint to the consumers or by any Service Provider (see §4.9.3.7) subjected to a service implementation. Each one

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

must specify metadata associated to the related Endpoint Reference (EPR, see §4.9.3.3), as shown below, attached to the corresponding WSDL file (see §4.9.3.5).

```
<wsdl:service name="xs:string">
  <wsdl:port name="xs:string" binding="xs:string">
    <soap:address location="xs:anyURI"/>
    <wsa:EndpointReference>
      <wsa:Address>xs:anyURI</wsa:Address>
      <wsa:ReferenceParameters>xs:any*</wsa:ReferenceParameters> ?
      <wsa:Metadata>
        <ccn2:XMLValidation>xs:boolean<ccn2:XMLValidation>
          ...
        </wsa:Metadata>?
      </wsa:EndpointReference>
    </wsdl:port>
  </wsdl:service>
```

The EPR metadata allows:

- The identification of a web service endpoint;
- The identification of the organisation that owns it;
- The definition of the logical destination (see §4.9.3.4) at which the specific implementation is available⁵¹;
- The configuration of CCN2 mediation capabilities (see §4.9.2) that can be activated in the message flows relating to the endpoint.

It must be specified according to the XML Infoset described below.

```
<wsa:Metadata>
  <!-- the reference to the service contract -->
  <ccn2:ServiceID>xs:string</ccn2:ServiceID>
  <ccn2:ServiceName>xs:string</ccn2:ServiceName>
  <ccn2:ServiceDescription>xs:string</ccn2:ServiceDescription> ?
  <ccn2:ServiceVersion>xs:anyURI</ccn2:ServiceVersion>
  <ccn2:OrganisationID>xs:string</ccn2:OrganisationID> ?
  <!-- the logical address of the partner's endpoint -->
  <ccn2:DestinationID>xs:anyURI</ccn2:DestinationID> ?
  <ccn2:DestinationName>xs:string</ccn2:DestinationName> ?
  <ccn2:DestinationDescription>xs:string</ccn2:DestinationDescription> ?
  <!-- other metadata relating to CCN2 mediation capabilities -->
</wsa:Metadata>
```

See §4.9.3.5, Service Endpoint Description

E.4 IAM Metadata

The CCN2 Platform relies on the Role-Based Access Control (RBAC) model. Permissions are associated with roles through a permission-to-role assignment, and the users are granted access to resources through a user-to-role assignment.

The processes driving the CCN2 Platform security governance require the communication of information (using a ticket on Synergia) for registration in the CCN2 IAM tool as follows:

- The set of permissions associated to specific resources and operations on them (cf. §5.2.4.2).
- A set of roles, relating to associated permissions (cf. §5.2.4.3).

E.5 Outbound KPS Metadata

The CCN2 Platform routes requests to Partner endpoints are based on the logical routing information which they contain. The following metadata allows mapping logical to physical destination as well as providing the requirements on requests arriving to Partner endpoints and responses flowing back.

⁵¹ It has only to be specified for Partner's endpoint and not for CCN2 endpoint.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Note that some of these requirements may be overridden by the CCN2 Platform. For example, the CCN2 Platform may consider that responses from a Partner must be analysed for threats, even if a Partner has decided not to activate that feature.

Partner service-related KPS table properties:		
partner_service_url	String	The URL of the partner service to which the message will be routed.
partner_service_id	String	The service identifier (i.e. CCN2.Service...) as present in the WSDL file of the service (cf. the ServiceID element provided in the Metadata section of the WSDL).
partner_destination_id	String	The destination identifier (i.e. CCN2.Partner...) as present in the WSDL file of the service (cf. the DestinationID element provided in the Metadata section of the WSDL). The destination identifier is one of the elements, with the service (see partner_service_id above) of the logical routing information.
partner_service_enabled	Boolean	Whether the partner service is enabled and accepts incoming requests.
partner_service_type	String	The partner service type, with one of the following values: • partner (for a partner service) • test (for a test service)
partner_service_comment	String	A free form comment associated to the service, as part of the KPS entry.
Request-related KPS table properties:		
request_sign	Boolean	Whether the request message must be signed before being delivered to the Partner service.
request_encrypt	Boolean	Whether the request message must be encrypted before being delivered to the Partner service.
Response-related KPS table properties:		
response_maxSize	Long	The maximum response message size in bytes.
response_validate	Boolean	Whether response message validation is

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

		required.
response_analyse	Boolean	Whether response message analysis must be performed in order to detect threats.
response_checkSignature	Boolean	Whether a message signature must be present in the response and checked for validity.
response_decrypt	Boolean	Whether the response message must be decrypted.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Annex F. Document templates

F.1 Bulk utility templates

The CSV file templates for the Bulk Utility are presented below. For more information please refer to §8.3.1.6.

F.1.1 User account creation CSV template

```
"User Login","Last Name","First Name","Display Name",Email,Country,"Common Name",Domain,Partnername,usr_user_type, CCN2 Partner,usr_password,"Department Number","Home Postal Address",Mobile,Description,"Manager Login"
```

F.1.2 Role and Permission creation CSV template

```
"Role Name", usr_role_type,"Role Display Name",RoleCategory
```

F.1.3 Roles assignment to User Accounts CSV template

```
"User Login","Role Name"
```

F.1.4 Permission to role assignment CSV template

```
"Child Name","Parent Name"
```

F.1 Web Application Metadata

The CCN2 Platform specifications define a set of metadata that supports the description of web applications as exposed by the CCN2 OAM/OHS proxy (see §4.11.1).

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Annex G. CCN2 Platform - Connectivity Tests

The instructions below describe what should be done to test the connectivity from your environment to the CCN2 platform. In the steps below, examples are illustrated based on a Windows machine.

G.1 Test steps

Before running the CCN2 connectivity tests described on the following pages, check if your configuration is correct. Open the Run application, type "cmd" and press OK in your Windows OS:

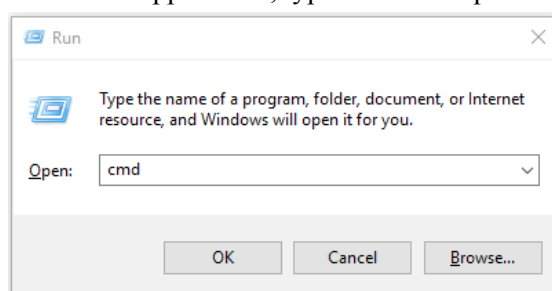


Figure 10-66: Windows run application

Execute the following lines in the Command Prompt:

- *nslookup -type=A u2s.prod.ccn2.taxud*
- *nslookup -type=A s2s.prod.ccn2.taxud*

In response, you should receive the respective IP addresses.

- Execute the two test cases from below sections. (See G.1.1 & G.1.2)
- Submit the results of your tests by updating and returning the Request for Service to CCN2 Platform Service Desk.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

G.1.1 Connectivity between the Partner Administrator Workstation and OIM

Test Identifier	CCN2_CT_CONN_OHS	
Test Category	Connectivity testing	
Test Purpose	This test case verifies the connectivity between the MS Workstation and the Oracle Identity Manager by navigating to OHS URL with a web browser.	
Test Modes	Mode 1	
Actors	the IT Service Management Contractor / Partner	
Test Tools	Browser	
Test Prerequisites	MS workstation up and running MS User logged in MS Workstation URL: https://u2s.prod.ccn2.taxud/identity (refer to the connectivity table Table 20)	
Input Specification	None	
Test steps	User open a web browser In the address box the following URL is accessed: https://u2s.prod.ccn2.taxud/identity	
Expected Result	After executing the command, the SSO login page is displayed on the browser.	
Pass Criteria	All steps in the test description section are executed correctly, the actual results match the expected results and no errors are detected.	
Passed	Failed	Comment

Table 30: Connectivity between the Partner Workstation and OIM

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

G.1.2 Connectivity between the Partner Workstation and AAG

Test Identifier	CCN2_CT_CONN_AAG	
Test Category	Connectivity testing	
Test Purpose	This test case verifies the connectivity between the MS Workstation and AAG by connecting via telnet	
Test Modes	Mode 1	
Actors	The IT Service Management Contractor / Partner	
Test Tools	Using software that supports the Telnet protocol (generally included in traditional operating systems), in this test case, the Windows Telnet tool is used.	
Test Prerequisites	MS workstation up and running MS User logged in MS Workstation Telnet client enabled on the MS Workstation If telnet is not enabled on the Windows machine: Click Start > Control Panel. Click Programs and Features. Click Turn Windows features on or off. In the Windows Features dialog box, check the Telnet Client check box. Click OK. The system installs the appropriate files. This will take a few seconds to a minute.	
Input Specification	None	
Test steps	Open terminal (Win+R -> cmd) Run the following command: telnet s2s.prod.ccn2.taxud 8441 + Enter	
Expected Result	The connection is successful if user sees one of the following: A request for a username and password (there is no need to log in). The Telnet server welcome message and a command prompt.	
Pass Criteria	All steps in the expected result section are executed correctly, the actual results match the expected results and no errors are detected.	
Passed	Failed	Comment

Table 31: Connectivity between the Partner Workstation and AAG

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

Annex H. CCN2 Platform - Standards Deviations

H.1 Third party identity propagation

For historical reason, below table represent other possibilities that are currently implemented but should not be used anymore. In a future version of the platform, this will be deleted from the implementation for the strict respects of the standards.

In this case WS-Security information in header is not used by the CCN2 Platform. Such header is forwarded to receiving Partner's application. Table below describes the behaviour of CCN2 for different roles.

Header Block				
Role	Custom Role Name	Processed by CCN2	Forward to Partner	Comments
Final Receiver		YES	NO	In most of the exchanges the CCN2 Platform can be seen as an intermediary so this behaviour is not expected.
next		YES	NO	
Null		YES	NO	Please note that this is omitting the role or using an empty value role=""
none		NO	NO	CCN2 does not process but does not forward either this due to the fact that UsernameToken is plain text.
User-defined	"CCN2.Platform"	YES	NO	
	Any value known explicitly by the CCN2 Platform. ⁵²	NO	YES	
	Does NOT exist in the CCN2PartnerRoles property file/List. ⁵²	NO	NO	

Table 32: Third Party Identity Propagation and SOAP Role

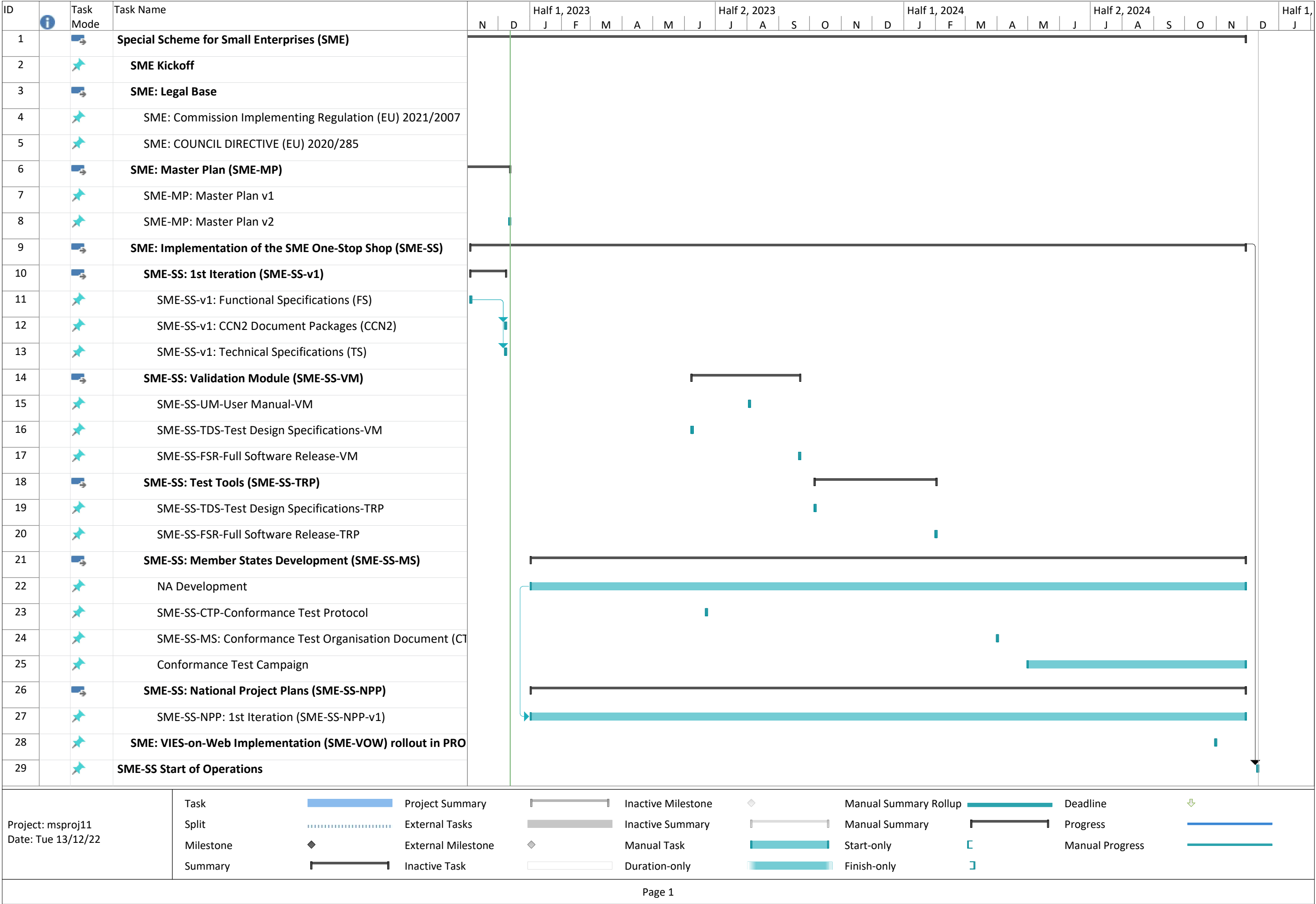
Some role usage scenarios are:

1. If there is one security block in header with role= "**CCN2.platform**", or "**finalReceiver**" or "**next**" or "" or **null** then **CCN2 Platform** will consume credentials and discard blocks in header

⁵² The role names are decided in agreement with Business Partners & CCN2 Project team.

DG-TAXUD	Ref.: CCN2-CIMA
CCN2 Platform Integration Manual	Version: 16.00
Annex H - CCN2 Platform - Standards Deviations	Issue Date: 22/02/2022

2. If there are one or more security blocks in header and **none of the security blocks has a** role from scenario 1 inside, the message will be rejected and an authentication error will be raised
3. If there are two or more security blocks in header and one security block has role from scenario 1, this role will be used for authentication & authorization on the platform afterwards security block will be removed.
 - ➔ Security blocks with role which is on **allowed list** will be forwarded to partner.
 - ➔ Security blocks with role which not exists in **allowed list** will be deleted.



	EUROPEAN COMMISSION DIRECTORATE-GENERAL TAXATION AND CUSTOMS UNION Digital Delivery of Customs and Taxation Policies Taxation Systems & Digital Governance

SS-SME

Functional Specifications

Date:	08/02/2023
Status:	Submitted for acceptance (SfA)
Version:	1.30
Author:	SOFTDEV
Approved by:	DG TAXUD
Reference number:	DLV-194-6.4-105-2-1
Public:	DG TAXUD external
Confidentiality:	Commission use (CU)

Document control information

Property	Value
Title	SS-SME
Subtitle	Functional Specifications
Author	SOFTDEV
Project owner	Head of Unit of DG TAXUD Unit C1 Value added tax
Solution provider	DG TAXUD Unit B4 Taxation Systems & Digital Governance
DG TAXUD Project Manager	DG TAXUD Unit B4 Taxation Systems & Digital Governance
Version	1.30
Confidentiality	Commission use (CU)
Date	08/02/2023

Contract information

Property	Value
Framework Contract	TAXUD/2021/CC/162
Specific Contract	TAXUD/2021/DE/1018

Document history

The document author is authorised to make the following types of changes to the document without requiring that the document be re-approved:

- Editorial, formatting, and spelling.
- Clarification.

To request a change to this document, contact the document author or project owner.

Changes to this document are summarised in the table in reverse chronological order (latest version first).

Version	Date	Description	Action	Section
1.30	08/02/2023	Implementation of review comments in the scope of RfA 08-194. Version Submitted for Acceptance (SfA).	R	Document history, 1.7, 6.5.1.3, 6.5.1.6
1.20	24/01/2023	Implementation of the following RfC in the scope of RfA 08-194: • SME-5 (section 6.5.1.4); • SME-6 (section 6.5.1.3); • SME-7 (sections 1.4, 6.5.1, 10.3). Version Submitted for Review (SfR).	R	See description
1.11	17/11/2022	Implementation of RfC SME-8. Version Sent for Information (SfI).	R	5.1.5
1.10	09/11/2022	Removal of duplicated tables that were wrongly added when preparing the SfA version 1.00. Version Submitted for Acceptance (SfA2).	R	All

Version	Date	Description	Action	Section
1.00	04/11/2022	Implementation of review comments in the context of RfA 04-022. Implementation of Member States comments received during the elaboration phase. Version Submitted for Acceptance (SfA).	I, R	All
0.10	08/09/2022	Initial version created in the scope of RfA 04-022. Version Submitted for Review (SfR).	I	All

Action: I=Insert R=Replace

Configuration management: document location

No previously accepted version of this document exists.

Table of contents

1	INTRODUCTION.....	15
1.1	Document purpose.....	15
1.2	Target audience.....	15
1.3	Structure.....	15
1.4	Reference documents.....	16
1.5	Applicable documents.....	16
1.6	Abbreviations & acronyms.....	16
1.7	Definitions.....	17
2	CONTEXT.....	19
2.1	Overview.....	20
2.2	Legal base.....	20
2.2.1	Council Directive 2006/112/EC.....	20
2.2.2	Council Regulation (EU) No 904/2010.....	20
2.2.3	Council Directive 2020/285.....	21
2.2.4	Commission Implementing Regulation (EU) 2021/2007.....	21
2.2.5	Council Directive (EU) 2022/542.....	21
3	BUSINESS PROCESSES.....	23
3.1	Organisational structure.....	23
3.1.1	Model maintained properties.....	23
3.1.2	Object maintained properties.....	23
3.2	Core business functions of the SME special scheme.....	24
3.2.1	Model maintained properties.....	26
3.2.2	Object maintained properties.....	26
3.3	Notification business processes.....	38
3.3.1	Notification business process.....	38
3.3.2	Update of Notification - Change in Identity Information business process.....	82
3.3.3	Update of Notification - cessations of some MSEX in which TP is not established business process.....	115
3.3.4	Update of Notification - change in yearly total values of supplies business process.....	139
3.4	Quarterly report business processes.....	175
3.4.1	Quarterly reporting business process.....	175
3.4.2	Elaborate Quarterly report sub-process.....	208
3.4.3	Validate the compliance of the Quarterly report sub-process.....	213
3.4.4	Verify the Quarterly report sub-process.....	215
3.5	Exclusion and cessation processes.....	220
3.5.1	It is assumed that the activities of the taxable person are ceased business process.....	220
3.5.2	Exclusion and cessation - change in legislation in MS of exemption business process.....	230
3.5.3	Taxable person informs of exceeding Union annual threshold business process.....	254
3.5.4	Update to a Prior notification - Taxable person ceases to apply the special scheme business process.....	281
3.5.5	Update to a Prior Notification - Taxable person informs of the change of MS of establishment.....	293
3.6	Specific business processes.....	305
3.6.1	Publish details of provisions business process.....	305
3.6.2	Special scheme has ceased to apply in MS of exemption business process.....	307

3.7	Common business processes.....	321
3.7.1	Process the Received Electronic Message business process.....	321
3.7.2	Automated Access to MEST Information business process.....	325
4	FUNCTIONAL MODEL.....	336
4.1	Notification process functional model.....	336
4.2	Quarterly report process functional model.....	336
5	LOGICAL DATA MODEL.....	338
5.1	Notification logical data model entities.....	338
5.1.1	Taxable Person.....	338
5.1.2	Notification.....	340
5.1.3	Taxable Person Details.....	342
5.1.4	Additional Clarification.....	343
5.1.5	Yearly Supplies.....	343
5.1.6	Sectoral Threshold Applicable.....	344
5.1.7	Union Annual Threshold.....	344
5.1.8	Active Exemption.....	345
5.1.9	Sectoral Threshold.....	346
5.1.10	MS Annual Threshold.....	346
5.1.11	Exclusion from Special Scheme.....	347
5.1.12	Cessation from MS of Exemption.....	353
5.2	Quarterly report logical data model entities.....	354
5.2.1	Taxable Person.....	354
5.2.2	Quarterly Report.....	355
5.2.3	Quarterly Report Version.....	356
5.2.4	Quarterly Report Details.....	357
5.2.5	Supplies.....	358
5.2.6	Sectoral Threshold Applicable.....	359
5.3	Common data types.....	359
5.3.1	Single Data Types.....	360
5.3.2	Complex data types.....	361
6	FUNCTIONAL MESSAGE SPECIFICATIONS.....	365
6.1	Notification messages.....	365
6.1.1	IE3N01 – Notification Notice.....	365
6.1.2	IE3N02 – Notification Request.....	367
6.1.3	IE3N03 – Notification.....	368
6.1.4	IE3N04 - Exemption Eligibility.....	371
6.1.5	IE3N05 - Exemption Acceptance.....	373
6.1.6	IE3N06 - Exemption Eligibility reminder.....	376
6.1.7	IE3N07 - Additional Clarification Request.....	378
6.1.8	IE3N08 - Additional Clarification.....	379
6.2	Quarterly report messages.....	380
6.2.1	IE3Q01 - Quarterly report request.....	381
6.2.2	IE3Q02 – Quarterly Report.....	382
6.2.3	IE3Q03 - Quarterly Report non-compliance.....	385
6.2.4	IE3Q04 - Quarterly Report correction notification.....	386
6.2.5	IE3Q05 - Final Report non-compliance.....	388

6.2.6	IE3Q06 - Final Report request.....	390
6.2.7	IE3Q07 - Final Report.....	391
6.3	Exemption and cessation messages.....	395
6.3.1	IE3E01 - Exemption Cessation.....	395
6.3.2	IE3E02 – Special Scheme Cessation.....	397
6.3.3	IE3E03 - Exclusion or cessation notification.....	398
6.3.4	IE3E04 - Exceedance of Union annual threshold notification.....	400
6.4	Specific messages.....	402
6.4.1	IE3A01 - Details of provisions.....	402
6.5	Common messages.....	408
6.5.1	IE3C01 - Error message.....	408
7	FUNCTIONAL REQUIREMENTS.....	421
7.1	Model maintained properties.....	423
7.2	Object maintained properties.....	423
8	NON-FUNCTIONAL REQUIREMENTS.....	439
8.1	Model maintained properties.....	440
8.2	Object maintained properties.....	441
9	NATIONAL APPLICATION GUIDELINES.....	444
9.1	National website guidelines.....	444
9.2	Communication with the taxable person.....	445
9.2.1	Exempt acceptance.....	445
9.2.2	Exempt denial.....	446
9.2.3	Acceptance of the identity information update.....	446
9.2.4	Refusal of the identity information update.....	447
9.2.5	Exclusion information.....	447
9.2.6	Cessation information.....	448
9.2.7	Denial of the Notification update – exceedance of the Union annual threshold.....	448
9.3	Electronic interface simulation.....	448
9.3.1	Prior Notification.....	449
9.3.2	Update to Prior Notification – Adding or ceasing Member State(s) of exemption.....	454
9.3.3	Update to Prior Notification – Identity information change.....	458
9.3.4	Update to prior notification - Request exclusion.....	461
9.3.5	Update to a prior notification -Exclusion from the SME special scheme – confirmation.....	462
9.3.6	Update to a prior notification - Exclusion request submission confirmation.....	463
9.3.7	Union annual threshold exceedance.....	463
9.3.8	Union annual threshold exceedance information submitted.....	465
9.3.9	Quarterly report.....	466
9.3.10	Quarterly report summary confirmation.....	469
9.3.11	Quarterly report submission confirmation.....	471
10	APPENDICES.....	472
10.1	Functional requirements matrix.....	472
10.1.1	Model maintained properties.....	474
10.1.2	Object maintained properties.....	474
10.2	Territorial scope.....	478
10.3	SME-SS Validation Module.....	478
10.3.1	Functional and non-Functional Requirements.....	478

10.3.2 Business and Technical Rules covered by SME-SS Validation Module.....479

List of tables

Table 1: Applicable documents.....	16
Table 2: Abbreviations and acronyms.....	17
Table 3: Definitions.....	18
Table 4: Maintained Properties of the model.....	23
Table 5: Maintained Properties of the objects.....	24
Table 6: Maintained Properties of the model.....	26
Table 7: Maintained Properties of the objects.....	38
Table 8: Maintained Properties of the model.....	40
Table 9: Maintained Properties of the objects.....	63
Table 10: Maintained Properties of the model.....	64
Table 11: Maintained Properties of the objects.....	68
Table 12: Maintained Properties of the model.....	69
Table 13: Maintained Properties of the objects.....	71
Table 14: Maintained Properties of the objects.....	76
Table 15: Maintained Properties of the model.....	78
Table 16: Maintained Properties of the objects.....	82
Table 17: Maintained Properties of the model.....	84
Table 18: Maintained Properties of the objects.....	110
Table 19: Maintained Properties of the model.....	111
Table 20: Maintained Properties of the objects.....	112
Table 21: Maintained Properties of the model.....	113
Table 22: Maintained Properties of the objects.....	115
Table 23: Maintained Properties of the objects.....	138
Table 24: Maintained Properties of the model.....	141
Table 25: Maintained Properties of the objects.....	166
Table 26: Maintained Properties of the model.....	168
Table 27: Maintained Properties of the objects.....	170
Table 28: Maintained Properties of the objects.....	175
Table 29: Maintained Properties of the model.....	177
Table 30: Maintained Properties of the objects.....	208
Table 31: Maintained Properties of the model.....	209
Table 32: Maintained Properties of the objects.....	213
Table 33: Maintained Properties of the model.....	213
Table 34: Maintained Properties of the objects.....	215
Table 35: Maintained Properties of the model.....	216
Table 36: Maintained Properties of the objects.....	220
Table 37: Maintained Properties of the model.....	222

Table 38: Maintained Properties of the objects.....	229
Table 39: Maintained Properties of the model.....	231
Table 40: Maintained Properties of the objects.....	246
Table 41: Maintained Properties of the model.....	247
Table 42: Maintained Properties of the objects.....	250
Table 43: Maintained Properties of the model.....	251
Table 44: Maintained Properties of the objects.....	254
Table 45: Maintained Properties of the objects.....	273
Table 46: Maintained Properties of the model.....	275
Table 47: Maintained Properties of the objects.....	279
Table 48: Maintained Properties of the model.....	280
Table 49: Maintained Properties of the objects.....	281
Table 50: Maintained Properties of the model.....	283
Table 51: Maintained Properties of the objects.....	293
Table 52: Maintained Properties of the model.....	295
Table 53: Maintained Properties of the objects.....	305
Table 54: Maintained Properties of the model.....	306
Table 55: Maintained Properties of the objects.....	307
Table 56: Maintained Properties of the model.....	309
Table 57: Maintained Properties of the objects.....	321
Table 58: Maintained Properties of the model.....	323
Table 59: Maintained Properties of the objects.....	325
Table 60: Maintained Properties of the model.....	327
Table 61: Maintained Properties of the objects.....	335
Table 62: Logical data model – Attributes definitions – Taxable person.....	339
Table 63: Logical data model – Relationships – Taxable person.....	339
Table 64: Logical data model – Rules – Taxable person.....	340
Table 65: Logical data model – Attributes definitions – Notification.....	341
Table 66: Logical data model – Relationships – Notification.....	341
Table 67: Logical data model – Rules – Notification.....	341
Table 68: Logical data model – Attributes definitions – Taxable Person Details.....	342
Table 69: Logical data model – Relationships – Taxable Person Details.....	342
Table 70: Logical data model – Rules – Taxable Person Details.....	343
Table 71: Logical data model – Attributes definitions – Additional Clarification.....	343
Table 72: Logical data model – Relationships – Additional Clarification.....	343
Table 73: Logical data model – Attributes definitions – Yearly Supplies.....	344
Table 74: Logical data model – Relationships – Yearly Supplies.....	344
Table 75: Logical data model – Rules – Yearly Supplies.....	344

Table 76: Logical data model – Attributes definitions – Sectoral Threshold Applicable.....	344
Table 77: Logical data model – Relationships – Sectoral Threshold Applicable.....	344
Table 78: Logical data model – Attributes definitions – Union Annual Threshold.....	345
Table 79: Logical data model – Attributes definitions – Active Exemption.....	345
Table 80: Logical data model – Relationships – Active Exemption.....	345
Table 81: Logical data model – Attributes definitions – Sectoral Threshold.....	346
Table 82: Logical data model – Relationships – Sectoral Threshold.....	346
Table 83: Logical data model – Attributes definitions – MS Annual Threshold.....	346
Table 84: Logical data model – Relationships – MS Annual Threshold.....	347
Table 85: Logical data model – Attributes definitions – Exclusion from Special Scheme.....	347
Table 86: Exclusion and cessation reason codes.....	352
Table 87: Logical data model – Relationships – Exclusion from Special Scheme.....	353
Table 88: Logical data model – Rules – Exclusion from Special Scheme.....	353
Table 89: Logical data model – Attributes definitions – Cessation from MS of Exemption.....	353
Table 90: Logical data model – Relationships – Exclusion from Special Scheme.....	354
Table 91: Logical data model – Relationships – Taxable person.....	354
Table 92: Logical data model – Attributes definitions – Quarterly Report.....	355
Table 93: Logical data model – Relationships – Quarterly Report.....	355
Table 94: Logical data model – Rules – Quarterly Report.....	356
Table 95: Logical data model – Attributes definitions – Quarterly Report Version.....	356
Table 96: Logical data model – Relationships – Quarterly Report Version.....	356
Table 97: Logical data model – Rules – Quarterly Report Version.....	357
Table 98: Logical data model – Attributes definitions – Quarterly Report Details.....	357
Table 99: Logical data model – Relationships – Quarterly Report Details.....	357
Table 100: Logical data model – Rules – Quarterly Report Details.....	358
Table 101: Logical data model – Attributes definitions – Supplies.....	358
Table 102: Logical data model – Relationships – Supplies.....	358
Table 103: Logical data model – Rules – Supplies.....	359
Table 104: Logical data model – Attributes definitions – Sectoral Threshold Applicable.....	359
Table 105: Logical data model – Relationships – Sectoral Threshold Applicable.....	359
Table 106: Logical Data Model – Attributes Definitions – GEN-DT-VAT-NUMBER.....	361
Table 107: Logical Data Model - Rules – GEN-DT-VAT-NUMBER.....	361
Table 108: Logical Data Model – Attributes Definitions – GEN-DT-EXEMPT-NUMBER.....	362
Table 109: Logical data model – Rules – GEN-DT-EXEMPT-NUMBER.....	362
Table 110: Logical Data Model - Attributes Definitions – Name.....	363
Table 111: Logical Data Model - Attributes Definitions – Address.....	364
Table 112: Logical Data Model – Attributes Definitions – GEN-DT-PERIOD.....	364
Table 113: Logical Data Model – Attributes Definitions – GEN-DT-QUARTERLY-REPORT-REFERENCE.....	364

Table 114: Maintained Properties of the model.....	365
Table 115: Maintained Properties of the objects.....	366
Table 116: Maintained Properties of the model.....	367
Table 117: Maintained Properties of the objects.....	368
Table 118: Maintained Properties of the model.....	369
Table 119: IE3N03 – Notification.....	371
Table 120: Maintained Properties of the model.....	372
Table 121: Maintained Properties of the objects.....	373
Table 122: Maintained Properties of the model.....	374
Table 123: Maintained Properties of the objects.....	376
Table 124: Maintained Properties of the model.....	376
Table 125: Maintained Properties of the objects.....	378
Table 126: Maintained Properties of the model.....	378
Table 127: Maintained Properties of the objects.....	379
Table 128: Maintained Properties of the model.....	380
Table 129: Maintained Properties of the objects.....	380
Table 130: Maintained Properties of the model.....	381
Table 131: Maintained Properties of the objects.....	382
Table 132: Maintained Properties of the model.....	383
Table 133: Maintained Properties of the objects.....	385
Table 134: Maintained Properties of the model.....	386
Table 135: Maintained Properties of the objects.....	386
Table 136: Maintained Properties of the model.....	387
Table 137: Maintained Properties of the objects.....	388
Table 138: Maintained Properties of the model.....	389
Table 139: Maintained Properties of the objects.....	390
Table 140: Maintained Properties of the model.....	390
Table 141: IE3Q06 - Final Report request.....	391
Table 142: Maintained Properties of the model.....	392
Table 143: Maintained Properties of the objects.....	394
Table 144: Maintained Properties of the model.....	395
Table 145: Maintained Properties of the objects.....	396
Table 146: IE3E02 - Special scheme cessation.....	397
Table 147: Maintained Properties of the model.....	397
Table 148: Maintained Properties of the objects.....	398
Table 149: IE3N03 - Exclusion or cessation notification.....	398
Table 150: Maintained Properties of the model.....	399
Table 151: Maintained Properties of the objects.....	400

Table 152: Maintained Properties of the model.....	401
Table 153: Maintained Properties of the objects.....	402
Table 154: Maintained Properties of the model.....	403
Table 155: Maintained Properties of the objects.....	408
Table 156: Maintained Properties of the model.....	409
Table 157: Maintained Properties of the objects.....	410
Table 158: Technical error codes.....	413
Table 159: Notification business error codes.....	417
Table 160: Quarterly report error codes.....	420
Table 161: Common business error codes.....	421
Table 162: Maintained Properties of the model.....	423
Table 163: Maintained Properties of the objects.....	439
Table 164: Maintained Properties of the objects.....	443
Table 165: National Application Guidelines – User Interface.....	445
Table 166: Electronic interface – Prior Notification - Identification.....	452
Table 167: Electronic interface – Prior Notification - Contact.....	453
Table 168: Electronic interface – Prior Notification - Member State(s) in which you intend to avail yourself of exemption.....	453
Table 169: Electronic interface – Prior Notification – Total value of supplies carried out by the taxable person.....	453
Table 170: Electronic interface – Prior Notification – Buttons.....	454
Table 171: Electronic interface – Update to Prior Notification - Adding or ceasing Member State(s) of exemption – Identification.....	456
Table 172: Electronic interface – Update to Prior Notification - Adding or ceasing Member State(s) of exemption - Member State(s) in which you intend to avail yourself of exemption.....	456
Table 173: Electronic interface – Update to Prior Notification – Adding or ceasing Member State(s) of exemption - Total value of supplies carried out by the taxable person.....	457
Table 174: Electronic interface – Update to Prior Notification - Adding or ceasing Member State(s) of exemption – Buttons.....	457
Table 175: Electronic interface – Update to Prior Notification - Identity information change - Identification.....	460
Table 176: Electronic interface – Update to Prior Notification – Identity information change - Contact.....	460
Table 177: Electronic interface – Update to Prior Notification – Identity information change - Buttons.....	460
Table 178: Electronic interface – Update to Prior Notification - Request exclusion – I request exclusion from the SME special scheme for the following reason.....	462
Table 179: Electronic interface – Update to Prior Notification - Request exclusion – Buttons.....	462
Table 180: Electronic interface – Update to a Prior Notification - Exclusion from the SME special scheme – buttons.....	463
Table 181: Electronic interface – Union annual threshold exceedance.....	465
Table 182: Electronic interface – Union annual threshold exceedance – Final report grand total.....	465
Table 183: Electronic interface – Union annual threshold exceedance – buttons.....	465
Table 184: Electronic interface – Quarterly report - Identification.....	468

Table 185: Electronic interface – Quarterly report - Total value of supplies of goods and services carried out during the calendar quarter.....	468
Table 186: Electronic interface – Quarterly report – Quarterly report grand total.....	469
Table 187: Electronic interface – Quarterly report – Buttons.....	469
Table 188: Electronic interface – Quarterly report summary confirmation – Quarterly report summary.....	471
Table 189: Electronic interface – Quarterly report summary confirmation – Buttons.....	471
Table 190: Maintained Properties of the model.....	474
Table 191: Matrix – relation between the functional requirements and core business functions.....	477
Table 192: Territorial scope.....	478
Table 193: SME-SS VM - Functional Requirements.....	479

List of figures

Figure 1: Organisational structure of the involved SME stakeholders.....	23
Figure 2: Core business functions of the SME special scheme.....	25
Figure 3: Notification main business process.....	39
Figure 4: Fill in Notification sub-process.....	64
Figure 5: Validate the Notification sub-process.....	68
Figure 6: Validate the taxable person's eligibility for exemption sub-process.....	72
Figure 7: Request additional clarification sub-process.....	77
Figure 8: Update of Notification – change in identity information business process.....	83
Figure 9: Validate the Notification (syntax and semantics) sub-process.....	110
Figure 10: Validate the taxable person's eligibility to benefit from exemption after change of activity sub-process.....	112
Figure 11: Update of Notification - cessations of some MSEX in which TP is not established business process.....	116
Figure 12: Update of Notification - change in yearly total values of supplies business process.....	140
Figure 13: Validate the updated Notification - change in yearly total values of supplies in MEST sub-process.....	167
Figure 14: Validate the updated Notification - change in yearly total values of supplies in MSEX sub-process.....	171
Figure 15: Quarterly reporting business process.....	176
Figure 16: Elaborate Quarterly report sub-process.....	209
Figure 17: Validate the compliance of the Quarterly report sub-process.....	213
Figure 18: Verify the Quarterly report sub-process.....	216
Figure 19: It is assumed that the activities of the taxable person are ceased business process.....	221
Figure 20: Exclusion and cessation - change in legislation in MS of exemption business process.....	230
Figure 21: Check if the taxable person is still eligible to benefit from the exemption sub-process.....	247
Figure 22: Check if the taxable person's annual turnover is acceptable sub-process.....	251
Figure 23: Taxable person informs of exceeding Union annual threshold business process.....	255
Figure 24: Inform the MS of establishment of the Union annual threshold exceedance sub-process.....	274

Figure 25: Verify the compliance with Art. 284b(3) sub-process.....	279
Figure 26: Update to a Prior information - Taxable person ceases to apply the special scheme business process.....	282
Figure 27: Update to a Prior Notification - Taxable person informs of the change of MS of establishment business process.....	294
Figure 28: Publish details of provisions business process.....	305
Figure 29 Special scheme has ceased to apply in MS of exemption business process.....	308
Figure 30: Process the received electronic message business process.....	322
Figure 31: Automated access to MEST information business process.....	326
Figure 32: Notification process functional model.....	336
Figure 33: Quarterly reporting process functional model.....	337
Figure 34: Logical data model - Notification.....	338
Figure 35: Logical data model – Quarterly report.....	354
Figure 36: IE3N01 – Notification Notice.....	365
Figure 37: IE3N02 – Notification Request.....	367
Figure 38: Information exchange IE3N03 – Notification.....	369
Figure 39: IE3N04 - Exemption Eligibility.....	371
Figure 40: IE3N05 - Exemption Acceptance.....	373
Figure 41: IE3N06 - Exemption Eligibility reminder.....	376
Figure 42: IE3N07 – Additional Clarification Request.....	378
Figure 43: IE3N08 – Additional Clarification.....	379
Figure 44: IE3Q01 – Quarterly report request.....	381
Figure 45: IE3Q02 – Quarterly report.....	383
Figure 46: IE3Q03 Quarterly Report non-compliance.....	385
Figure 47: IE3Q04 Quarterly Report correction notification.....	387
Figure 48: IE3Q05 - Final Report non-compliance.....	388
Figure 49: IE3Q06 - Final Report request.....	390
Figure 50: IE3Q07 - Final Report.....	391
Figure 51: IE3E01 - Exemption Cessation.....	395
Figure 52: IE3E04 - Exceedance of Union annual threshold notification.....	401
Figure 53: IE3A01 - Details of provisions.....	403
Figure 54: IE3C01 - Error message.....	409
Figure 55: Functional requirements of the SME special scheme.....	422
Figure 56: Non-functional requirements of the SME special scheme.....	440
Figure 57: Electronic interface – Log in.....	449
Figure 58: Electronic interface – Activity selection.....	450
Figure 59: Electronic interface – Prior Notification.....	451
Figure 60: Electronic interface – Prior Notification – Prior Notification submission confirmation.....	454

Figure 61: Electronic interface – Update to Prior Notification – Adding or ceasing Member State(s) of exemption	455
Figure 62: Electronic interface – Update to Prior Notification – Adding or ceasing Member State(s) of exemption – Update to Prior Notification submission confirmation	458
Figure 63: Electronic interface – Update to Prior Notification – Identity information change	459
Figure 64: Electronic interface – Update to Prior Notification – Identity information change - Prior Notification submission confirmation	461
Figure 65: Electronic interface – Update to Prior Notification - Request exclusion	461
Figure 66: Electronic interface – Update to Prior Notification - Exclusion from the SME special scheme – confirmation	462
Figure 67: Electronic interface – Update to a Prior Notification - Exclusion request submission confirmation	463
Figure 68: Electronic interface – Union annual threshold exceedance	464
Figure 69: Electronic interface – Union annual threshold exceedance information submitted	466
Figure 70: Electronic interface – Quarterly report	467
Figure 71: Electronic interface – Quarterly report summary	470
Figure 72: Electronic interface – Quarterly report submission confirmation	471
Figure 73: Association between the functional requirements and core business functions	473

1 INTRODUCTION

1.1 DOCUMENT PURPOSE

This document is the functional specifications for the Special Scheme for Small Enterprises (SME) defined in [A03]. From a business perspective the amended VAT scheme for small enterprises:

- Opens the VAT exemption to eligible SMEs not established in the MS where VAT is due;
- Provides exempt SMEs with simplifications in terms of registration and reporting;
- Enables MS to set their annual turnover threshold to exempt supplies by SMEs using the scheme at a maximum of EUR 85.000;
- Sets a Union annual turnover threshold at EUR 100.000 as a safeguard for the cross-border application of the special scheme (that is in MS where the SME is not established).

1.2 TARGET AUDIENCE

The target audience for this document includes:

- DG TAXUD/B4 (Taxation system & digital governance);
- DG TAXUD/C1 (Value added tax);
- Member States' Administrations (MSAs);
- SOFTDEV;
- QA.

1.3 STRUCTURE

This document is organised as follows:

- **Chapter 1 – Introduction:** the section describes the scope and the objectives of the document.
- **Chapter 2 – Context:** the section describes the SME special scheme overview and the legal base used in this document.
- **Chapter 3 - Business processes:** the section lists and depicts all the SME special scheme business processes.
- **Chapter 4 - Functional model:** the section depicts the SME special scheme functional model at the level of information exchanges between the main stakeholders.
- **Chapter 5 - Logical data model:** the section defines the logical data models of the SME special scheme.
- **Chapter 6 - Functional message specifications:** the section defines the information exchanges used between the Member States at business level.
- **Chapter 7 - Functional requirements:** the section lists all functional requirements of the SME special scheme and coverage of the main business functions with those functional requirements.
- **Chapter 8 - Non-functional requirements:** the section lists all non-functional requirements of the SME special scheme.

- **Chapter 9 - National application guidelines** – The section contains the proposed national guidelines for communication with the taxable person and the electronic interface simulation.
- **Chapter 10 - Appendices** – the section lists the functional and non-functional requirements and the territorial scope.

1.4 REFERENCE DOCUMENTS

Ref.	Title	Version	Date
R1	Project Charter – Special Scheme for Small Enterprises	1.0	19/11/2021
R02	Validation Module Core – Functional Specifications	SOFT-DEV	N/A

1.5 APPLICABLE DOCUMENTS

The table below lists the documents that are referred to in the current document.

Ref.	Title	Reference	Version	Date
A01	COUNCIL DIRECTIVE 2006/112/EC https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32006L0112		N/A	28/11/2006
A02	COUNCIL REGULATION (EU) No 904/2010 https://eur-lex.europa.eu/eli/reg/2010/904/oj		N/A	07/10/2010
A03	COUNCIL DIRECTIVE (EU) 2020/285 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020L0285		N/A	18/02/2020
A04	COMMISSION IMPLEMENTING REGULATION (EU) 2021/2007 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32021R2007		N/A	16/11/2021
A5	COUNCIL DIRECTIVE (EU) 2022/542 https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32022L0542&from=EN		N/A	05/04/2022

Table 1: Applicable documents

1.6 ABBREVIATIONS & ACRONYMS

For a better understanding of the present document, the TEMPO provides a list of the principal abbreviations and acronyms used. See the ‘list of acronyms’ on TEMPO, available at following location:

<https://webgate.ec.europa.eu/fpfis/wikis/display/TEMPO/List+of+Acronyms>

Abbreviation/Acronym	Definition
Art.	Article
BPMN	Business Process Model and Notation
CCN	Common Communication Network
DG TAXUD	Directorate-General Taxation and Customs Union
MS	Member State
MSEST	MS of Establishment

Abbreviation/Acronym	Definition
MSEXE	MS of Exemption
SCAC	Standing Committee on Administrative Cooperation
SME	Small Enterprises within the meaning of Title XII, Chapter 1, Section 2, of Directive 2006/112/EC
VAT	Value Added Tax

Table 2: Abbreviations and acronyms

1.7 DEFINITIONS

For a better understanding of the present document, the TEMPO provides a list of the principal terms used. See the ‘glossary’ on TEMPO, available at following location:

<https://webgate.ec.europa.eu/fpfis/wikis/display/TEMP/O/Glossary>

Term	Definition
Special Scheme	Special scheme means the special scheme of exemptions for small enterprises provided for in Title XII, Chapter 1, Section 2, of Directive 2006/112/EC.
Member State of exemption	Member State of exemption means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.
Member State of establishment	Member State of establishment means the Member State in which the taxable person availing itself of the special scheme is established.
Member State annual turnover	Member State annual turnover means the total annual value of supplies of goods and services, exclusive of VAT, made by a taxable person within that Member State during a calendar year.
Union annual turnover	Union annual turnover means the total annual value of supplies of goods and services, exclusive of VAT, made by a taxable person within the territory of the Community during a calendar year.
Partially covered by the VM	In the context of message validation, information included in the so-called message as well as external information (i.e. information stored in the MS database) may be needed for performing checks. The SME Validation Module (SME VM) provided by DG TAXUD can only validate message against rules by only using the information included in the so-called message. Rules using external information are not considered in the SME VM. In some cases, a rule can be partially covered by the VM in the sense that the rule will only use the information of the so-called message to perform a sub-set of checks. Access to MS database will be necessary to perform the full set of checks.
Quarantine period	This period is either the prohibition period mentioned in Article 288a(1) of Directive 2006/112/EC or, for a taxable person not established in the Member State granting the exemption, the one year period starting from the time the Union annual turnover threshold was

Term	Definition
	exceeded.
Working days	According to the Regulation (EEC, Euratom) No 1182/71, 'working days' means all days, other than public holidays, Sundays and Saturdays.

Table 3: Definitions

2 CONTEXT

The main aim of the SME project is to define and implement the required cross-border processes with the related information that is to be exchanged between the Member States to enable the correct application and monitoring of the VAT SME special scheme. The information between the Member States will be exchanged in a uniform manner based on the adopted Commission Implementing Regulation providing technical details including common electronic message definitions.

It will be up to each Member State to regulate and implement the technical details on its relationship with established taxable persons.

The SME system will be implemented as a distributed Trans-European System (TES). This implies a segregation of implementation responsibilities according to the following schema:

- External Domain – this domain covers the processes and services which are to be set-up between the SME and the National Administrations (more specifically the Member State of Establishment).
- National Domain - national tax administrations of Member States are responsible for the implementation of the national processes as Member State of establishment and as Member State granting SME exemptions (or Member States other than the MS of establishment) and of the information exchanges with the other National Administrations.
- Common Domain – this domain covers the agreed exchanges between the National Administrations. These exchanges are formalised by the Common Domain Functional and Technical System Specifications.

2.1 OVERVIEW

Council Directive 2006/112/EC allows Member States to continue to apply their special schemes to small enterprises (SME). However, those provisions are outdated and do not reduce the compliance burden of small enterprises, as they were designed for a common system of value added tax (VAT) based on taxation in the Member State of origin. The special scheme for small enterprises currently only allows for an exemption to be granted to enterprises established in the Member State in which the VAT is due.

As part of the Commission action plan on VAT and more specifically the part that announced a comprehensive simplification package for small enterprises, Council Directive (EU) 2020/285 of 18 February 2020 [R3] amends Directive 2006/112/EC on the common system of value added tax as regards the special scheme for small enterprises (Title XII, Chapter 1) and Regulation (EU) No 904/2010 as regards the administrative cooperation and exchange of information for the purpose of monitoring the correct application of the special scheme for small enterprises.

The Commission Implementing Regulation (EU) 2021/2007 from 16/11/2021 laying down detailed rules for the application of Council Regulation (EU) No 904/2010 as regards the special scheme for small enterprises has been adopted following the positive opinion from the SCAC via written procedure ended on 27 October 2021.

The Council Directive (EU) 2022/542 of 5 April 2022 has amended Directives 2006/112/EC and (EU) 2020/285 as regards rates of value added tax.

The SME system will implement the required business functionality to provide the envisaged simplifications for SMEs but as well to ensure the proper functioning and monitoring of the granted exemption.

2.2 LEGAL BASE

This section reviews the legal basis and mentions the main points of relevance to the specifications.

2.2.1 Council Directive 2006/112/EC

“Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax”

This Directive is the base Council Directive governing the common system of VAT in the Community. It defines the original special scheme for small enterprises designed for a common system of value added tax (VAT) based on taxation in the Member State of origin. It has been amended by Council Directive (EU) 2020/285/EC. The new special scheme for small enterprises will apply as of 1 January 2025.

2.2.2 Council Regulation (EU) No 904/2010

“Council Regulation (EU) No 904/2010 of 7 October 2010 on administrative cooperation and combating fraud in the field of value added tax (recast)”

This Regulation sets the rules on administrative cooperation and combating fraud in the field of value added tax. It has been amended by Council Directive (EU) 2020/285/EC as regards the administrative cooperation and exchange of information for the purpose of monitoring the correct application of the special scheme for small enterprises. The new rules on the special scheme for small enterprises will apply as of 1 January 2025.

Chapter V of this regulation provides the legal base for the storage and exchange of specific information.

Article 17 defines the information Member States shall store in an electronic system.

Article 21 requires the MEST to provide automated access to all other MS to at least certain information it collects under the special scheme of SME.

Article 31 requires each Member State to provide confirmation by electronic means that the taxable person to whom the individual identification number referred to in Article 284(3) of Directive 2006/112/EC has been issued is an exempt small enterprise. The confirmation shall specify the Member State or Member States in which the taxable person avails itself of the exemption.

Article 32 requires the Commission to publish on its website the details of the provisions approved by each Member State.

Articles 37a and 37b lay down rules on the information to be exchanged between Member States concerning the special scheme for small enterprises.

2.2.3 Council Directive 2020/285

“Council Directive (EU) 2020/285 of 28 November 2020 amending Directive 2006/112/EC on the common system of value added tax as regards the special scheme for small enterprises and Regulation (EU) No 904/2010 as regards the administrative cooperation and exchange of information for the purpose of monitoring the correct application of the special scheme for small enterprises”

This Directive includes the amendments that have been made to the special scheme for small enterprises as this was initially defined in the 2006/112/EC Directive on the common system of value added tax and, in the Regulation, (EU) No 904/2010, as regards the administrative cooperation and exchange of information for the purpose of monitoring the correct application of the special scheme for small enterprises.

2.2.4 Commission Implementing Regulation (EU) 2021/2007

“Commission Implementing Regulation (EU) 2021/2007 of 16 November 2021 laying down detailed rules for the application of Council Regulation (EU) No 904/2010 as regards the special scheme for small enterprises”

The Implementing Regulation defines practical arrangements concerning the storage, the automated enquiry and the transmission of information relating to the special scheme for small enterprises, including common electronic messages.

Article 2 defines functionalities of the electronic interface in Member State of establishment, by which a taxable person may be required to submit a prior notification, any update to that notification and to report the value of supplies for the use of the special scheme in another Member State.

Article 3 defines the practical details and specifications of the automated exchange of information pursuant to Articles 17 and 21(2b) of Regulation (EU) No 904/2010.

Article 4 defines the transmission of information between Member State of establishment and Member State of the exemption (bidirectional).

2.2.5 Council Directive (EU) 2022/542

“Council Directive (EU) 2022/542 of 5 April 2022 amending Directives 2006/112/EC and (EU) 2020/285 as regards rates of value added tax”

The Council Directive modernises and updates the rules on rates of value added tax, amending the Directive 2006/112/EC to allow the application of reduced rates for specific social policy objectives, to ensure clarity, and to consider the neutrality principle, namely, by ensuring the same treatment, in terms of VAT rates, for the renting or leasing and the supply of certain goods and amending Article 288 of Directive (EU) 2020/285.

3 BUSINESS PROCESSES

The section defines the involved stakeholders and the core business functions of the SME special scheme and the related business processes.

3.1 ORGANISATIONAL STRUCTURE

This section defines the organisational structure of the stakeholders involved in the SME special scheme.

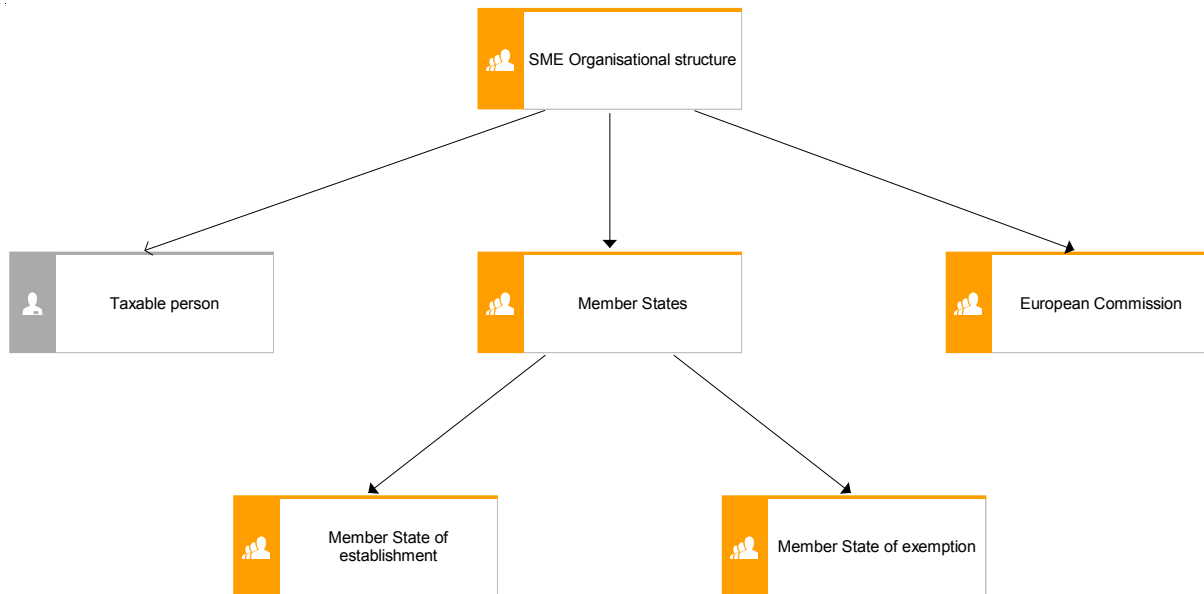


Figure 1: Organisational structure of the involved SME stakeholders

3.1.1 Model maintained properties

Model Property	Property Value
Name	Organisational structure
Identifier	MCC.2953740
Type	Organisational chart

Table 4: Maintained Properties of the model

3.1.2 Object maintained properties

Name	Description/Definition	Identifier
European Commission	The European Commission is the executive branch of the European Union. It is responsible for publication of the SME special scheme and Special scheme for cash accounting provisions details on the Commission web site for each	MCC.2953803

Name	Description/Definition	Identifier
	Member State.	
Member State of establishment	Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2953781
Member State of exemption	Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2953805
Member States	Member State means any Member State of the European Union. Norther Ireland (NI) is not a Member State, but can act as a Member State in the context of the SME special scheme (i.e. it can assume both the MSEST and MSEXE roles).	MCC.2953780
SME Organisational structure	Organisational structure of the SME special scheme defines the involved stakeholders.	MCC.2953760
Taxable person	The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails or wants to avail itself of exemption in Member State other than the Member State of Establishment.	MCC.2953801

Table 5: Maintained Properties of the objects

3.2 CORE BUSINESS FUNCTIONS OF THE SME SPECIAL SCHEME.

The core business functions of the SME special scheme are depicted at the following figure.

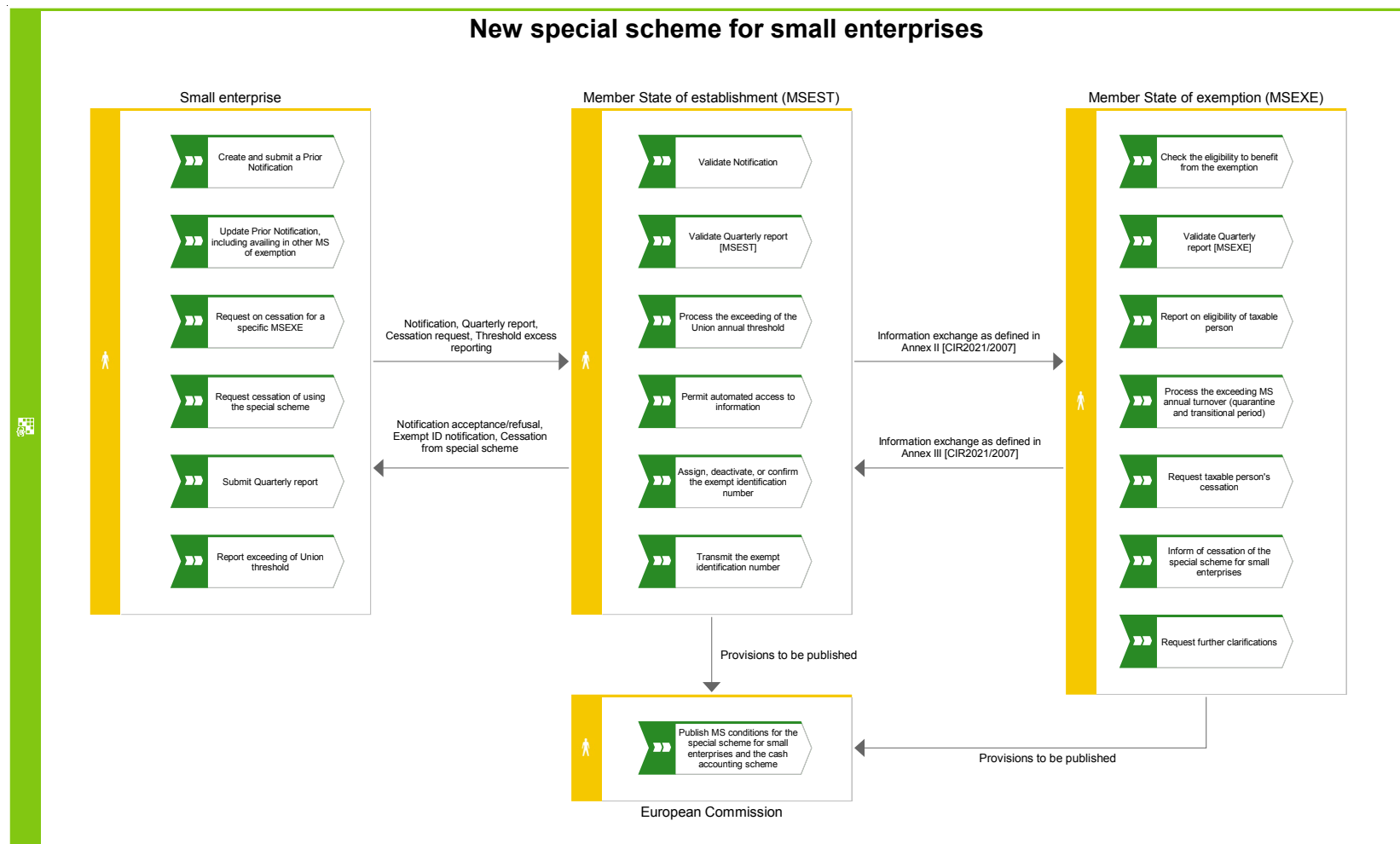


Figure 2: Core business functions of the SME special scheme

3.2.1 Model maintained properties

Model Property	Property Value
Name	Core business functions of the special scheme
Identifier	MCC.2900700
Type	ArchiMate Service Realization Viewpoint

Table 6: Maintained Properties of the model

3.2.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference
Assign, deactivate, or confirm the exempt identification number	The MS of establishment must assign the taxable person with a unique exempt identification number for identification within the special scheme. If the taxable person is ceased from using the special scheme, that exempt identification number must be deactivated. In case the taxable person wishes to apply for the special scheme again, he will be assigned by the same number. In addition, the MS of establishment shall confirm to the taxable person its (already assigned) exempt identification number after an update to a prior notification.	MCC.2900720	Articles 284 (3)(5) and 284e [DIR2020/285]
Check the eligibility to benefit from the exemption	The MS of exemption is responsible for validation of the taxable person's eligibility to benefit of the exemption in that MS of exemption. MSs may exempt the supply of goods and services made within their territory by taxable persons who are not established in that territory and whose MS annual turnover, attributable to such supplies, does not exceed the threshold fixed by those MS for the application of this exemption. That threshold shall be no higher than EUR 85.000 or the equivalent in national currency. MSs may fix varying thresholds for different business sectors based on objective criteria. However, none of those thresholds shall exceed the threshold of EUR 85.000 or the equivalent in national currency. MSs shall ensure that a taxable person eligible to benefit from more than one	MCC.2900740	Articles 284 (1) and 288a (1) [DIR2020/285]

Name	Description/Definition	Identifier	Legal Reference
	sectoral threshold can only use one of those thresholds. Thresholds set by a Member State shall not differentiate between taxable persons who are established and those who are not established in that MS. A taxable person, whether or not established in the MS granting the exemption, shall not be able to benefit from that exemption during a period of one calendar year where the threshold was exceeded in the preceding calendar year. The MS granting the exemption may extend this period to two calendar years.		
Create and submit a Prior Notification	Taxable persons who want to avail themselves of the exemption in a Member State in which they are not established shall be required to give Prior Notification to the Member State in which they are established. The Prior Notification shall contain at least the following information: * the name, activity, legal form, and address of the taxable person; * the Member State or Member States in which the taxable person intends to avail itself of the exemption; * the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is established and in each of the other Member States during the preceding calendar year; * the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is established and in each of the other Member States during the current calendar year prior to the Notification; * whether the taxable person is already registered in another MS of establishment; * whether the taxable person is registered in the OSS Union scheme and, if yes, its OSS number.	MCC.2900760	Article 284 (3) letter a), Article 284a (1) , Article 284c (1), and Article 288 [DIR2020/285]

Name	Description/Definition	Identifier	Legal Reference
	The value of supplies to be reported only consists of the amounts listed in Article 288 of Directive 2020/285.		
Inform of cessation of the special scheme for small enterprises	The MS of exemption shall inform the MS of establishment of the cessation of the application of the special scheme for small enterprises in the Member State granting the exemption. The information to be transmitted by the MS of exemption to the MS of establishment shall be transmitted by electronic means without delay. The information also contains the date on which the special scheme for small enterprises has ceased to apply in that Member State.	MCC.2900780	Article 284e(b) [DIR2020/285] and Article 4(3) letter c) and ANNEX III (3) [CIR2021/2007]
New special scheme for small enterprises	The updated special scheme for small enterprises allows the small enterprises established in Member States other than that in which the VAT is due to benefit from the exemption under the same conditions as the small enterprises established in the Member State.	MCC.2900920	Title XII Chapter 1, Section 2 [DIR2006/112]
Permit automated access to information	The MS of establishment shall store all the information needed for using the special scheme pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The MS of exemption is permitted to automatically access a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The information to be stored by the MS of establishment whose automated access can be granted is the following: * the individual number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to	MCC.2900800	Article 3 [CIR2021/2007]

Name	Description/Definition	Identifier	Legal Reference
	establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Prior Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect;		

Name	Description/Definition	Identifier	Legal Reference
	* the date on which the activities of the taxable person have ceased and the MSs concerned.		
Process the exceeding MS annual turnover (quarantine and transitional period)	A taxable person, whether or not established in the MS granting the exemption, shall not be able to benefit from that exemption during a period of one calendar year where the threshold was exceeded in the preceding calendar year. The MS granting the exemption may extend this period to two calendar years. Where, during a calendar year, the threshold is exceeded by: * not more than 10 %, a taxable person shall be able to continue to benefit from the exemption during that calendar year; * more than 10 %, the exemption shall cease to apply as of that time. The MSs may set a ceiling of 25 % or allow the taxable person to continue to benefit from the exemption without any ceiling during the calendar year when the threshold is exceeded. However, the application of this ceiling or option may not result in exempting a taxable person whose turnover within the MS granting the exemption exceeds EUR 100.000. The MSs may determine that the exemption shall cease to apply as of the time when the threshold is exceeded. Note: it is on decision of the MS of the exemption whether it will apply the ceiling or not.	MCC.2900829	Article 288a (1) [DIR2020/285]
Process the exceeding of the Union annual threshold	A taxable person not established in the MS granting the exemption shall not be able to benefit from that exemption, where the Union annual turnover threshold was exceeded in the preceding calendar year. Where, during a calendar year, the Union annual turnover threshold is exceeded, the exemption granted to a taxable person not established in the MS granting that exemption shall cease to apply	MCC.2900827	Article 288a (2) [DIR2020/285]

Name	Description/Definition	Identifier	Legal Reference
	as of that time.		
Publish MS conditions for the special scheme for small enterprises and the cash accounting scheme	The Commission shall, on the basis of the information provided by the MS, publish on its website the details of the provisions approved by each MS which transpose the special scheme for small enterprises and the Special scheme for cash accounting.	MCC.2900832	Article 32 paragraph 1 [REG2010/904] and Annex I [CIR2021/2007]
Report exceeding of Union threshold	When the Union annual turnover threshold is exceeded, the taxable person shall inform the MS of establishment within 15 working days of that fact. At the same time, the taxable person shall be required to report the total value of supplies that have been made from the beginning of the current calendar quarter in the MS of establishment and in any Member State other than the MS of establishment up until the date the Union annual threshold was exceeded.	MCC.2900824	Article 284b (3) [DIR2020/285]
Report on eligibility of taxable person	The Member State granting the exemption shall, within 15 working days after receiving the information referred to in point (a) of Article 37a(1) of Regulation, confirm by electronic means to the competent authorities of the Member State of establishment, based on the total values of supplies reported by the taxable person, that the annual turnover threshold referred to in point (b) of Article 284(2) of Directive 2006/112/EC was not exceeded during the current calendar year and that the conditions referred to in Article 288a(1) of that Directive are fulfilled.	MCC.2900830	Article 37b (2) [DIR 2020/285]
Request cessation of using the special scheme	The taxable person may decide to voluntarily leave the special scheme in Member State(s) in which it is not established. In this case the taxable person has to inform in advance the MS of establishment of his decision to cease using of the special scheme. The cessation will be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received	MCC.2900822	Article 284 (4) and 284e (c) [DIR2020/285]

Name	Description/Definition	Identifier	Legal Reference
	during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter.		
Request further clarifications	The MS of exemption may request the MS of establishment for additional clarification needed in view of the following information to be provided: * information as to whether or not the annual turnover threshold applicable in that MS for the exemption, referred to in Article 284(2), point (b), of Directive 2006/112/EC, in the current year is exceeded; * information as to whether the conditions referred to in Article 288a(1) of Directive 2006/112/EC are fulfilled. The MS of exemption shall transmit the request to the competent authorities of the MS of establishment within 15 working days from the date, when the MS of exemption received from the MS of establishment a notification that either a Prior notification or an update to it is available in the MEST data store.	MCC.2915600	Article 4 (3), letter a) [CIR2021/2007]
Request on cessation for a specific MSEX	The taxable person is allowed to cease applying the exemption scheme in a Member State or Member States in which that taxable person is not established. In this case the taxable person has to inform in advance the MS of establishment of his decision to cease using of the special scheme in one or more Member State/s. The cessation will be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter.	MCC.2900821	Articles 284e (c) and 284 (4) [DIR2020/285]
Request taxable person's cessation	The MS granting the exemption shall, without delay, notify by electronic means the competent authorities of the MS of establishment of the date on which the	MCC.2900831	Article 37b (3) [DIR2020/285]

Name	Description/Definition	Identifier	Legal Reference
	taxable person has ceased to be eligible for the exemption.		
Submit Quarterly report	A taxable person benefiting from the exemption in MS of exemption, in which that person is not established, shall report for each calendar quarter to the MS of establishment the following information including the exempt individual identification number: * the total value of supplies carried out during the calendar quarter in the MS of establishment or “0” if no supplies have been made; * the total value of supplies carried out during the calendar quarter in each of the MSs other than the MS of establishment or “0” if no supplies have been made. The taxable person shall communicate the information within one month from the end of the calendar quarter. Where the Member State of exemption applies varying thresholds as referred to in the second subparagraph of Article 284(1), the taxable person shall be obliged in respect of that MS to report separately the total value of supplies of goods and/or services as regards each threshold that may be applicable. The value of supplies to be reported only consists of the amounts listed in Article 288 of Directive 2020/285.	MCC.2900823	Article 284b (1) and (2), Article 284c (1), Article 284c (1) letter c), and Article 288 [DIR2020/285]
Transmit the exempt identification number	To inform the Member State concerned of a taxable person’s intention to avail itself of the exemption in that Member State, the MS of establishment shall transmit to the MS of exemption the exempt individual identification number assigned to that taxable person (e.g. if it is an update to a prior notification) or, if not yet available, any other number for the purpose of the identification. After having received a confirmation from the MS of exemption that the taxable person is eligible for the exemption and after having notified the taxable person with his	MCC.2915620	Article 4 (2) letters a) and b) [CIR2021/2007]

Name	Description/Definition	Identifier	Legal Reference
	individual identification number or confirmed the number to the taxable person, the MS of establishment shall transmit to the MS of exemption the individual identification number assigned to that taxable person referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 and the date of commencement of the exemption in respect of the taxable person in a Member State or Member States. This notification has to be made within 15 working days from the date on which the information becomes available.		
Update Prior Notification, including availing in other MS of exemption	The taxable person shall inform the Member State of establishment in advance, by means of an update to a Prior Notification, of any changes to the information previously provided, including the intention to avail itself of the exemption in a Member State or Member States other than the ones indicated in the Prior Notification and the decision to cease applying the exemption scheme in a Member State or Member States in which that taxable person is not established. The taxable person is allowed to update any information in the Prior Notification, except the exempt identification number issued by the MS of establishment. Where the taxable person informs the Member State of establishment with an update to a prior notification that it intends to avail itself of the exemption in a Member State or Member States other than the ones indicated in the prior notification, that person is not obliged to provide the information already included in quarterly reports previously submitted. The update to a prior notification shall include the exempt individual identification number.	MCC.2900820	Article 284 (4) Article 284a (2), second paragraph [DIR2020/285]
Validate Notification	The MS of establishment is responsible for the validation of the Prior Notification or of an update to it as regards the Union annual turnover. The MS of establishment shall, before identifying the taxable person or confirming	MCC.2900826	Article 284a (1), Article 284c (1), Article 288, Article 288a (1), 37b (1)

Name	Description/Definition	Identifier	Legal Reference
	the exempt individual identification number to the taxable person, calculate on the basis of the total values of supplies reported by the taxable person, that the Union annual turnover threshold was not exceeded during the current or the previous calendar year. The Notification shall contain at least the following information: * the name, activity, legal form, and address of the taxable person; * the Member State or Member States in which the taxable person intends to avail itself of the exemption; * the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is established and in each of the other Member States during the preceding calendar year; * the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is established and in each of the other Member States during the current calendar year prior to the Notification. A taxable person not established in the MS granting the exemption shall not be able to benefit from that exemption, where the Union annual turnover threshold was exceeded in the preceding calendar year. Where, during a calendar year, the Union annual turnover threshold is exceeded, the exemption granted to a taxable person not established in the MS granting that exemption shall cease to apply as of that time. The value of supplies to be reported only consists of the amounts listed in Article 288 of Directive 2020/285.		[DIR2020/285]
Validate Quarterly report [MSEST]	The MS of establishment validates if, on the basis of the supplies of goods and/or services reported by the taxable person on a quarterly basis, the Union annual turnover of the taxable person does not exceed the Union	MCC.2900828	Articles 284b (1) and (2), Article 284c (1), points (a), (b) and

Name	Description/Definition	Identifier	Legal Reference
	annual threshold. The taxable person shall report for each calendar quarter to the MS of establishment the following information, including the exempt individual identification number: * the total value of supplies carried out during the calendar quarter in the MS of establishment or “0” if no supplies have been made; * the total value of supplies carried out during the calendar quarter in each of the MSs other than the MS of establishment or “0” if no supplies have been made. Where the Member State granting the exemption applies different thresholds, the taxable person shall be required to report separately the total value of the supplies of goods and / or services in respect of each threshold that may be applicable. The taxable person shall communicate the information within one month from the end of the calendar quarter. The values shall be denominated in euro. Member States which have not adopted the euro may require the values to be expressed in their national currencies. The value of supplies to be reported only consists of the amounts listed in Article 288 of Directive 2020/285.		(c), and Article 288 [DIR2020/285]
Validate Quarterly report [MSEXE]	The MS of exemption is obliged to notify the MS of establishment if, on the basis of the supplies of goods and/or services, reported by the taxable person on quarterly basis, the annual turnover of the taxable person exceeds the MS annual threshold. The MS of exemption can periodically access the information of the quarterly report through automatic exchange of information. A taxable person availing itself of the exemption in a MS in which that person is not established, shall report for each calendar quarter to the MS of establishment the	MCC.2900825	Articles 284b (1)(a) and (1) (b), Article 284c (1) (c), and Article 21 (2b) points (f) and (g) and Article 37b(3) [DIR2020/285]

Name	Description/Definition	Identifier	Legal Reference
	following information, including the exempt individual identification number * the total value of supplies carried out during the calendar quarter in the MS of establishment or “0” if no supplies have been made; * the total value of supplies carried out during the calendar quarter in each of the MSs other than the MS of establishment or “0” if no supplies have been made. Where the Member State granting the exemption applies different thresholds, the taxable person shall be required to report separately the total value of the supplies of goods and / or services in respect of each threshold that may be applicable. The taxable person shall communicate the information within one month from the end of the calendar quarter.		
European Commission	The European Commission is the executive branch of the European Union.	MCC.2901380	
Member State of establishment (MSEST)	Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2901200	Article 1 (3) [CIR2021/2007]
Member State of exemption (MSEXE)	Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2901260	Article 1 (2) [CIR2021/2007]
Small enterprise	The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails or wants to avail itself of exemption in Member State other than the Member State of Establishment.	MCC.2901280	

Table 7: Maintained Properties of the objects

3.3 NOTIFICATION BUSINESS PROCESSES

The section contains all the business processes related to the elaboration and processing of the Prior Notification and update of the Prior Notification.

3.3.1 Notification business process

The process describes the submission and processing of the Prior Notification. The process also covers the intention of the taxable person to avail itself of the exemption in a Member State or Member States other than the ones indicated in the prior notification.

3.3.1.1 Notification main business process

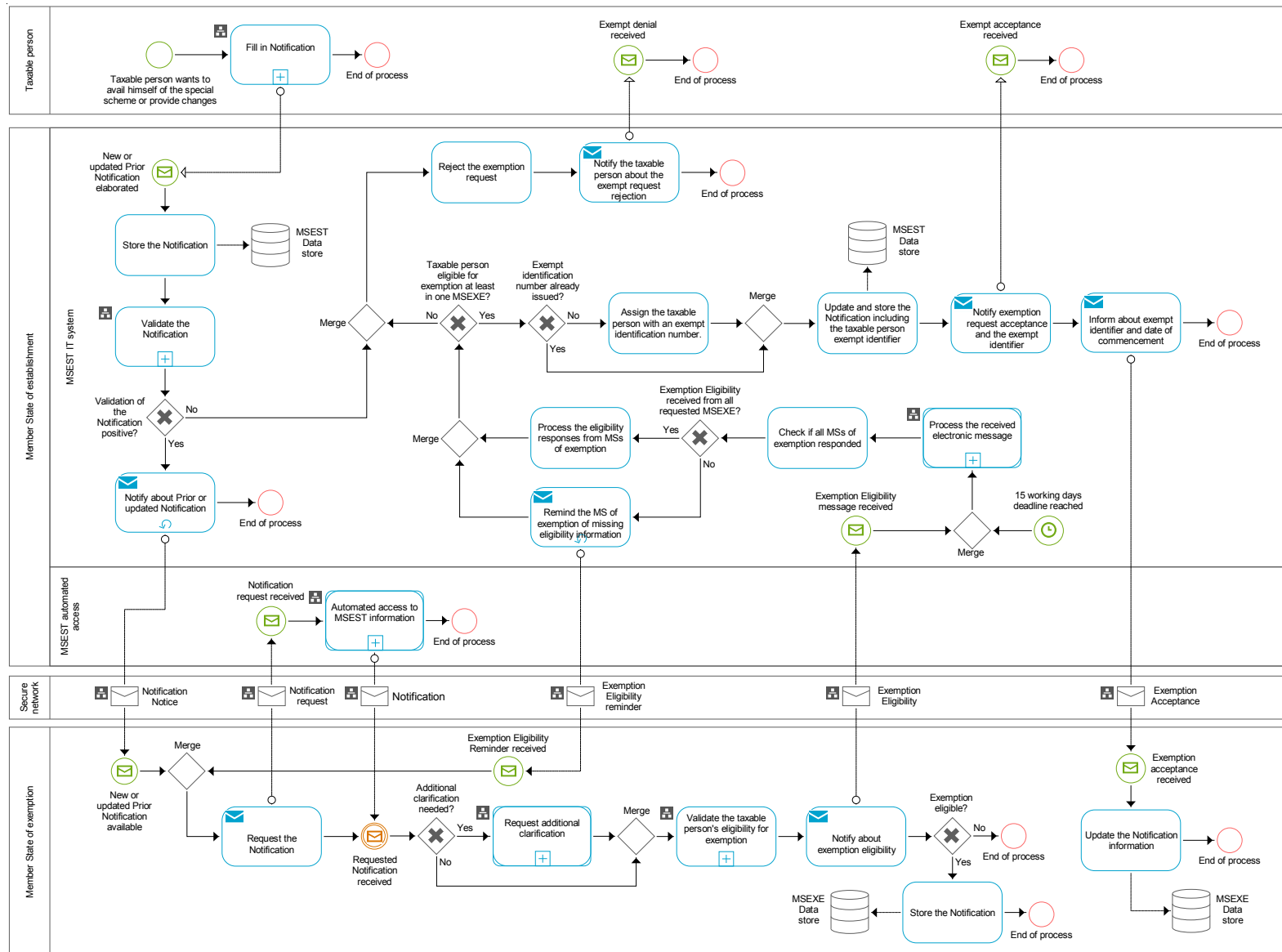


Figure 3: Notification main business process

3.3.1.1.1 Model maintained properties

Model Property	Property Value
Name	Notification
Identifier	MCC.2902820
Description/Definition	The process describes the submission and processing of the Prior Notification. The process also covers the intention of the taxable person to avail itself of the exemption in a Member State or Member States other than the ones indicated in the prior notification.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 8: Maintained Properties of the model

3.3.1.1.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
Taxable person		The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140			Pool
Taxable person wants to avail himself of the special scheme or provide changes		The taxable person wants to avail himself of the special scheme of exemption for small enterprises in a Member State other than his MEST, or update an existing Notification.	MCC.2903240			Start event
Fill in Notification		The sub-process defines the way how the taxable person avails itself of the VAT exemption in the Member State in which the taxable person is not established. The sub-process covers the following activities:	MCC.2903440		Article 284 (3) and (4) [DIR2020/285], Article 2 [CIR	Subprocess (collapsed)

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		* elaboration of a Prior Notification; * update of an existing Notification. The taxable person can decide to store the semi-finished Notification for later, without immediate submission.			2021/2007]	
End of process		The process stops at this point.	MCC.2904760			End event
Exempt denial received		The taxable person is notified about the denial of his request to avail himself of the special scheme. If the rejected Notification was an update of existing Notification, the taxable person may submit a new update. If the rejected Notification was a Prior Notification, the taxable person may send a new Prior Notification (not an update).	MCC.2902980			Message start event
End of process		The process stops at this point.	MCC.2904760			End event
Exempt acceptance received		The taxable person is notified about the acceptance of the request to avail himself of the special scheme. In case of a prior notification, the taxable person is informed of the exempt individual identification number by the Member State of establishment; in case of an update to a prior notification, the exempt identification number is confirmed to the taxable person in consequence of his update by the Member State of establishment.	MCC.2902960			Message start event
End of process		The process stops at this point.	MCC.2904760			End event

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
Member State of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860		Article 1 (3) [CIR2021/2007]	Pool
MSEST IT system		The MSEST IT system represents the information system of the MS of establishment, which performs the automatic activities related to special scheme for small enterprises.	MCC.2903020			Lane
New or updated Prior Notification elaborated		The taxable person filled in and submitted a new or updated Prior Notification.	MCC.2903180			Message start event
Store the Notification		The MS of establishment stores the information included in the Notification, elaborated, or updated by the taxable person. That information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information will be stored in data store of the MS of establishment, it will be ready for an automated access.			Article 3 [CIR2021/2007] and Articles 17(1) letter (g) and 21(2b) [DIR2020/285]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following:	MCC.2902100	Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3		Data store

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		* the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant,		[CIR2021/2007]		

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person’s OSS number.				
Validate the Notification		The sub-process describes the validation of the Notification at the MS of establishment side. The MS of establishment has maximum 15 working days to perform these activities since within 15 working days from the notification, it has to	MCC.2983100			Subprocess (collapsed)

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		notify the MS of exemption. The following validations are performed: * semantic validation; * syntactic validation; * excess of the Union annual threshold; * multiple registrations of the taxable person for the special scheme. In case some of the validations are violated, the overall result from the validation will be negative and the taxable person will be notified. However, the form and means of the notification is a national matter.				
Validation of the Notification positive?		The gateway splits the business flow based on whether the validation of the Notification was successful or not.	MCC.2904700			Exclusive gateway
Notify about Prior or updated Notification		The MS of establishment notifies the MS of exemption of a Prior or updated Notification. The notification is represented by the Notification Notice electronic message. The electronic message is submitted to all MSs of exemption, which are listed in the Notification (MSs of exemption in which the taxable person wants to avail itself of the exemption). In case of a Prior Notification, the electronic message contains the taxable person's identifier (e.g. VAT number of the taxable person or any other number for purpose of the identification of the taxable person in internal taxation system). If	MCC.2903580		Article 4 (2) [CIR2021/2007]	Send task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		the Notification is an update of the previously submitted and approved (Prior) Notification, the electronic message contains the taxable person's exempt identification number, assigned to taxable person by the MS of establishment for the purposes of the special scheme. The electronic message contains only one of the above-mentioned identifiers. The rest of the information will be accessible to MS of exemption via automated access to MEST information. The notification has to be transmitted to MS of exemption within 15 working days from the date when the information becomes available, pursuant to Article 37a(1) of Regulation (EU) No 904/2010.				
End of process		The process stops at this point.	MCC.2904760			End event
Exemption Eligibility message received		The MS of establishment received the Exemption Eligibility message.	MCC.3014260			Message start event
15 working days deadline reached		The 15 working days from the time, when the MS of establishment informed the MS of exemption about presence of a Prior Notification or an update to it has passed.	MCC.2939740			Timer start event
Merge		The gateway merges the incoming business flows.	MCC.2904620			Gateway
Process the received electronic message		The sub-process depicts the processing of the message, received by MS. The sub-process also covers the treatment of the received message in case of failed parsing.	MCC.2903700			Call activity (collapsed)

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
Check if all MSs of exemption responded		The MS of exemption has 15 working days following the notification from the MS of establishment to inform the MS of establishment on the eligibility of the taxable person. The MS of establishment checks if it received the Exemption Eligibility message from all requested MSs of exemption. If some of the requested MSs of exemption did not respond within 15 working days, the MS of establishment will remind those MSs of exemption by sending a reminder message. For the overall approval of the taxable person's request to avail himself of the special scheme, at least one MS of exemption must approve the taxable person's eligibility to benefit of the exemption in its MS.	MCC.2929520		Article 37b (2) [DIR2020/285]	Task
Exemption Eligibility received from all requested MSEX?		The gateway splits the business flow into two parallel business flows based on whether the Exemption Eligibility message was received from all requested MSs of exemption within the 15 working days or not.	MCC.2904560			Exclusive gateway
Process the eligibility responses from MSs of exemption		The MS of establishment processes the Eligibility Exemption messages received from MS of exemption. The information will be used for acceptance or rejection of the notification submitted by the taxable person.	MCC.2903380		Article 37b (2) and Article 284 (5) [DIR2020/285]	Task
Remind the MS of exemption of missing		The MS of exemption has 15 working days following the notification from the MS of	MCC.2929360		Article 37b (2) and	Send task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
eligibility information		establishment to inform the MS of establishment on the eligibility of the taxable person. If the MS of establishment did not receive the Exemption Eligibility messages from some MSs of exemption within those 15 working days, the MS of establishment reminds those MSs of exemption by sending a reminder message. The MS of establishment gives the MS of exemption some days (e.g., two working days) to reply. In absence of a reply to the reminder, the silence of the MS of exemption will be taken by the MS of establishment as an agreement and the exemption will be granted.			Article 284 (5) [DIR2020/285]	
Merge		The gateway merges the incoming business flows.	MCC.2904620			Gateway
Taxable person eligible for exemption at least in one MSEXE?		The gateway splits the business flow based on whether the taxable person is eligible for the exemption at least in one MS of exemption.	MCC.2951240			Exclusive gateway
Merge		The gateway merges the incoming business flows.	MCC.2956800			Gateway
Reject the exemption request		The taxable person's request to avail himself of the special scheme was rejected. If the taxable person's request was rejected by the MS of establishment, the taxable person cannot benefit from the special scheme at all. If the taxable person's request was accepted by the MS of establishment but not by the MS of exemption (taxable person not eligible to benefit from the exemption in that specific MS of	MCC.2903760		Articles 284 (2) and 37b (1) and (2) [DIR2020/285]	Task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		exemption), the taxable person still can try to avail himself of the special scheme in other MS of exemption.				
Notify the taxable person about the exempt request rejection		The MS of establishment notifies the taxable person, that the request to avail himself of the special scheme was rejected. The notification should also inform about the reason of denial. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme.	MCC.2903660			Send task
End of process		The process stops at this point.	MCC.2904760			End event
Exempt identification number already issued?		The gateway splits the business flow based on whether the taxable person's exempt number was already issued by the MS of establishment and assigned to the taxable person or not.	MCC.2904460			Exclusive gateway
Assign the taxable person with an exempt identification number.		If the taxable person is approved to avail himself of the exemption for the first time, the MS of establishment will assign to the taxable person a unique exempt identification number to be used for the taxable person's identification within the special scheme. The exempt identification number will be concatenated from: * The code of the MS of establishment issuing the exempt identification number (issuedBy attribute); * The existing VAT identification number or the national Tax identification number of the taxable	MCC.2903300		Articles 284 (3) [DIR2020/285]	Task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		person or any other number for the purpose of the identification; * Hyphen (or minus) character “-”; * Suffix 'EX'.				
Merge		The gateway merges the incoming business flows.	MCC.2904620			Gateway
Update and store the Notification including the taxable person exempt identifier		The MS of establishment updates the data store with the approved changes and the taxable person's new exempt identifier (if applicable). If applicable, the data store will be also updated by the status of all MSs of exemption (the taxable person benefits from the exemption in the MS of exemption or not). That information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information will be stored in data store of the MS of establishment, it will be ready for an automated access.	MCC.2904060		Article 3 [CIR2021/2007]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS	MCC.2902100	Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article		Data store

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the		3 [CIR2021/2007]		

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person’s OSS number.				
Notify exemption request acceptance and the exempt identifier		The MS of establishment will notify the taxable person that the taxable person's request to avail himself of the special scheme was approved. At	MCC.2903620		Article 284 (5) [DIR2020/	Send task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		the same time, the taxable person will be notified about his new exempt identifier, which will be used in any other subsequent communication. In case that was an update to a Prior notification, the taxable person will receive a confirmation of its already assigned exempt identifier. The date of commencement of the exemption is the date of informing the taxable person of the exempt individual identification number by the MS of establishment or the date of confirming the number to the taxable person in consequence of his update. If the validation of an updated Notification results in a change of portfolio of MSs of exemption, where the taxable person benefited from the exemption or where he will benefit after the update of the Notification, the taxable person will be informed about that, too. The format and means of the notification are national matter.			285]	
Inform about exempt identifier and date of commencement		Within 15 working days from the date on which the information becomes available, after the taxable person was notified about his new exempt identification number, the MS of establishment will notify the MS of exemption(s) of the taxable person's exempt identification number and the date of commencement of the exemption in that MS(s) of exemption.	MCC.2903520		Article 37a(1), point (a) [DIR2020/285] and Article 4 (2) point (b) [CIR2021/2	Send task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
					007]	
End of process		The process stops at this point.	MCC.2904760			End event
MSEST automated access		The MSEST automated access is part of the MSEST information system, operated by the MS of establishment. The MSEST automated access provides the other MSs with the automated access to information. The information relates to registration details of the taxable person and the value of supplies of goods and/or services carried out by that taxable person.	MCC.2903040		Article 17(1)(g) and Article 21(2b) [REG2010/904] and Article 3 [CIR2021/2007]	Lane
Notification request received		The automated access to information of the MS of establishment received an information request.	MCC.2903100			Message start event
Automated access to MSEST information		The call activity depicts the activities performed by the automated access to MSEST information, which is operated by the MS of establishment. The information relates to the special scheme for small enterprises. The minimum information to be provided by the MS of establishment to the other MSs is specified in Article 21 (2b) [REG2010/904].	MCC.2903320		Article 3 [CIR2021/2007]	Call activity (collapsed)
End of process		The process stops at this point.	MCC.2904760			End event
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network	MCC.2901560		Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		or via an equivalent secure network or system.				
Member State of exemption		Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940		Article 1 (2) [CIR2021/2007]	Pool
New or updated Prior Notification available		The MS of exemption receives a notification that a new or updated Prior Notification is made available in the MS of establishment. In this occasion the MS of exemption is notified by the MS of establishment with the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 or, if not yet available, any other number for the purpose of the identification.	MCC.2903120			Message start event
Exemption Eligibility Reminder received		The MS of the exemption received from the MS of establishment a reminder to submit the Exemption Eligibility message. The part of the electronic message is also the taxable person's exempt identification number, issued by the MS of establishment, to identify that taxable person within the SME special scheme, or any other number for the purpose of the identification of the taxable person, if the exempt identification number is yet to be issued (e.g. prior notification).	MCC.2939362			Message start event
Merge		The gateway merges the incoming business flows.	MCC.2904620			Gateway

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
Request the Notification		The MS of exemption received a notification that a new or updated Prior Information is available in the MS of establishment. The MS of exemption prepares a request message requesting the Notification and sends the message to MS of establishment using the automated access to information. For the request of Prior Notification, the taxable person's VAT identification number or Taxation identification number is used, as referred in the Notification Notice. The reason is that at this point the taxable person's exempt identification number is not yet available. For the request related to an updated Notification, the taxable person's exempt identification number is used, issued by the MS of establishment for the purposes of the special scheme.	MCC.2903800		Article 3 [CIR2021/2007]	Send task
Requested Notification received		The MS of exemption received the requested Notification as a response on the Notification request message, transmitted by that MS of exemption in the previous step.	MCC.2903220			Message intermediate event (catch)
Additional clarification needed?		The gateway splits the business flow based on whether the MS of exemption needs some additional information for eligibility evaluation or not.	MCC.2949860			Exclusive gateway
Request additional clarification		If the MS of exemption does not have enough information for evaluation of the Notification, he requests the MS of establishment for additional clarification.	MCC.2950120		Article 4 (3) point (a) [CIR2021/2	Call activity (collapsed)

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
					007]	
Merge		The gateway merges the incoming business flows.	MCC.2950520			Gateway
Validate the taxable person's eligibility for exemption		The MS of exemption verifies if the taxable person is eligible to benefit from the exemption in that MS of exemption. MS of exemption can request additional clarification to MS of establishment if needed in view of the information to be provided. To be eligible to benefit from the exemption, the following conditions have to be fulfilled by the taxable person: * the supplies meet the criteria of the sectoral threshold, and they are not excluded from the special scheme in the MS of exemption; * the taxable person will use one sectoral threshold only; * the annual turnover threshold was not exceeded during the current, or the preceding, (or the year prior to preceding calendar year if required by the MS of exemption pursuant to Article 288a(1)).	MCC.2904160		Article 284 (1) [DIR2020/285], Article 283 (2) of VAT Directive, Article 288a (1) and Article 37b (2) [DIR2020/285]	Subprocess (collapsed)
Notify about exemption eligibility		Once the MS of exemption validated the taxable person's eligibility to benefit from the exemption in that MS of exemption, the latter informs the MS of establishment about the result of this validation (deadline: within 15 working days after receiving the notification from the MEST). Part of the information is the exempt identification number of the taxable person.	MCC.2903560		Article 37b (2) [DIR2020/285] and Article 4 (3) letter a) [CIR2021/2007]	Send task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
Exemption eligible?		The gateway splits the business flow based on whether the taxable person is eligible to benefit from the exemption in the MS of exemption or not.	MCC.2904540			Exclusive gateway
End of process		The process stops at this point.	MCC.2904760			End event
Store the Notification		If the taxable person is eligible to benefit from the exemption in the MS of exemption, the latter can store all the information from the Notification in his data store. The MS of exemption is not obliged to store the data, but it can be used for later reference. Note: in case of new Prior Notification, the taxable person's exempt identifier to be used in the special scheme has not been assigned yet and is still to be notified by the MS of establishment.	MCC.2903900			Task
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.	MCC.2935426			Data store
End of process		The process stops at this point.	MCC.2904760			End event
Exemption acceptance received		After the MS of establishment received a confirmation from the MS of exemption that the taxable person is eligible for the exemption and after the MS of establishment has notified the	MCC.2903000		Article 37a(1)point (a) [DIR2020/	Message start event

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		taxable person on its eligibility, the MS of establishment notifies within 15 working days from the date on which the information becomes available the MS of the exemption that the taxable person has started to benefit from the exemption in that MS of exemption. The part of the electronic message is also the taxable person's exempt identification number, issued by the MS of establishment to identify that taxable person within the special scheme and the date of commencement of the exemption.			285]	
Update the Notification information		Based on the information received in the Exemption Acceptance message, the MS of exemption can update the taxable person's information in its data store. The MS of exemption is not obliged to store the information, but this information is particularly important for the MS of exemption since it contains the date of commencement of the exemption in respect of the taxable person in its Member State and the exempt identifier of that taxable person.	MCC.2905420			Task
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.	MCC.2935426			Data store

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
End of process		The process stops at this point.	MCC.2904760			End event
Notification Notice	IE3N01	Notification Notice is a common electronic message, transmitted by the MS of establishment to the MS of exemption to inform about the received Prior Notification or an update to a Prior Notification. The Notification Notice consist of the following information: * the exempt identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010, or, if not yet available; * any other number for the purpose of the identification of the taxable person, namely a ‘VAT Identification Number’, a ‘Tax Identification Number’, or ‘Any Other Identification. The Member State of establishment shall transmit the information to the Member State of exemption, within 15 working days from the date on which the information becomes available (Article 37a(1) letter a).	MCC.2904380			Message
Notification request	IE3N02	Notification request is a common electronic message, transmitted by any MS to the MS of establishment, requesting the Notification information of a specific taxable person.	MCC.2904400			Message
Notification	IE3N03	Notification is a common electronic message, transmitted by the MS of establishment to the	MCC.2904420			Message

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		requesting MS as a response on the Notification request message.				
Exemption Eligibility reminder	IE3N06	Exemption Eligibility Reminder is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to remind the latter that the MS of establishment still did not receive the Exemption Eligibility message from that MS of exemption. The deadline for this transmission is 15 working days. The Exemption Eligibility Remainder consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 or, if not yet available, any other number for the purpose of the identification of the taxable person. The electronic message is sent to the MS of exemption, from which the MS of establishment requested the Exemption Eligibility information. The MS of establishment has to send to the MS of exemption a reminder giving few days (e.g. 2 working days) to the MS of exemption to reply. Second, in the absence of a reply to the reminder, the silence of the MS of exemption will be taken by the MS of establishment as tacit agreement and the exemption will be granted. Sending of the message is not provided by the	MCC.2939340			Message

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		legal basis so it can be done on a voluntary basis.				
Exemption Eligibility	IE3N04	Exemption Eligibility is a common electronic message, transmitted by the MS of exemption to the MS of establishment, to inform the latter about the eligibility of the taxable person to benefit from the exemption in that MS of exemption. The Exemption Eligibility consist of the following information: * the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 or, if not yet available, any other number received from the Member State of establishment for the purpose of the identification; * information as to whether or not the annual turnover threshold applicable in that Member State for the exemption, referred to in Article 284(2), point (b) of Directive 2006/112/EC, in the current year is exceeded; * information as to whether the conditions referred to in Article 288a(1) of Directive 2006/112/EC are fulfilled; * any request for additional clarification needed in view of the information to be provided. The Exemption Eligibility message may contain the aforementioned information on multiple taxable persons, which were evaluated on the	MCC.2904340			Message

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		eligibility to benefit from the exemption in a specific MS of exemption.				
Exemption Acceptance	IE3N05	Exemption Acceptance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about approved request of the taxable person to avail himself of the special scheme. The Exemption Acceptance consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the date of commencement of the exemption referred to in Article 21(2b), point (d), of Regulation (EU) No 904/2010 in respect of the taxable person in the Member State concerned. The electronic message is sent to all MS of exemptions, for which the taxable person was approved to avail himself of the exemption.	MCC.2904320			Message

Table 9: Maintained Properties of the objects

3.3.1.2 Fill in Notification sub-process

The sub-process describes the taxable person activities to elaborate the Prior Notification or an update of the Prior Notification.

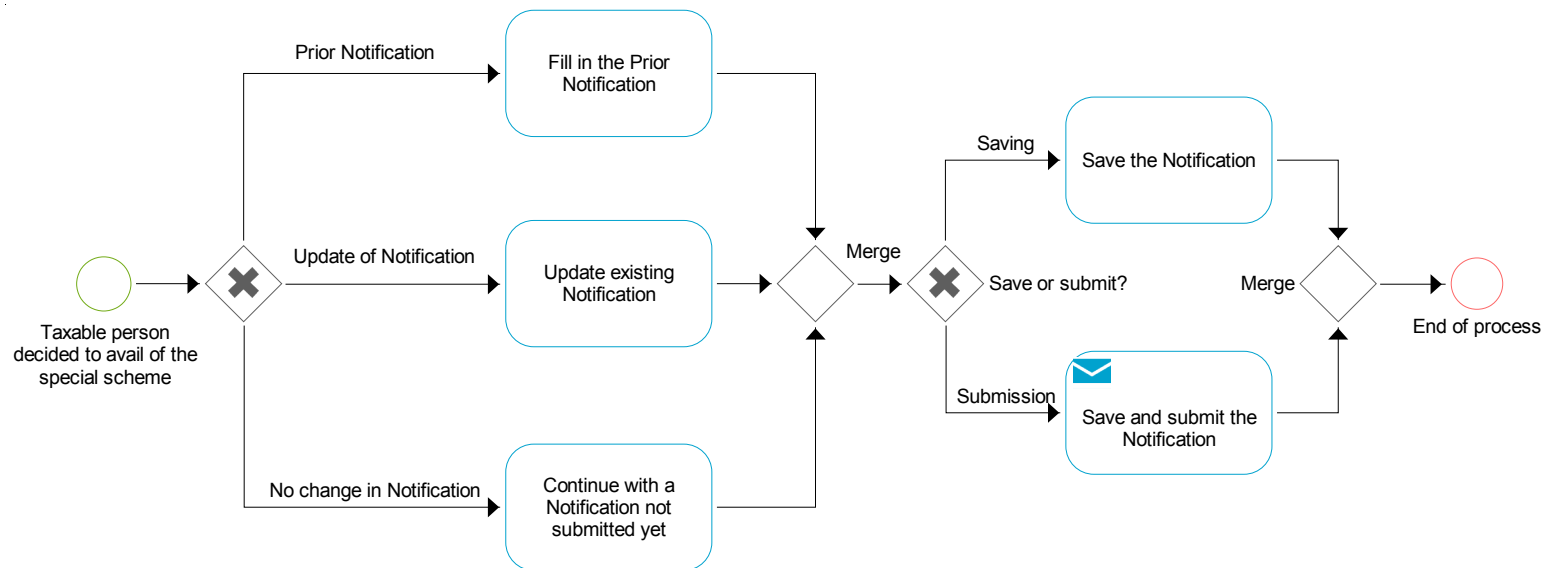


Figure 4: Fill in Notification sub-process

3.3.1.2.1 Model maintained properties

Model Property	Property Value
Name	Fill in Notification
Identifier	MCC.2903500
Description/Definition	The sub-process defines the way the taxable person elaborates a prior notification or an update to a prior notification. The sub-process covers the following activities: * elaboration of a Prior Notification; * update of an existing Notification. The taxable person can decide to store the semi-finished Notification for later, without immediate submission.
Type	BPMN process diagram (BPMN 2.0)

Table 10: Maintained Properties of the model

3.3.1.2.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
Taxable person decided to avail of the special scheme	The taxable person has decided to avail himself of the special scheme of exemption for small enterprises.	MCC.2908600		Start event
Type of activity	The gateway splits the business flow based on whether the taxable person elaborates a Prior Notification, updates an existing Notification, or wants to submit a completed Notification.	MCC.2908741		Exclusive gateway
Fill in the Prior Notification	The taxable person enters all the relevant information required for the Prior Notification. The minimum amount of information to be filled in: 1. the name, activity, legal form, and address of the taxable person, also the business sector should be provided if sectoral thresholds are applied in the MS of exemption; 2. the Member State or Member States in which the taxable person intends to avail itself of the exemption; 3. the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is established and in each of the other Member States during the preceding calendar year and the year prior to the preceding year if applicable; 4. the total value of supplies of goods and/or services, exclusive of VAT carried out in the Member State in which the taxable person is established and in each of the other Member States during the current calendar year prior to the Notification. The value of supplies to be reported only consists of the	MCC.2908680	Article 284 (3), Article 284a (1), and Articles 288 and 288a (1) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	amounts listed in Article 288 of Directive 2020/285. Where the Member State granting the exemption applies varying thresholds, the taxable person shall be obliged in respect of that Member State to report separately the total value of supplies of goods and/or services as regards each threshold that may be applicable. In addition, the taxable person must indicate his identification number already allocated in respect of obligations under the internal system: * VAT identification number; or * Tax identification number; * Any other number for purpose of identification. That identification will be used by the MS of establishment, until the taxable person is assigned by an exempt identification number. The taxable person should also declare: * Whether it is already registered for the purposes of the SME scheme in another MEST; * Whether it is registered in the Union OSS and if yes its OSS number.			
Update existing Notification	The taxable person shall inform the Member State of establishment in advance, by means of an update to a prior notification, of any changes to the information previously provided in a prior notification (Article 284(4)). Where the taxable person informs the Member State of establishment that it intends to avail itself of the exemption in	MCC.2908760	Article 284 (4) and Article 284a (1) and (2), 284c and 288 [DIR2020/28	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	a Member State or Member States other than the ones indicated in the prior notification, that person is not obliged to give the information that has already been included in quarterly reports previously submitted. In the update to a prior notification the taxable person shall provide its exempt individual identification number.		5]	
Continue with a Notification not submitted yet	In the case when the taxable person already elaborated a Prior Notification or updated an existing Notification, but he did not submit it yet, he can continue without any other change directly to submission of that Notification.	MCC.2908660		Task
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Save or submit?	The gateway splits the business flow based on whether the taxable person wants to submit the Notification to the MS of establishment or to store the information for later submission.	MCC.2908840		Exclusive gateway
Save the Notification	The taxable person filled in some information related to the Prior or updated Notification but have decided not to submit that Notification yet. The taxable person is permitted to change that information later (and probably to submit it). The semi-finished Notification is stored to allow later accomplishment by the taxable person.	MCC.2908720		Task
Save and submit the Notification	The taxable person filled in all requested information in the Notification and have decided to submit the Notification to the MS of establishment. The Notification should be saved before the submission. The means of submission is a national matter of the MS of establishment. The taxable person can still update that Notification in case of need.	MCC.2908700		Send task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	Part of the information is the exempt identification number of the taxable person or, if not yet available, any other number for the purpose of the identification of the taxable person.			
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 11: Maintained Properties of the objects

3.3.1.3 Validate the Notification sub-process

The sub-process describes the Notification validation performed by the MS of establishment.

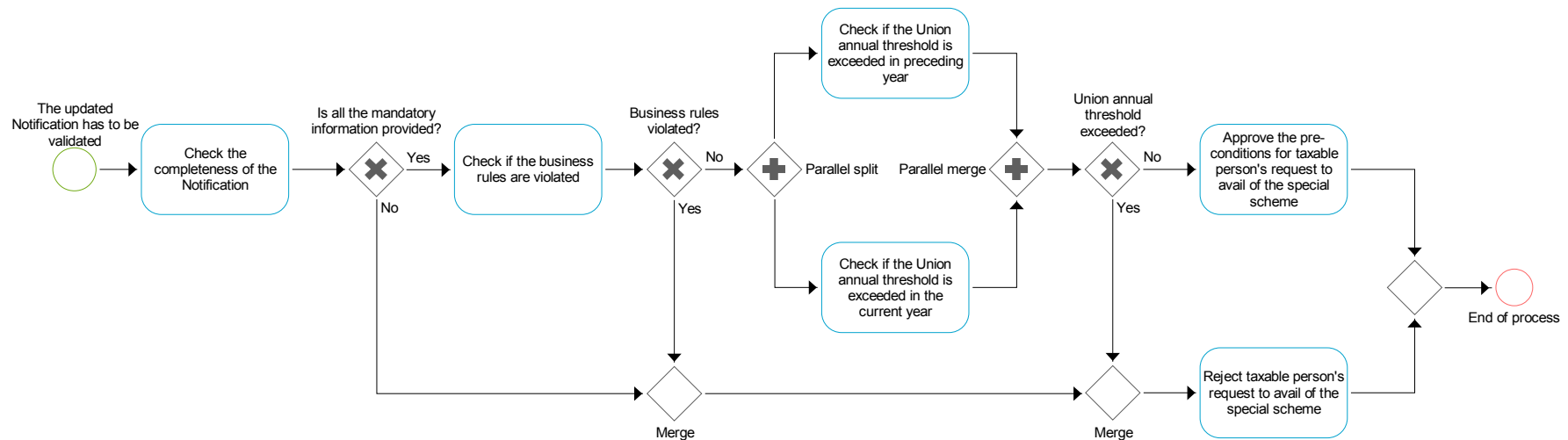


Figure 5: Validate the Notification sub-process

3.3.1.3.1 Model maintained properties

Model Property	Property Value
Name	Validate the Notification
Identifier	MCC.2983120
Description/Definition	The call activity describes the validation of the Notification at the side of the MS of establishment. The MS of establishment has maximum 15 working days to perform these activities since within 15 working days from the notification, it must notify the MS of exemption. The following validations are performed: • syntactic validation; • semantic validation; • exceedance of the Union annual threshold. In case some of the validations are violated, the overall result from the validation will be negative.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 12: Maintained Properties of the model

3.3.1.3.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
The updated Notification has to be validated	The MS of establishment has to validate the Notification before further processing.	MCC.2907080		Start event
Check the completeness of the Notification	The MS of establishment checks if all the mandatory information is included in the Notification. If some mandatory information is missing, which can cause some ambiguity, the taxable person's request to avail himself of the special scheme or update the Notification will be rejected.	MCC.3016220	Article 284a (1) [DIR2020/285]	Task
Is all the mandatory information provided?	The gateway splits the business flow based on whether all mandatory information is provided or not.	MCC.2907400		Exclusive gateway
Check if the business rules are violated	The MS of establishment checks if all the business rules are followed. If some of the business rules are violated and that	MCC.2907140		Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	leads to ambiguity, the Notification will not be accepted.			
Business rules violated?	The gateway splits the business flow based on whether the business rules are violated or not.	MCC.2907380		Exclusive gateway
Parallel split	The gateway splits the business flow into two parallel business flows.	MCC.2907507		Parallel gateway
Check if the Union annual threshold is exceeded in preceding year	Only those taxable persons whose Union annual turnover in preceding year is below EUR 100.000 could be eligible for exemption in a MS where they are not established. The Union annual turnover threshold is set to EUR 100.000. The MS of establishment calculates on the basis of the total values of supplies reported by the taxable person in preceding year that the Union annual turnover threshold referred to in point a) of Article 284 (2) of DIR 2020/285 was not exceeded during the preceding calendar year. If the Union threshold is exceeded, the taxable person's request to avail himself of the special scheme will be rejected.	MCC.2907160	Article 284 (2) letter a), 288a (2) and 37b (1) [DIR2020/285]	Task
Check if the Union annual threshold is exceeded in the current year	The MS of establishment calculates on the basis of the total values of supplies reported by the taxable person in current year that the Union annual turnover threshold referred to in Article 284 (2) point (a) of DIR 2020/285 was not exceeded during the current calendar year. The MS of establishment should also notify the taxable person. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme.	MCC.2907180	Article 284 (2) letter a), 288a (2) and 37b (1) [DIR2020/285]	Task
Parallel merge	The gateway merges the incoming business flows.	MCC.2907509		Parallel gateway

Name	Description/Definition	Identifier	Legal Reference	Artefact
Union annual threshold exceeded?	The gateway splits the business flow based on whether the Union annual threshold was exceeded or not (either in the preceding or current year).	MCC.2907440		Exclusive gateway
Approve the pre-conditions for taxable person's request to avail of the special scheme	If the taxable person fulfils all the requested conditions, his request to avail himself of the special scheme will be accepted by the MS of establishment. In the next step, the involved MS(s) of exemption has/have to confirm the taxable person's eligibility to benefit from the exemption and subsequently the MS of establishment will acknowledge if the taxable person may use the SME special scheme and if yes, in which MS(s) of exemption.	MCC.2907100		Task
Merge	The gateway merges the incoming business flows.	MCC.2952560		Gateway
Merge	The gateway merges the incoming business flows.	MCC.2952540		Gateway
Reject taxable person's request to avail of the special scheme	If the taxable person does not fulfil all the requested conditions, his request to avail himself of the special scheme will be rejected by the MS of establishment.	MCC.2907260		Task
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 13: Maintained Properties of the objects

3.3.1.4 Validate the Taxable Person's Eligibility for exemption sub-process

The sub-process describes validations performed by the MS of exemption to evaluate if the taxable person is eligible to benefit of exemption in the MS of exemption.

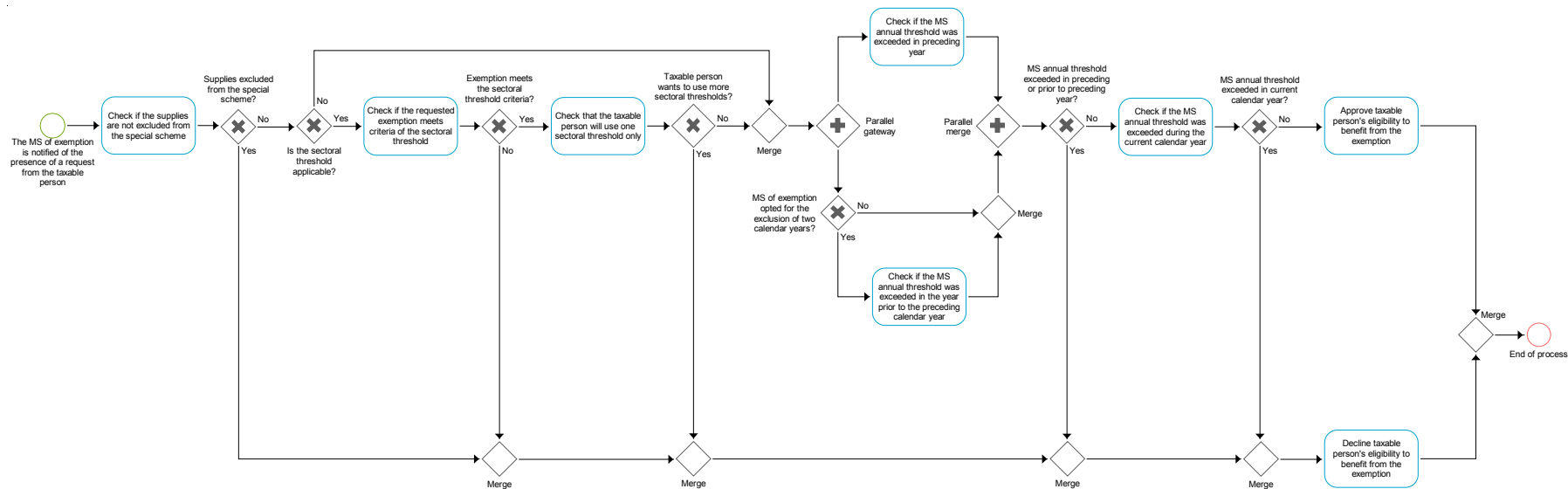


Figure 6: Validate the taxable person's eligibility for exemption sub-process

3.3.1.4.1 Model maintained properties

Model Property	Property Value
Name	Validate the taxable person's eligibility for exemption
Identifier	MCC.2904180
Description/Definition	The MS of exemption verifies if the taxable person is eligible to benefit from the exemption in that MS of exemption. To be eligible to benefit from the exemption, the following conditions must be fulfilled by the taxable person: * the supplies are not excluded from the special scheme in the MS of exemption; * the supplies meet the criteria of the sectoral threshold, if applicable in the MS of exemption; * the taxable person will use one sectoral threshold only, if more sectoral thresholds are applicable in the MS of exemption; * the annual turnover threshold was not exceeded during the current (N year), or the preceding calendar year (N-1 year), or also during the year prior to the preceding calendar year (N-2 year) if the MS of exemption has chosen

Model Property	Property Value
	two calendar years of exclusion in case of exceedance of the threshold.
Type	BPMN process diagram (BPMN 2.0)

Table: Maintained Properties of the model

3.3.1.4.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
The MS of exemption is notified of the presence of a request from the taxable person	The MS of exemption received from the MS of establishment a Notification that a request from the taxable person is available for automated access in the MEST data store. The MS of exemption shall, within 15 working days after receiving this information, confirm by electronic means to MS of establishment, based on the total values of supplies reported by the taxable person, available through MEST automated access, whether the taxable person is eligible for the exemption in its territory.	MCC.2909180		Start event
Check if the supplies are not excluded from the special scheme	The MS of exemption verifies whether the supplies are not excluded from the special scheme in that MS of exemption.	MCC.2915780	Article 283 (2) [DIR2006/112]	Task
Supplies excluded from the special scheme?	The gateway splits the business flow based on whether the supplies are excluded from the special scheme in that MS of exemption or not.	MCC.3108240		Exclusive gateway
Is the sectoral threshold applicable?	The gateway splits the business flow based on whether the MS of exemption applies different sectoral thresholds or not.	MCC.2999420		Exclusive gateway
Check if the requested exemption meets criteria of the sectoral threshold	If a sectoral threshold is applicable in the MS of exemption, the Member State verifies whether the supplies for which the taxable person asks for exemption meet the criteria of the sectoral threshold.	MCC.2915740	Article 284(1) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
Exemption meets the sectoral threshold criteria?	The gateway splits the business flow based on whether the supplies for which the taxable person asks for exemption meet the criteria of the sectoral threshold or not.	MCC.2915760		Exclusive gateway
Check that the taxable person will use one sectoral threshold only	Member State of exemption may fix varying thresholds for different business sectors based on objective criteria. The Member State of exemption shall ensure that a taxable person eligible to benefit from more than one sectoral threshold can only use one of those thresholds.	MCC.2909360	Article 284 (1) [DIR2020/285]	Task
Taxable person wants to use more sectoral thresholds?	The gateway splits the business flow based on whether the taxable person wants to use more than one sectoral threshold.	MCC.2909500		Exclusive gateway
Merge	The gateway merges the incoming business flows.	MCC.2999440		Gateway
Parallel gateway	The gateway splits the business flow into parallel business flows.	MCC.2917220		Parallel gateway
Check if the MS annual threshold was exceeded in preceding year	The MS of exemption verifies whether or not the MS annual threshold was exceeded during the preceding calendar year. The value of the supplies in the MS of exemption, where the taxable person is not established, shall not exceed the threshold set by that MS (which shall not be higher than EUR 85.000).	MCC.2909300	Articles 37b(2) and 288a (1) [DIR2020/285]	Task
MS of exemption opted for the exclusion of two calendar years?	The gateway splits the business flow based on whether the MS of exemption has opted for the exclusion from the scheme of two calendar years or not.	MCC.2924000	Article 288a (1) [DIR2020/285]	Exclusive gateway
Check if the MS annual threshold was exceeded in the year prior to the preceding calendar year	The MS of exemption verifies whether or not the MS annual threshold was exceeded in the year prior to the preceding calendar year if it has opted to extend the exclusion period to two calendar years pursuant to the first subparagraph of Article 288a(1).	MCC.2915900	Article 288a (1) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	The value of the supplies in the MS of exemption, where the taxable person is not established, shall not exceed the threshold set by the MS (which shall not be higher than EUR 85.000).			
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Parallel merge	The gateway merges the incoming business flows.	MCC.2917422		Parallel gateway
MS annual threshold exceeded in preceding or prior to preceding year?	The gateway splits the business flow based on whether the MS annual threshold was exceeded either in preceding or in prior to preceding calendar years evaluated in previous step or not.	MCC.2917440		Exclusive gateway
Check if the MS annual threshold was exceeded during the current calendar year	The MS of exemption verifies whether or not the MS annual threshold was exceeded during the current calendar year. The value of the supplies in the MS of exemption, where the taxable person is not established, shall not exceed the threshold set by that MS (which shall not be higher than EUR 85.000), to grant the exemption to the taxable persons in that MS of exemption.	MCC.2909280	Article 37b (2) [DIR2020/285]	Task
MS annual threshold exceeded in current calendar year?	The gateway splits the business flow based on whether the MS annual threshold was exceeded in the current calendar year or not.	MCC.2917520		Exclusive gateway
Approve taxable person's eligibility to benefit from the exemption	If the taxable person fulfils all the requested conditions, the Member State of exemption confirms the taxable person's eligibility to benefit from the exemption in that Member State of the exemption.	MCC.2909200	Article 37b (2) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway

Name	Description/Definition	Identifier	Legal Reference	Artefact
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Decline taxable person's eligibility to benefit from the exemption	If the taxable person does not fulfil all the expected conditions, the Member State of exemption declines the taxable person's eligibility to benefit from the exemption in that Member State of the exemption.	MCC.2909380	Article 37b (2) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 14: Maintained Properties of the objects

3.3.1.5 Request additional clarification sub-process

The process describes the process how the MS of exemption request additional clarification from MS of establishment to evaluate the taxable person's eligibility to benefit from the exemption.

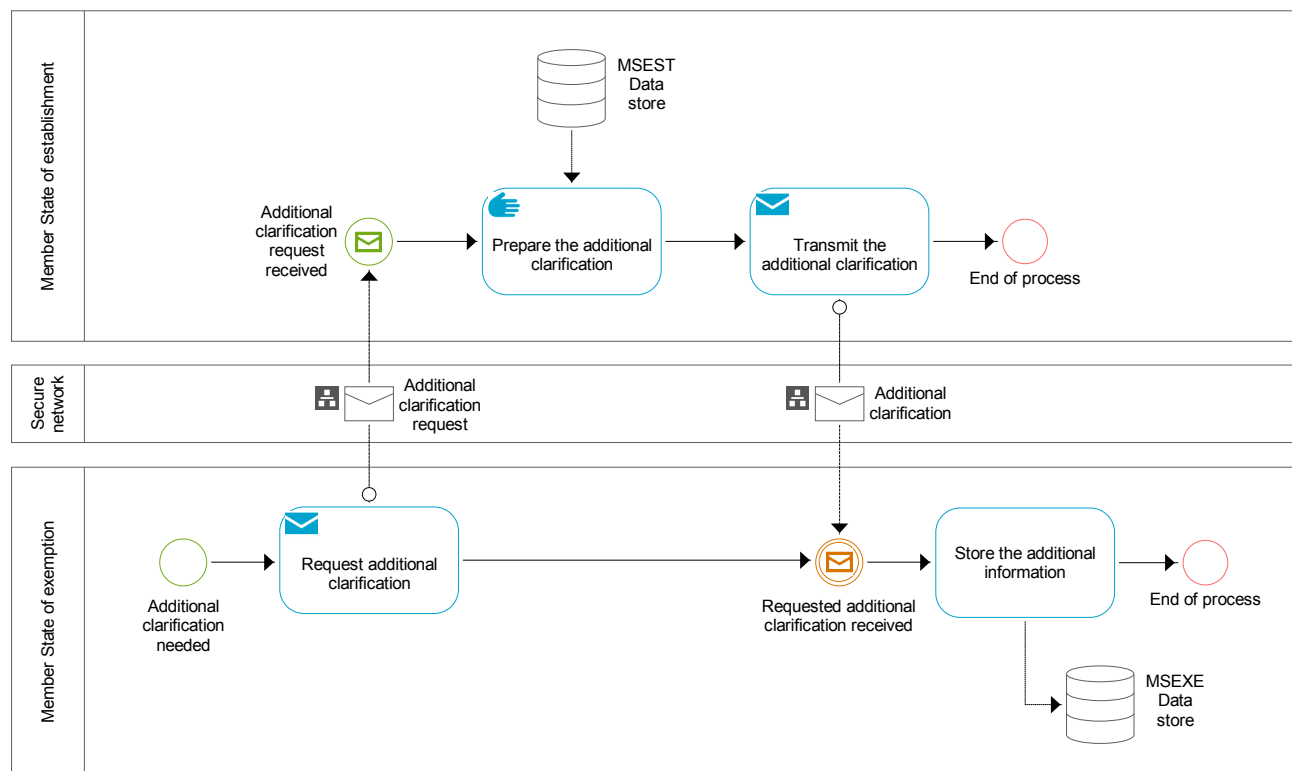


Figure 7: Request additional clarification sub-process

3.3.1.5.1 Model maintained properties

Model Property	Property Value
Name	Request additional clarification
Identifier	MCC.2950140
Description/Definition	If the MS of exemption does not have enough information for evaluation of the Notification, he requests the MS of establishment for additional clarification. Regardless of this request for additional clarifications, the MS of exemption has to confirm whether or not the taxable person is eligible in its territory within 15

Model Property	Property Value
	working days from the date of receiving the notification from the MS of establishment on the existence of a request from a taxable person in its database.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 15: Maintained Properties of the model

3.3.1.5.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
Member State of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860		Article 1 (3) [CIR2021/2007]	Pool
Additional clarification request received		The MS of establishment received the additional clarification request coming from the MS of exemption.	MCC.2950260			Message start event
Prepare the additional clarification		The MS of establishment received the additional clarification request. Following the request (free text), the MS of establishment prepares the requested clarification for the MS of exemption.	MCC.2950300		Article 4 (3) (a)(iv) [CIR2021/2007]	Manual task
Transmit the additional clarification		The MS of establishment transmits within 15 working days from the reception of the Prior notification or an update to it the requested additional clarification prepared in the previous step to the MS of exemption.	MCC.2950360		Article 4 (3) (a)(iv) [CIR2021/2007]	Send task
End of process		The process stops at this point.	MCC.2904760			End event
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States.	MCC.2901560		Articles 3 and Article 4 (2) and (3)	Pool

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.			[CIR2021/2007]	
Member State of exemption		Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940		Article 1 (2) [CIR2021/2007]	Pool
Additional clarification needed		The MS of exemption requests the MS of establishment for additional clarification, needed for evaluation of the taxable person's eligibility to benefit from the exemption in that MS of exemption.	MCC.2950200			Start event
Request additional clarification		The MS of exemption requests the MS of establishment for additional clarification on the taxable person to evaluate the taxable person's eligibility to benefit from the exemption in that MS of exemption.	MCC.2950220		Article 4 (3) (a)(iv) [CIR2021/2007]	Send task
Requested additional clarification received		The MS of exemption received the requested additional clarification, as a response on the Additional clarification request message, transmitted by the MS of exemption in the previous step.	MCC.2950400			Message intermediate event (catch)
Store the additional information		The MS of exemption stores the received additional clarification in its data store. Even the MS of exemption is not obliged to store the information, it will be needed for evaluation of taxable person's eligibility to benefit from the exemption.	MCC.2950437			Task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.	MCC.2935426			Data store
End of process		The process stops at this point.	MCC.2904760			End event
Additional clarification request	IE3N07	Additional clarification request is a common electronic message, transmitted by MS of exemption to the MS of establishment, requesting additional clarification on a specific taxable person.	MCC.2950240			Message
Additional clarification	IE3N08	Additional clarification is a common electronic message, transmitted by MS of establishment to the MS of exemption, responding to the additional clarification request.	MCC.2950380			Message
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the	MCC.2902100	Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made;				

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		* the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person’s OSS number.				

Table 16: Maintained Properties of the objects

3.3.2 Update of Notification - Change in Identity Information business process

The process describes the update of Prior Notification in case, when only the identity information of the taxable person is updated.

3.3.2.1 Update of Notification – Change in Identity Information main business process

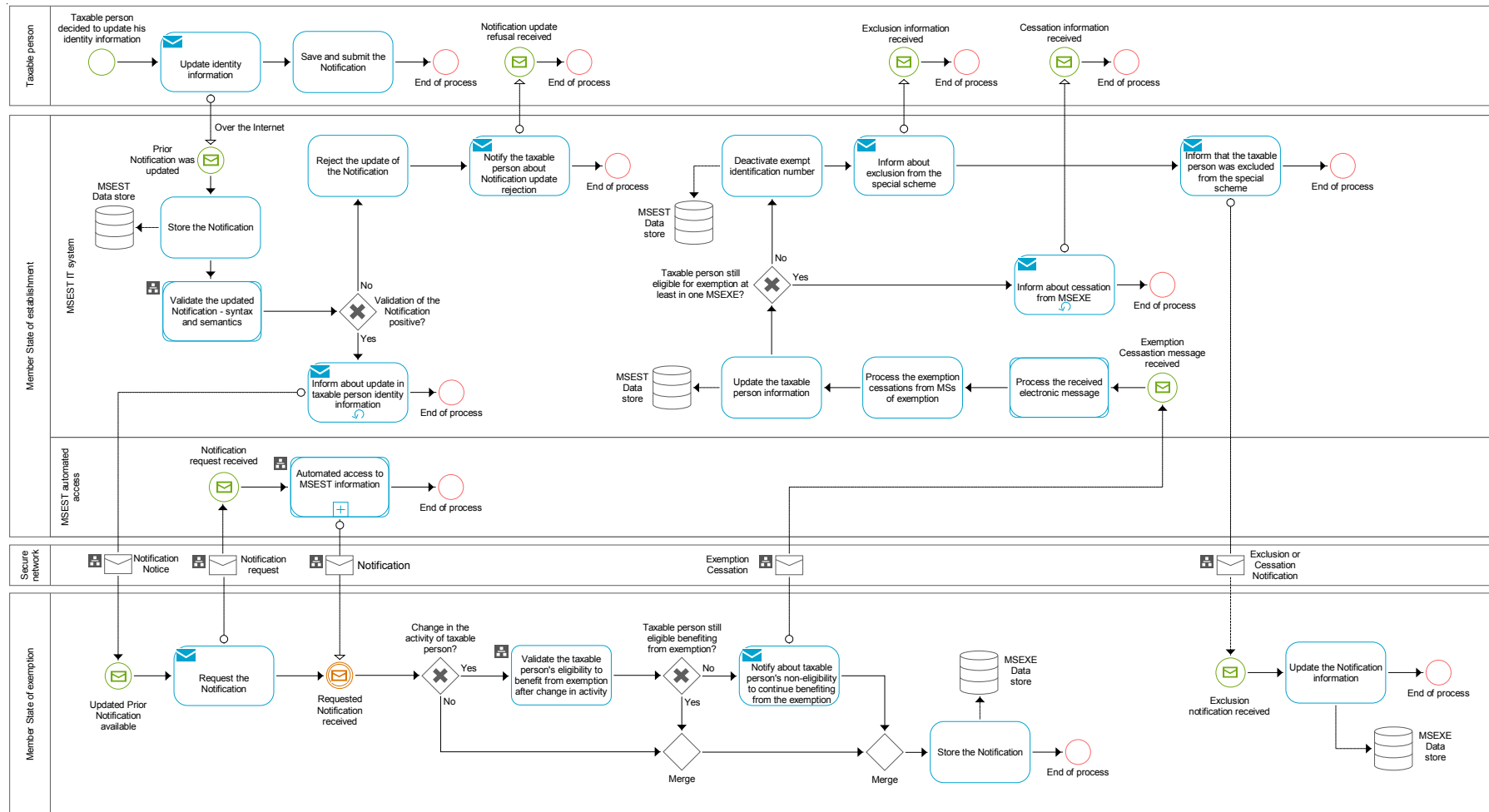


Figure 8: Update of Notification – change in identity information business process

3.3.2.1.1 Model maintained properties

Model Property	Property Value
Name	Update of Notification – change in identity information
Identifier	MCC.2939460
Description/Definition	The process describes the submission and processing of an update to Prior Notification. This process covers the following: * change in the name, legal form and address of the taxable person; * change in the ID/VAT number of the taxable person (this should not however lead to change in the EX ID number); * communication or update of the taxable person's OSS number, * change in the activity of the taxable person. In this case, the following can happen: * The taxable person non-fulfilling anymore the criteria set by MS of exemption for the sectoral threshold; * The taxable person fulfilling the criteria set by MS of exemption for another sectoral threshold but exceeding with its turnover that sectoral threshold; * The supply of the taxable person now falling within the supplies excluded from the special scheme in that MS of exemption. The validation at the MS of establishment side consists of syntactical and semantical validations only. At the side of the MS of exemption, no validation is needed to be performed unless the taxable person has communicated a change in its activity/business sector. The MS of exemption is informed of the updated Notification only if the validation performed by the MS of establishment was successful.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 17: Maintained Properties of the model

3.3.2.1.2 Object maintained properties

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person		The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140				Pool
Taxable person decided to update his identity information		Taxable person decided to update his identity information via Notification update.	MCC.2939500				Start event
Update identity information		The taxable person shall update his identity information in case of any changes to the information previously provided. The following information can be a subject of change: * the taxable person's name; * the taxable person's activity; * the legal form; * the address within the MS of establishment; * ID/VAT number of the taxable person * registration in the Union OSS and OSS number. The taxable person must indicate his exempt identification number allocated to him by the MS of establishment to be	MCC.2939520			Article 284 (4) [DIR2020/285]	Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		identified for using the special scheme.					
Save and submit the Notification		The taxable person has updated his identity information in the Notification and submits the Notification to the MS of establishment. The Notification should be saved before the submission. The means of submission is a national matter of the MS of establishment.	MCC.2939540				Task
End of process		The process stops at this point.	MCC.2904760				End event
Notification update refusal received		The taxable person is notified about refusal of the requested update of the taxable person's identity information.	MCC.2940052				Message start event
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion information received		The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of exclusion.	MCC.2956200				Message start event
End of process		The process stops at this point.	MCC.2904760				End event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Cessation information received		The taxable person received the information that he was ceased from one or more MS(s) of exemption. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the reason and the date of cessation.	MCC.2956220				Message start event
End of process		The process stops at this point.	MCC.2904760				End event
Member State of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860			Article 1 (3) [CIR2021/2007]	Pool
MSEST IT system		The MSEST IT system represents the information system of the MS of establishment, which performs the automatic activities related to special scheme for small enterprises.	MCC.2903020				Lane
Prior Notification was updated		The taxable person filled in and submitted an updated Prior Notification, with changes related to taxable person's identity information only.	MCC.2939620				Message start event
Store the Notification		The MS of establishment stores the information included in the updated Notification. That information shall be	MCC.2939640			Article 3 [CIR2021/2007]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information will be stored in data store of the MS of establishment, it will be ready for an automated access.					
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person;	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		* in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any;					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		* whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Validate the updated Notification - syntax and semantics		The call activity describes the validation of the taxable person's identity information at the MS of establishment side. The MS of establishment has maximum 15 working days to perform these activities since within 15 working days from the notification, it has to notify the MS of exemption. The following validations are performed: * semantic validation; * syntactic validation. In case some of the validations failed, the overall result from the validation will be negative.	MCC.2939780			Articles 284a (1) [DIR2020/285]	Call activity
Validation of the Notification positive?		The gateway splits the business flow based on whether the validation of the Notification was successful or not.	MCC.2939783				Exclusive gateway
Reject the update of the Notification		The MS of establishment rejects the taxable person's request to update the taxable person's identity information. The reason is that either the updated Notification was not complete, or some of the business rules have failed.	MCC.2940020				Task
Notify the taxable		The MS of establishment notifies the	MCC.2940056				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
person about Notification update rejection		taxable person, that the request to update his identity information was rejected. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme.					
End of process		The process stops at this point.	MCC.2904760				End event
Inform about update in taxable person identity information		The MS of establishment notifies the MS(s) of exemption about an update in the taxable person's identity information. The notification is represented by the Notification Notice electronic message. The electronic message is submitted to each MS of exemption, in which the taxable person benefits from the exemption. The Notification contains the taxable person's exempt identification number, assigned to taxable person by the MS of establishment for the purposes of the special scheme. The notification has to be transmitted to MS of exemption within 15 working days from the date when the information becomes available, pursuant to Article 37a(1) of Regulation (EU) No 904/2010.	MCC.3091620				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
End of process		The process stops at this point.	MCC.2904760				End event
Exemption Cessation message received		The MS of establishment received the Exemption Cessation message from the MS of exemption.	MCC.3112220				Message start event
Process the received electronic message		The sub-process depicts the processing of the message, received by MS. The sub-process also covers the treatment of the received message in case of failed parsing.	MCC.3112222				Call activity
Process the exemption cessations from MSs of exemption		The MS of establishment processes the taxable person's non-eligibility to continue benefiting from the exemption in the MSs of exemption on the basis of the information received from MS of exemption. To allow the taxable person to benefit from the special scheme in a MS other than the MS of establishment, the taxable person must be eligible for the exemption at least in one MS of exemption. If the taxable person continues to avail itself of the exemption in at least one Member State, the MS of establishment will have to adapt the information stored on the taxable person with regards to those MSs of exemption, which delivered the Exemption Cessation information.	MCC.3112224			Article 284a (1) [DIR2020/285], Article 283 (2) of VAT Directive	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		If not, the MS of establishment shall, without delay, deactivate the identification number of the taxable person.					
Update the taxable person information		The taxable person was ceased from MS(s) of exemption. MS of establishment without delay updates the taxable person information with date of cessation and Member State of exemption, in which the cessation takes effect. The data store will be also updated by the status of all MSs of exemption where the taxable person benefits from the exemption. The information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information is stored in data store of the MS of establishment, it will be ready for an automated access.	MCC.2951245			Article 3 [CIR2021/2007] and Article 284e [DIR2020/285]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of			(EU) No 904/2010 and Article 3 [CIR2021/2007]		

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Taxable person still eligible for exemption at least in one MSEXE?		The gateway splits the business flow based on whether the taxable person is eligible for the exemption at least in one MS of exemption or not.	MCC.2906520				Exclusive gateway
Deactivate exempt identification number		When the taxable person is not eligible to benefit from the exemption in any MSs of exemption, the Member State of establishment shall, without delay, deactivate the taxable person's exempt identification number referred to in point (b) of Article 284(3).	MCC.3112560			Article 284e (1) point (b) [DIR2020/285]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		In case that the taxable person later decides to submit a new Prior Notification to avail of the special scheme again, the same exempt identification number will be assigned to him unless his VAT/Tax or other identifier in the MS of establishment was changed. In such a case, the MS of establishment will assign the taxable person with a new exempt identification number, generated from the taxable person's new VAT/Tax identifier or any other identifier used for VAT purposes in MS of establishment.					
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Inform about exclusion from the special scheme		The taxable person is not eligible to continue benefiting from the special scheme. The MS of establishment submits a notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the information that the taxable person's exempt identification number was deactivated. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. It is proposed that in case of impossibility of the MEST to notify the taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or	MCC.3112580				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		by a separate message (not part of the specifications).					
Inform that the taxable person was excluded from the special scheme		The MS of establishment notifies the relevant MSs of exemption about exclusion of the taxable person from the special scheme. The information contains the exempt identification number of the taxable person and the date from which the exclusion is valid.	MCC.3058540				Send task
End of process		The process stops at this point.	MCC.2904760				End event
Inform about cessation from MSEXE		The taxable person has ceased to benefit from the exemption in one or more MS(s) of exemption. The MS of establishment should submit a notification to the taxable person, informing the latter about that cessation. The notification should contain one or more MS(s) of exemption, from which the taxable person is ceased and the date of cessation. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme . It is proposed that in case the taxable person was not informed about his exclusion from the special scheme due to impossibility on the side of the MS of	MCC.2951232				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		establishment, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).					
End of process		The process stops at this point.	MCC.2904760				End event
MSEST automated access		The MSEST automated access is part of the MSEST information system, operated by the MS of establishment. The MSEST automated access provides the other MSs with the automated access to information. The information relates to registration details of the taxable person and the value of supplies of goods and/or services carried out by that taxable person.	MCC.2903040			Article 17(1)(g) and Article 21(2b) [REG2010/904] and Article 3 [CIR2021/2007]	Lane
Notification request received		The automated access to information of the MS of establishment received an information request.	MCC.2903100				Message start event
Automated access to MSEST information		The call activity depicts the activities performed by the automated access to MSEST information, which is operated by the MS of establishment. The information relates to the special scheme for small enterprises. The minimum information to be provided by the MS of establishment to the other MSs is specified in Article 21	MCC.2903320			Article 3 [CIR2021/2007]	Call activity (collapsed)

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		(2b) [REG2010/904].					
End of process		The process stops at this point.	MCC.2904760				End event
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560			Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool
Member State of exemption		Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940			Article 1 (2) [CIR2021/2007]	Pool
Updated Prior Notification available		The MS of exemption receives a notification that an updated Prior Notification is made available in the MS of establishment data store. In this occasion the MS of exemption is notified by the MS of establishment with the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No	MCC.2940093				Message start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		904/2010.					
Request the Notification		The MS of exemption received a notification that an updated Prior Information is available in the MS of establishment. The MS of exemption prepares a request message requesting the Notification and sends the message to MS of establishment using the automated access to information. The request related to the updated Notification will contain the taxable person's exempt identification number, issued by the MS of establishment for the purposes of the special scheme.	MCC.2940095			Article 3 [CIR2021/2007]	Send task
Requested Notification received		The MS of exemption received the requested Notification as a response on the Notification request message, transmitted by that MS of exemption in the previous step.	MCC.2940091				Message intermediate event (catch)
Change in the activity of taxable person?		The gateway splits the business flow based on whether there is a change in the activity of the taxable person or not.	MCC.3111100				Exclusive gateway
Validate the taxable person's eligibility to benefit from exemption after change in activity		The MS of exemption verifies if the taxable person is still eligible to benefit from the exemption in that MS of exemption after the change in the activity of the taxable person. To remain eligible to benefit from the exemption, the	MCC.3111140			Articles 284 (1), Article 283 (2), and Article 288a (1)	Subprocess

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		following conditions have to be fulfilled by the taxable person: * the supplies are not excluded from the special scheme in the MS of exemption; * the supplies meet the criteria of the sectoral threshold.				[DIR2020/285], Article 37b (2) [DIR2020/285]	
Taxable person still eligible benefiting from exemption?		The gateway splits the business flow based on whether the taxable person is eligible to continue benefiting from the exemption or not.	MCC.3112020				Exclusive gateway
Notify about taxable person's non-eligibility to continue benefiting from the exemption		The MS of exemption evaluated the taxable person as non-eligible to continue benefiting from the exemption in that MS of exemption. The MS of exemption informs the MS of establishment that the taxable person is not eligible anymore to continue benefiting from the exemption in that MS of exemption. The MS of exemption shall, without delay, notify by electronic means the competent authorities of the MS of establishment of the individual exempt identification number of the taxable person, referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 and the date on which the taxable person has ceased to be eligible for the exemption in	MCC.3115660			Articles 284 (1), Article 283 (2), and Article 288a (1) [DIR2020/285], Article 37b (2) [DIR2020/285]	Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		that MS of exemption.					
Merge		The gateway merges the incoming business flows.	MCC.3111980				Gateway
Merge		The gateway merges the incoming business flows.	MCC.3112200				Gateway
Store the Notification		The MS of exemption can store all the information from the Notification in his data store. The MS of exemption is not obliged to store the data, but it can be used for later reference.	MCC.2940140				Task
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.	MCC.2935426				Data store
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion notification received		The MS of the exemption received from the MS of establishment the information that the taxable person was excluded from the special scheme as a consequence of change in the activity of the taxable	MCC.3112680				Message start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		person. The notification from MS of establishment to MS of exemption is not foreseen by the legal basis. It can be done on a voluntary basis only.					
Update the Notification information		Based on the exclusion information received in the Exclusion or cessation notification message or through automated access to MEST data store, the MS of exemption can update the taxable person's information in its data store. The MS of exemption is not obliged to store the information, but it can be used for later reference.	MCC.2935422				Task
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.	MCC.2935426				Data store
End of process		The process stops at this point.	MCC.2904760				End event
Notification	IE3N01	Notification Notice is a common	MCC.2904380				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Notice		electronic message, transmitted by the MS of establishment to the MS of exemption to inform about the received Prior Notification or an update to a Prior Notification. The Notification Notice consist of the following information: * the exempt identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010, or, if not yet available; * any other number for the purpose of the identification of the taxable person, namely a 'VAT Identification Number', a 'Tax Identification Number', or 'Any Other Identification'. The Member State of establishment shall transmit the information to the Member State of exemption, within 15 working days from the date on which the information becomes available (Article 37a(1) letter a).					
Notification request	IE3N02	Notification request is a common electronic message, transmitted by any MS to the MS of establishment, requesting the Notification information of a specific taxable person.	MCC.2904400				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Notification	IE3N03	Notification is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response on the Notification request message.	MCC.2904420				Message
Exemption Cessation	IE3E01	Exemption Cessation is a common electronic message, transmitted without delay by the MS of exemption to the MS of establishment, to inform the latter about the taxable persons' cessation of benefiting from the exemption in that MS of exemption. The Exemption Cessation message contains the list of the taxable persons that ceased to be eligible for the SME exemption in the MS of exemption and consists of the following information: * the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * according to Article 37b (3), the date on which the taxable person ceased to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC. The message should also contain the reason of the cessation from MS of exemption, but this is not mandatory as it	MCC.2906440				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		is not provided for by the legal text.					
Exclusion or Cessation Notification		Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption. These notifications are not foreseen by the legal basis except the case, when the MS of establishment notifies the MS of exemption when the Union annual threshold is exceeded (Article 37a (b)). In other cases, sending of the notification can be done on a voluntary basis. The Exclusion or cessation notification should consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the exclusion or cessation reason (optional); * the Exclusion effective date or the Cessation effective date.	MCC.2935400	IE3E03			Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		The Exemption or cessation notification message may contain a list of multiple taxable persons, which were excluded from the special scheme or ceased from the MS of exemption.					

Table 18: Maintained Properties of the objects

3.3.2.2 Validate the Notification (Syntax and Semantics) sub-process

The sub-process describes the validation performed by the MS of establishment in case, when only the syntactical and semantical validation is expected.

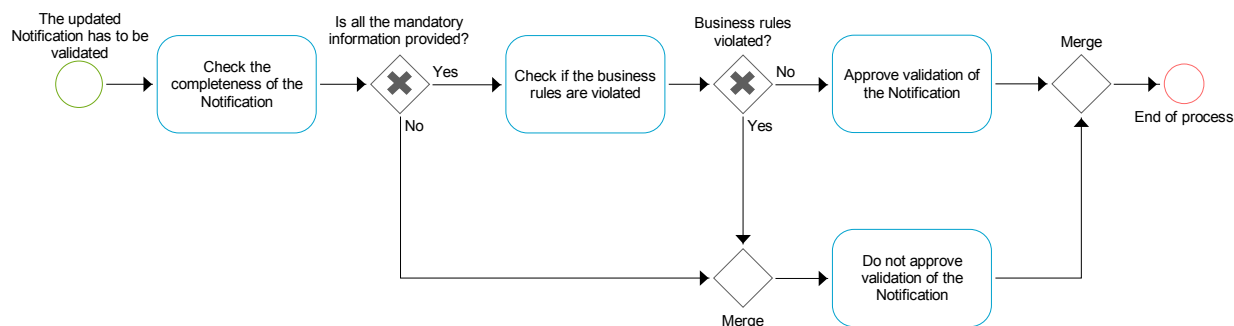


Figure 9: Validate the Notification (syntax and semantics) sub-process

3.3.2.2.1 Model maintained properties

Model Property	Property Value
Name	Validate the Notification (syntax and semantics)
Identifier	MCC.2934780
Description/Definition	The sub-process describes the validation of the Notification. Only the syntax and the semantics of the Notification is validated.

Model Property	Property Value
Type	BPMN process diagram (BPMN 2.0)

Table 19: Maintained Properties of the model

3.3.2.2.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
The updated Notification has to be validated	The MS of establishment has to validate the Notification before further processing.	MCC.2907080		Start event
Check the completeness of the Notification	The MS of establishment checks if all the mandatory information is included in the Notification. If some mandatory information is missing, which can cause some ambiguity, the taxable person's request to update the Notification will be rejected.	MCC.2907200	Article 284a (1) [DIR2020/285]	Task
Is all the mandatory information provided?	The gateway splits the business flow based on whether all mandatory information is provided or not.	MCC.2907400		Exclusive gateway
Check if the business rules are violated	The MS of establishment checks if all the business rules are followed. If some of the business rules are violated and that leads to ambiguity, the Notification will not be accepted.	MCC.2907140		Task
Business rules violated?	The gateway splits the business flow based on whether the business rules are violated or not.	MCC.2907380		Exclusive gateway
Approve validation of the Notification	The MS of establishment approves the validation of the Notification, the result is positive.	MCC.2934840		Task
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Do not approve validation of the Notification	The MS of establishment does not approve the validation of the Notification, the result is negative.	MCC.2934860		Task
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 20: Maintained Properties of the objects

3.3.2.3 Validate the taxable person's eligibility to benefit from exemption after change of activity sub-process

The sub-process describes the validation performed by the MS of exemption in case, when the taxable person informed of change in his activity.

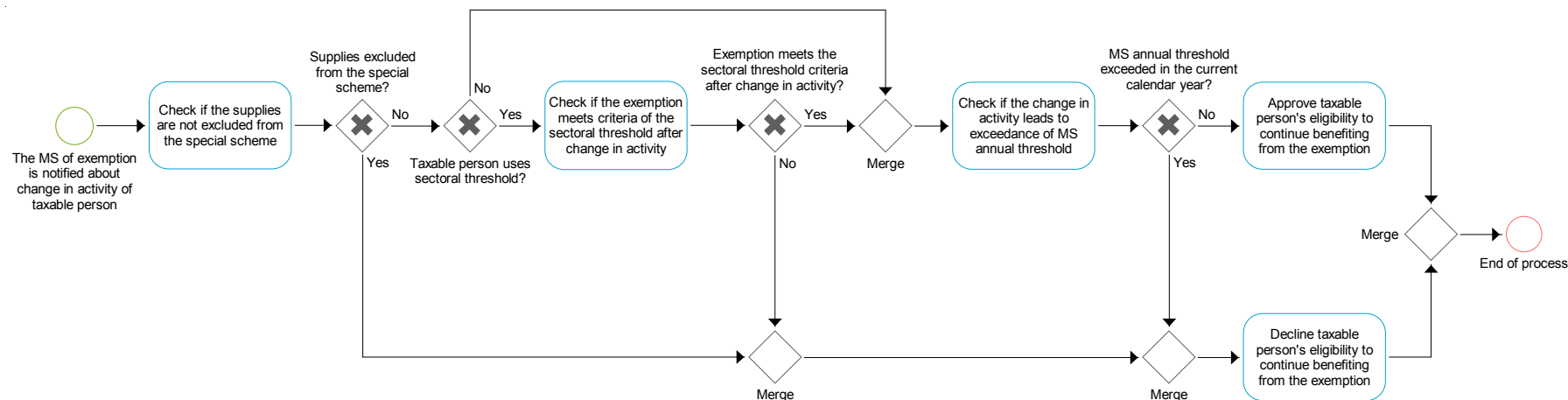


Figure 10: Validate the taxable person's eligibility to benefit from exemption after change of activity sub-process

3.3.2.3.1 Model maintained properties

Model Property	Property Value
Name	Validate the taxable person's eligibility to benefit from exemption after change of activity
Identifier	MCC.3111160
Description/Definition	The MS of exemption verifies if the taxable person is still eligible to benefit from the exemption in that MS of exemption after the change in the activity of the taxable person. To remain eligible to benefit from the exemption, the following conditions have to be fulfilled by the taxable person: * the supplies are not excluded from the special scheme in the MS of exemption; * the supplies meet the criteria of the sectoral threshold.

Model Property	Property Value
Type	BPMN process diagram (BPMN 2.0)

Table 21: Maintained Properties of the model

3.3.2.3.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
The MS of exemption is notified about change in activity of taxable person	The MS of exemption received from the MS of establishment an update to a Notification, which informs about a change in the activity of the taxable person. The MS of exemption shall validate the eligibility of the taxable person to benefit from the exemption after that change in the activity of that taxable person. If the taxable person will not be eligible anymore to benefit from the exemption in that MS of exemption, the MS of exemption shall within 15 working days after receiving this information to inform by electronic means the MS of establishment about the taxable person's non-eligibility to benefit from the exemption in that MS of exemption.	MCC.3111180		Start event
Check if the supplies are not excluded from the special scheme	The MS of exemption verifies whether the supplies are not excluded from the special scheme in that MS of exemption after change in the activity of the taxable person.	MCC.3111200	Article 283 (2) [DIR2006/112]	Task
Supplies excluded from the special scheme?	The gateway splits the business flow based on whether the supplies are excluded from the special scheme in that MS of exemption or not.	MCC.3108240		Exclusive gateway
Taxable person uses sectoral threshold?	The gateway splits the business flow based on whether the taxable person uses sectoral threshold or not.	MCC.3111660		Exclusive gateway
Check if the exemption meets criteria of the sectoral threshold after	If the taxable person uses a sectoral threshold, the MS of exemption validates whether the supplies carried out by the taxable person still meet the criteria of the sectoral threshold after change	MCC.3111240	Article 284(1) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
change in activity	in the activity of the taxable person.			
Exemption meets the sectoral threshold criteria after change in activity?	The gateway splits the business flow based on whether the supplies still meet the criteria of the sectoral threshold after the change in the activity of the taxable person or not.	MCC.3111260		Exclusive gateway
Merge	The gateway merges the incoming business flows.	MCC.3111602		Gateway
Check if the change in activity leads to exceedance of MS annual threshold	The MS of exemption verifies whether or not the MS annual threshold is exceeded during the current calendar year as a result from change in the activity of the taxable person. The value of the supplies in the MS of exemption, where the taxable person is not established, shall not exceed the threshold set by that MS (which shall not be higher than EUR 85.000). If the supplies of the taxable person after change in his activity do not exceed the MS annual threshold, the taxable person can still benefit from the exemption in that MS of exemption. If the taxable person fulfils the criteria set by the MS of exemption for another sectoral threshold but exceeding with its turnover that sectoral threshold, the taxable person will be excluded from the special scheme.	MCC.3111300	Article 37b (2) [DIR2020/285]	Task
MS annual threshold exceeded in the current calendar year?	The gateway splits the business flow based on whether the MS annual threshold was exceeded in the current calendar year as a result from change of the taxable person's activity or not.	MCC.3111460		Exclusive gateway
Approve taxable person's eligibility to continue benefiting from the exemption	If the taxable person fulfils all the requested conditions, the Member State of exemption confirms the taxable person's eligibility to continue benefiting from the exemption in that Member State of the exemption.	MCC.3111480	Article 37b (2) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.3111520		Gateway
Merge	The gateway merges the incoming business flows.	MCC.3111640		Gateway

Name	Description/Definition	Identifier	Legal Reference	Artefact
Decline taxable person's eligibility to continue benefiting from the exemption	If the taxable person does not fulfil all the expected conditions, the Member State of exemption declines the taxable person's eligibility to continue benefiting from the exemption in that Member State of the exemption.	MCC.3111500	Article 37b (2) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.3111603		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 22: Maintained Properties of the objects

3.3.3 Update of Notification - cessations of some MSEX in which TP is not established business process

The process describes the process how the taxable person requests his cessation from some MS of exemption.

3.3.3.1 Update of Notification - cessations of some MSEXE in which TP is not established main business process

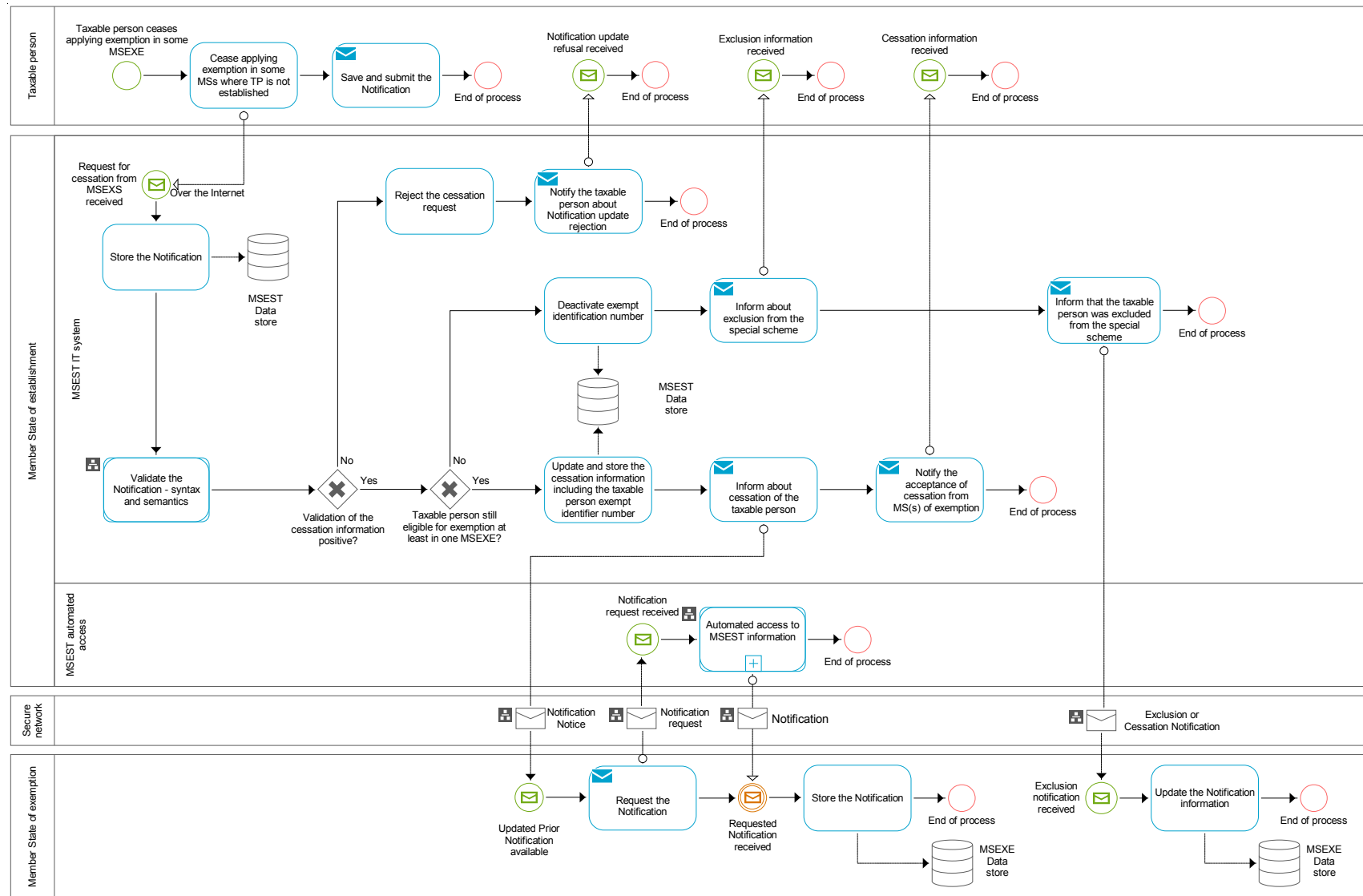


Figure 11: Update of Notification - cessations of some MSEXE in which TP is not established business process

3.3.3.1.1 Model maintained properties

Model Property	Property Value
Name	Update of Notification - cessations of some MSEX in which TP is not established
Identifier	MCC.3090700
Description/Definition	The process describes the process how the taxable person requests his cessation from some MS of exemption.
Type	BPMN collaboration diagram (BPMN 2.0)

Table: Maintained Properties of the model

3.3.3.1.2 Object maintained properties

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person		The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140				Pool
Taxable person ceases applying exemption in some MSEX		Taxable person decided to cease applying exemption in some MS of exemption, in which he is not established.	MCC.3090720				Start event
Cease applying exemption in some MSs where TP is not established		The taxable person is decided to cease applying the exemption in some MSs of exemption. He must indicate the following: * his exempt identification number allocated to him by the MS of establishment to be identified for using the special scheme;	MCC.3090740			Article 284 (4) [DIR2020/285]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		* the MS(s) of exemption, where he is availed and wants to be ceased from benefiting of exemption in that/those Member States.					
Save and submit the Notification		The taxable person has updated the information related to cessation from benefiting of exemption in some MSs of exemption. The taxable person submits this information to the MS of establishment. The taxable person may save that information before the submission. The means of submission is a national matter of the MS of establishment.	MCC.3090760				Send task
End of process		The process stops at this point.	MCC.2904760				End event
Notification update refusal received		The taxable person is notified about refusal of the request to be ceased from some MS of exemption.	MCC.3126460				Message start event
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion information received		The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of	MCC.2956200				Message start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		exclusion.					
End of process		The process stops at this point.	MCC.2904760				End event
Cessation information received		The taxable person received the information that he was ceased from one or more MS(s) of exemption. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the reason and the date of cessation.	MCC.2956220				Message start event
End of process		The process stops at this point.	MCC.2904760				End event
Member State of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860			Article 1 (3) [CIR2021/2007]	Pool
MSEST IT system		The MSEST IT system represents the information system of the MS of establishment, which performs the automatic activities related to special scheme for small enterprises.	MCC.2903020				Lane
Request for cessation from MSEXS received		The MS of exemption received the taxable person's request to be ceased from benefiting of the exemption in some MS(s) of exemption.	MCC.3091440				Message start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Store the Notification		The MS of establishment stores the information included in the Notification, elaborated, or updated by the taxable person. That information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information will be stored in data store of the MS of establishment, it will be ready for an automated access.	MCC.3091460			Article 3 [CIR2021/2007] and Article 284e [DIR2020/285]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that	MCC.2902100			Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]	Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		“0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person’s					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		OSS number.					
Validate the Notification - syntax and semantics		The call activity describes the validation of the information submitted by the taxable person to the MS of establishment. The MS of establishment has maximum 15 working days to perform these activities since within 15 working days from the notification, it has to notify the MS of exemption. The following validations are performed: * semantic validation; * syntactic validation. In case some of the validations failed, the overall result from the validation will be negative.	MCC.3091400			Articles 284a (1) [DIR2020/285]	Call activity
Validation of the cessation information positive?		The gateway splits the business flow based on whether the validation of the cessation information was successful or not.	MCC.3091463				Exclusive gateway
Reject the cessation request		The MS of establishment rejects the taxable person's request to be ceased from benefiting of the exemption in some MSs of exemption. The reason is that either the information was not complete, or validation of some business rules have failed.	MCC.3091480				Task
Notify the taxable person		The MS of establishment notifies the taxable person that the request to be ceased	MCC.3091761				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
about Notification update rejection		from benefiting of the exemption in MS(s) of exemption was rejected. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme.					
End of process		The process stops at this point.	MCC.3091762				End event
Taxable person still eligible for exemption at least in one MSEXE?		The gateway splits the business flow based on whether the taxable person is eligible for the exemption at least in one MS of exemption or not.	MCC.2906520				Exclusive gateway
Deactivate exempt identification number		When the taxable person is not eligible to benefit from the exemption in any MSs of exemption, the Member State of establishment shall, without delay, deactivate the taxable person's exempt identification number referred to in point (b) of Article 284(3). In case that the taxable person later decides to submit a new Prior Notification to avail of the special scheme again, the same exempt identification number will be assigned to him unless his VAT/Tax or other identifier in the MS of establishment was changed. In such a case, the MS of establishment will assign the taxable person with a new exempt identification	MCC.3112560			Article 284e (1) point (b) [DIR2020/285]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		number, generated from the taxable person's new VAT/Tax identifier or any other identifier used for VAT purposes in MS of establishment.					
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Inform about exclusion from the special scheme		The taxable person is not eligible to continue benefiting from the special scheme. The MS of establishment submits a notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the	MCC.3112580				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		information that the taxable person's exempt identification number was deactivated. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. It is proposed that in case of impossibility of the MEST to notify the taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).					
Inform that the taxable person was excluded from the special scheme		The MS of establishment notifies the relevant MSs of exemption about exclusion of the taxable person from the special scheme. The information contains the exempt identification number of the taxable person and the date from which the exclusion is valid.	MCC.3058540				Send task
End of process		The process stops at this point.	MCC.3091762				End event
Update and store the cessation information		The MS of establishment updates the data store with the approved changes and stores the information. The data store will be updated by the status of MS(s) of	MCC.3091767			Article 3 [CIR2021/2007]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
including the taxable person exempt identifier number		exemption from which the taxable person was ceased from benefiting from the exemption. That information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information will be stored in data store of the MS of establishment, it will be ready for an automated access.					
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		“0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person’s					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		OSS number.					
Inform about cessation of the taxable person		The MS of establishment will notify the MS of exemption(s) of the cessation of the taxable person from benefiting of the exemption in that MS of exemption, using the Notification notice message. Sending of the message is not provided by the legal basis so it can be done on a voluntary basis.	MCC.2940047			Article 4 (2b) [CIR2021/2007]	Send task
Notify the acceptance of cessation from MS(s) of exemption		The taxable person has ceased to benefit from the exemption in one or more MS(s) of exemption. The MS of establishment should submit a notification to the taxable person, informing the latter about that cessation. The notification should contain one or more MS(s) of exemption, from which the taxable person is ceased, the reason and the date of cessation. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme.	MCC.3091700				Send task
End of process		The process stops at this point.	MCC.3091762				End event
MSEST automated access		The MSEST automated access is part of the MSEST information system, operated by the MS of establishment. The MSEST automated access provides the other MSs	MCC.2903040			Article 17(1)(g) and Article 21(2b)	Lane

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		with the automated access to information. The information relates to registration details of the taxable person and the value of supplies of goods and/or services carried out by that taxable person.				[REG2010/904] and Article 3 [CIR2021/2007]	
Notification request received		The automated access to information of the MS of establishment received an information request.	MCC.2903100				Message start event
Automated access to MEST information		The call activity depicts the activities performed by the automated access to MEST information, which is operated by the MS of establishment. The information relates to the special scheme for small enterprises. The minimum information to be provided by the MS of establishment to the other MSs is specified in Article 21 (2b) [REG2010/904].	MCC.2903320			Article 3 [CIR2021/2007]	Call activity (collapsed)
End of process		The process stops at this point.	MCC.2904760				End event
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560			Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool
Member State		Member State of exemption (MSEXE)	MCC.2902940			Article 1	Pool

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
of exemption		means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.				(2) [CIR2021/2007]	
Updated Prior Notification available		The MS of exemption receives a notification that an updated Prior Notification is made available in the MS of establishment. In this occasion the MS of exemption is notified by the MS of establishment with the individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010.	MCC.3091900				Message start event
Request the Notification		The MS of exemption received a notification that an updated Prior Information is available in the MS of establishment. The MS of exemption prepares a request message requesting the Notification and sends the message to MS of establishment using the automated access to information. The request related to the updated Notification will contain the taxable person's exempt identification number, issued by the MS of establishment for the purposes of the special scheme.	MCC.2940095			Article 3 [CIR2021/2007]	Send task
Requested		The MS of exemption received the	MCC.2940091				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Notification received		requested Notification as a response on the Notification request message, transmitted by that MS of exemption in the previous step.					intermediate event (catch)
Store the Notification		The MS of exemption can store all the information from the Notification in his data store. The MS of exemption is not obliged to store the data, but it can be used for later reference.	MCC.2940140				Task
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.	MCC.2935426				Data store
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion notification received		The MS of the exemption received from the MS of establishment the information that the taxable person was excluded from the special scheme as he is not eligible to benefit from the exemption in any of MS of exemption.	MCC.3126620				Message start event
Update the		Based on the exclusion information	MCC.2935422				Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Notification information		received in the Exclusion or cessation notification message or through automated access to MEST data store, the MS of exemption can update the taxable person's information in its data store. The MS of exemption is not obliged to store the information, but it can be used for later reference.					
MSEX Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.	MCC.2935426				Data store
End of process		The process stops at this point.	MCC.2904760				End event
Notification Notice	IE3N01	Notification Notice is a common electronic message, transmitted by the MS of establishment to the MS of exemption to inform about the received Prior Notification or an update to a Prior Notification. The Notification Notice consist of the following information: * the exempt identification number of the taxable person, issued by the Member State	MCC.2904380				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010, or, if not yet available; * any other number for the purpose of the identification of the taxable person, namely a ‘VAT Identification Number’, a ‘Tax Identification Number’, or ‘Any Other Identification. The Member State of establishment shall transmit the information to the Member State of exemption, within 15 working days from the date on which the information becomes available (Article 37a(1) letter a).					
Notification request	IE3N02	Notification request is a common electronic message, transmitted by any MS to the MS of establishment, requesting the Notification information of a specific taxable person.	MCC.2904400				Message
Notification	IE3N03	Notification is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response on the Notification request message.	MCC.2904420				Message
Exclusion or Cessation Notification		Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the	MCC.2935400	IE3E03			Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		special scheme or cessation from that MS of exemption. These notifications are not foreseen by the legal basis except the case, when the MS of establishment notifies the MS of exemption when the Union annual threshold is exceeded (Article 37a (b)). In other cases, sending of the notification can be done on a voluntary basis. The Exclusion or cessation notification should consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the exclusion or cessation reason (optional); * the Exclusion effective date or the Cessation effective date. The Exemption or cessation notification message may contain a list of multiple taxable persons, which were excluded from the special scheme or ceased from the MS of exemption.					

Table 23: Maintained Properties of the objects

3.3.3.2 Validate the Notification (Syntax and Semantics) sub-process

The sub-process describes the validation performed by the MS of establishment in case, when only the syntactical and semantical validation is expected. The process is reuse of the 3.3.2.2 Validate the Notification (Syntax and Semantics) sub-process.

3.3.4 Update of Notification - change in yearly total values of supplies business process

The process describes the process how the taxable person reports update in total yearly values of supplies previously submitted in the Prior Notification.

3.3.4.1 Update of Notification - change in yearly total values of supplies main business process

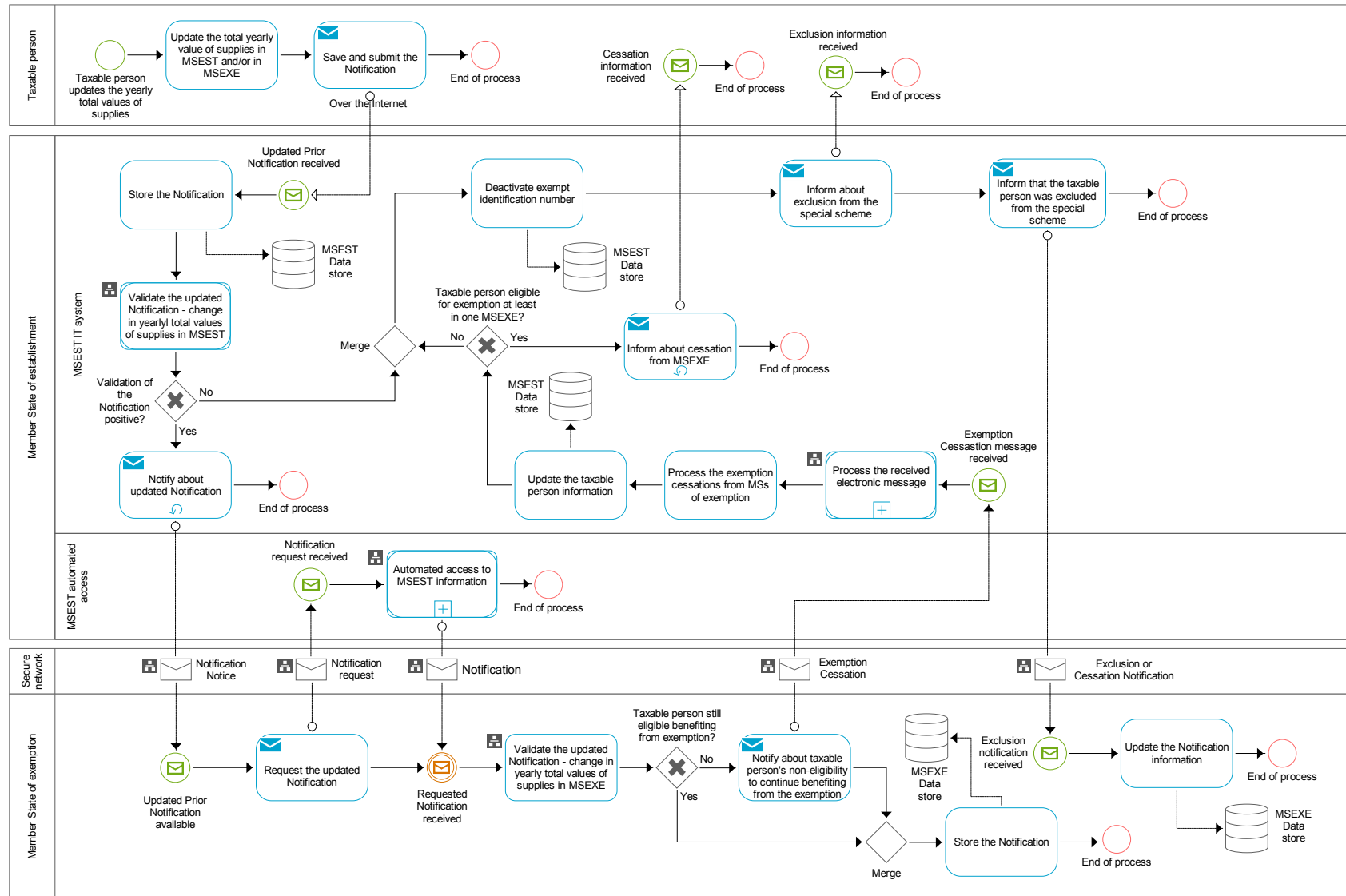


Figure 12: Update of Notification - change in yearly total values of supplies business process

3.3.4.1.1 Model maintained properties

Model Property	Property Value
Name	Update of Notification - change in yearly total values of supplies
Identifier	MCC.3095800
Description/Definition	The process describes the process how the taxable person reports update in total yearly values of supplies previously submitted in the Prior Notification.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 24: Maintained Properties of the model

3.3.4.1.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person		The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140				Pool
Taxable person updates the yearly total values of supplies		Taxable person updates at least one of the yearly total values of supplies carried out in MEST and/or MEXE, initially submitted in the Prior Notification.	MCC.3095840				Start event
Update the total yearly value of supplies in MEST and/or in MEXE		The taxable person updates at least one of the following values: * the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is established and in each of the other Member States during the previous	MCC.3095860			Article 284 (4) [DIR2020/285]	Task

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		calendar year; * the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is established and in each of the other Member States during the current calendar year prior to the notification; * the total value of supplies of goods and/or services carried out in each Member State other than the Member State in which the taxable person is established during the year prior to the preceding year if the Member State has opted to extend the exclusion period to two calendar years pursuant to the first subparagraph of Article 288a(1).					
Save and submit the Notification		The taxable person has updated at least one of the yearly total values of supplies carried out in MEST and/or MEXE and submits the updated Notification to the MS of establishment. The Notification should be saved before the submission. The means of submission is a national matter of the MS of establishment.	MCC.3095861				Send task
End of process		The process stops at this point.	MCC.2904760				End event
Cessation information received		The taxable person received the information that he was ceased from one	MCC.2956220				Message start

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		or more MS(s) of exemption. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the reason and the date of cessation.					event
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion information received		The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of exclusion.	MCC.2956200				Message start event
End of process		The process stops at this point.	MCC.2904760				End event
Member State of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860			Article 1 (3) [CIR2021/2007]	Pool
MSEST IT system		The MSEST IT system represents the information system of the MS of establishment, which performs the	MCC.2903020				Lane

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		automatic activities related to special scheme for small enterprises.					
Updated Prior Notification received		The taxable person filled in and submitted an updated Prior Notification, with changes related to yearly total values of supplies carried out in MS of establishment and/or MS of exemption.	MCC.3095960				Message start event
Store the Notification		The MS of establishment stores the information included in the updated Notification. That information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information will be stored in data store of the MS of establishment, it will be ready for an automated access.	MCC.2939640			Article 3 [CIR2021/2007]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following:	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		* the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification;					

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		* the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the					

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Validate the updated Notification - change in yearly total values of supplies in MEST		The call activity describes the validation of the updated Notification at the MS of establishment side, related to change in yearly total values of supplies carried out in the MS of establishment. The MS of establishment has maximum 15 working days to perform these activities since within 15 working days from the notification, it has to notify the MS of exemption. The following validations are performed by the MS of establishment: * semantic validation; * syntactic validation; * the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is established during the previous calendar year; * the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is	MCC.3096060			Articles 284a (1) [DIR2020/285]	Call activity

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		established during the current calendar year prior to the notification. In case some of the validations failed, the overall result from the validation will be negative.					
Validation of the Notification positive?		The gateway splits the business flow based on whether the validation of the Notification was successful or not.	MCC.2904700				Exclusive gateway
Notify about updated Notification		The MS of establishment notifies the MS of exemption of an updated Notification - change in the yearly total values of supplies carried out in the MS of exemption. The notification is represented by the Notification Notice electronic message. The electronic message is submitted to all MSs of exemption, in which the taxable person benefits from the exemption. As the Notification is an update of the previously submitted and approved (Prior) Notification, the electronic message contains the taxable person's exempt identification number, assigned to taxable person by the MS of establishment for the purposes of the special scheme. The Notification information will be accessible to MSs of exemption via automated access to MEST information.	MCC.3096462			Article 4 (2) [CIR2021/2007]	Send task

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		The notification related to updated Notification has to be transmitted to MS of exemption within 15 working days from the date when the information becomes available, pursuant to Article 37a(1) of Regulation (EU) No 904/2010.					
End of process		The process stops at this point.	MCC.2904760				End event
Exemption Cessation message received		The MS of establishment received the Exemption Cessation message from the MS of exemption.	MCC.3112220				Message start event
Process the received electronic message		The sub-process depicts the processing of the message, received by MS. The sub-process also covers the treatment of the received message in case of failed parsing.	MCC.2903700				Call activity (collapsed)
Process the exemption cessations from MSs of exemption		The MS of establishment processes the taxable person's non-eligibility to continue benefiting from the exemption in the MSs of exemption based on the information received from MS of exemption. To allow the taxable person to benefit from the special scheme in a MS other than the MS of establishment, the taxable person must be eligible for the exemption at least in one MS of exemption. If the taxable person continues to avail itself of the exemption in at least one Member State, the MS of establishment	MCC.3112224			Article 284a (1) [DIR2020/285], Article 283 (2) of VAT Directive	Task

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		will have to adapt the information stored on the taxable person with regards to those MSs of exemption, which delivered the Exemption Cessation information. If not, the MS of establishment shall, without delay, deactivate the identification number of the taxable person.					
Update the taxable person information		The taxable person was ceased from MS(s) of exemption. MS of establishment without delay updates the taxable person information with date of cessation and Member State of exemption, in which the cessation takes effect. The data store will be also updated by the status of all MSs of exemption where the taxable person benefits from the exemption. The information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information is stored in data store of the MS of establishment, it will be ready for an automated access.	MCC.2951245			Article 3 [CIR2021/2007] and Article 284e [DIR2020/285]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant	MCC.2902100		Article 17(1)(g) and Article		Data store

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the			21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes					

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Taxable person eligible for exemption at least in one MSEXE?		The gateway splits the business flow based on whether the taxable person is eligible for the exemption at least in one MS of exemption.	MCC.2951240				Exclusive gateway
Inform about cessation from MSEXE		The taxable person has ceased to benefit from the exemption in one or more MS(s) of exemption. The MS of establishment should submit a notification to the taxable person, informing the latter about that cessation. The notification should contain one or more MS(s) of exemption, from which the taxable person is ceased and the	MCC.2951232				Send task

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		date of cessation. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme . It is proposed that in case the taxable person was not informed about his exclusion from the special scheme due to impossibility on the side of the MS of establishment, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).					
End of process		The process stops at this point.	MCC.2904760				End event
Merge		The gateway merges the incoming business flows.	MCC.2904620				Gateway
Deactivate exempt identification number		When the taxable person exceeded the Union annual turnover threshold referred to in point (a) of Article 284(2) or the taxable person is not eligible to benefit from the exemption in any MSs of exemption, the Member State of establishment shall, without delay, deactivate the taxable person's exempt identification number referred to in point	MCC.3115300			Article 284e (1) points (a) and (b) [DIR2020/285]	Task

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		(b) of Article 284(3). The validation of the total value of supplies carried out in MS of establishment led to the fact that the taxable person at the time of the Prior notification was not eligible to benefit from the exemption, the taxable person will be retroactively excluded from the exemption. In case that the taxable person later decides to submit a new Prior Notification to avail of the special scheme again, the same exempt identification number will be assigned to him unless his VAT/Tax or other identifier in the MS of establishment was changed. In such a case, the MS of establishment will assign the taxable person with a new exempt identification number, generated from the taxable person's new VAT/Tax identifier or any other identifier used for VAT purposes in MS of establishment.					
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010		Data store

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established			and Article 3 [CIR2021/2007]		

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease					

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Inform about exclusion from the special scheme		The taxable person is not eligible to continue benefiting from the special scheme. As the validation of the total value of supplies carried out in MS of establishment led to the fact that the taxable person at the time of the Prior notification was not eligible, the taxable person will be retroactively excluded from the special scheme. The MS of establishment submits a notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the information that the taxable person's exempt identification number was deactivated.	MCC.3115380				Send task

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. It is proposed that in case of impossibility of the MEST to notify the taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).					
Inform that the taxable person was excluded from the special scheme		The MS of establishment notifies the relevant MSs of exemption about exclusion of the taxable person from the special scheme. The information contains the exempt identification number of the taxable person and the date from which the exclusion is valid.	MCC.3058540				Send task
End of process		The process stops at this point.	MCC.2904760				End event
MEST automated access		The MEST automated access is part of the MEST information system, operated by the MS of establishment. The MEST automated access provides the other MSs with the automated access to information. The information relates to registration details of the taxable person and the value	MCC.2903040			Article 17(1) (g) and Article 21(2b) [REG2010/9 04] and Article 3	Lane

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		of supplies of goods and/or services carried out by that taxable person.				[CIR2021/2007]	
Notification request received		The automated access to information of the MS of establishment received an information request.	MCC.2903100				Message start event
Automated access to MEST information		The call activity depicts the activities performed by the automated access to MEST information, which is operated by the MS of establishment. The information relates to the special scheme for small enterprises. The minimum information to be provided by the MS of establishment to the other MSs is specified in Article 21 (2b) [REG2010/904].	MCC.2903320			Article 3 [CIR2021/2007]	Call activity (collapsed)
End of process		The process stops at this point.	MCC.2904760				End event
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560			Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool
Member State of exemption		Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its	MCC.2902940			Article 1 (2) [CIR2021/2007]	Pool

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		territory by taxable persons eligible for exemption under the special scheme.					
Updated Prior Notification available		The MS of exemption receives a notification that an updated Prior Notification is made available in the MS of establishment data store. The MS of exemption is notified by the MS of establishment with the individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010.	MCC.3096520				Message start event
Request the updated Notification		The MS of exemption received a notification that an updated Prior Notification is available in the MS of establishment. The MS of exemption prepares a request message requesting the Notification and sends the message to MS of establishment using the automated access to information. For the request, the taxable person's exempt identification number is used, issued by the MS of establishment for the purposes of the SME special scheme.	MCC.3096560			Article 3 [CIR2021/2007]	Send task
Requested Notification received		The MS of exemption received the requested Notification as a response on the Notification request message, transmitted by that MS of exemption in the previous step.	MCC.2903220				Message intermediate event (catch)

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Validate the updated Notification - change in yearly total values of supplies in MSEXE		The MS of exemption verifies if the taxable person is still eligible to benefit from the exemption after the taxable person reported change in MS of exemption yearly total values of supplies carried out in that MS. The MS of exemption has to perform the following checks: * Check if the MS annual threshold was exceeded during the current calendar year; * Check if the MS annual threshold was exceeded in the preceding year; * Check if the MS annual threshold was exceeded in the year prior to the preceding calendar year, if the MS of exemption has opted to extend the exclusion period to two calendar years pursuant to the first subparagraph of Article 288a(1).	MCC.3098380			Articles 284 (1), Article 283 (2), and Article 288a (1) [DIR2020/285], Article 37b (2) [DIR2020/285]	Subprocess
Taxable person still eligible benefiting from exemption?		The gateway splits the business flow based on whether the taxable person is eligible to continue benefiting from the exemption or not.	MCC.3112020				Exclusive gateway
Notify about taxable person's non-eligibility to continue benefiting from the exemption		The MS of exemption evaluated the taxable person as non-eligible to continue benefiting from the exemption in that MS of exemption. The MS of exemption informs the MS of establishment that the taxable person is not eligible anymore to continue benefiting from the exemption in	MCC.3112040			Articles 284 (1), Article 283 (2), and Article 288a (1) [DIR2020/285], Article	Send task

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		that MS of exemption. The MS of exemption shall, without delay, notify by electronic means the competent authorities of the MS of establishment of the individual exempt identification number of the taxable person, referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 and the date on which the taxable person has ceased to be eligible for the exemption in that MS of exemption.				37b (2) [DIR2020/285]	
Merge		The gateway merges the incoming business flows.	MCC.3112980				Gateway
Store the Notification		If the taxable person is still eligible to benefit from the exemption in the MS of exemption after the change in total values of supplies carried out in that MS of exemption, the latter can store all the information from the Notification in his data store. The MS of exemption is not obliged to store the data, but it can be used for later reference.	MCC.3099900				Task
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base	MCC.2935426				Data store

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		does not oblige the MS of exemption to store the information related to the special scheme.					
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion notification received		The MS of the exemption received from the MS of establishment the information that the taxable person was excluded from the special scheme as the change in the total value of supplies initially transmitted in the prior notification carried out in the Member State in which the taxable person is established and/or in each of the other Member States during the current and the previous calendar year(s) led to exclusion of this taxable person from the special scheme.	MCC.3115240				Message start event
Update the Notification information		Based on the exclusion information received in the Exclusion or cessation notification message or through automated access to MEST data store, the MS of exemption can update the taxable person's information in its data store. The MS of exemption is not obliged to store the information, but it can be used for later reference.	MCC.2935422				Task
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of	MCC.2935426				Data store

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.					
End of process		The process stops at this point.	MCC.2904760				End event
Notification Notice	IE3N01	Notification Notice is a common electronic message, transmitted by the MS of establishment to the MS of exemption to inform about the received Prior Notification or an update to a Prior Notification. The Notification Notice consist of the following information: * the exempt identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010, or, if not yet available; * any other number for the purpose of the identification of the taxable person, namely a ‘VAT Identification Number’, a ‘Tax Identification Number’, or ‘Any Other Identification. The Member State of establishment shall transmit the information to the Member	MCC.2904380				Message

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		State of exemption, within 15 working days from the date on which the information becomes available (Article 37a(1) letter a).					
Notification request	IE3N02	Notification request is a common electronic message, transmitted by any MS to the MS of establishment, requesting the Notification information of a specific taxable person.	MCC.2904400				Message
Notification	IE3N03	Notification is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response on the Notification request message.	MCC.2904420				Message
Exemption Cessation	IE3E01	Exemption Cessation is a common electronic message, transmitted without delay by the MS of exemption to the MS of establishment, to inform the latter about the taxable persons' cessation of benefiting from the exemption in that MS of exemption. The Exemption Cessation message contains the list of the taxable persons that ceased to be eligible for the SME exemption in the MS of exemption and consists of the following information: * the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation	MCC.2906440				Message

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		(EU) No 904/2010; * according to Article 37b (3), the date on which the taxable person ceased to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC. The message should also contain the reason of the cessation from MS of exemption, but this is not mandatory as it is not provided for by the legal text.					
Exclusion or Cessation Notification		Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption. These notifications are not foreseen by the legal basis except the case, when the MS of establishment notifies the MS of exemption when the Union annual threshold is exceeded (Article 37a (b)). In other cases, sending of the notification can be done on a voluntary basis. The Exclusion or cessation notification should consist of the following information: * the exempt identification number of the taxable person, issued by the MS of	MCC.2935400	IE3E03			Message

Name	Remark/ Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the exclusion or cessation reason (optional); * the Exclusion effective date or the Cessation effective date. The Exemption or cessation notification message may contain a list of multiple taxable persons, which were excluded from the special scheme or ceased from the MS of exemption.					

Table 25: Maintained Properties of the objects

3.3.4.2 Validate the updated Notification - change in yearly total values of supplies in MEST sub-process

The sub-process describes the validation of the updated Notification at the MS of establishment side, related to change in annual total values of supplies in MS of establishment.

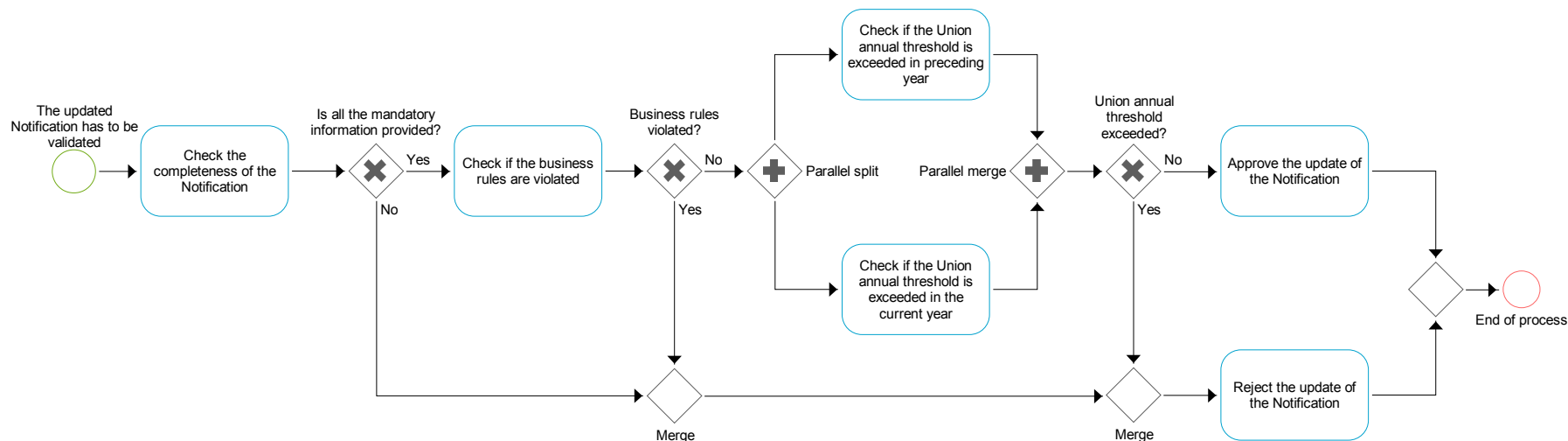


Figure 13: Validate the updated Notification - change in yearly total values of supplies in MEST sub-process

3.3.4.2.1 Model maintained properties

Model Property	Property Value
Name	Validate the updated Notification - change in yearly total values of supplies in MEST
Identifier	MCC.3096040
Description/Definition	The call activity describes the validation of the updated Notification at the MS of establishment side, related to change in annual total values of supplies in MS of establishment. The MS of establishment has maximum 15 working days to perform these activities since within 15 working days from the notification, it has to notify the MS of exemption. The following validations are performed: * semantic validation; * syntactic validation; * the total value of supplies of goods and/or services carried out in the Member State in which the taxable person is established during the previous calendar year; * the total value of supplies of goods and/or services carried out in the Member State in which the taxable

Model Property	Property Value
	person is established during the current calendar year prior to the notification. In case some of the validations failed, the overall result from the validation will be negative.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 26: Maintained Properties of the model

3.3.4.2.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
The updated Notification has to be validated	The MS of establishment has to validate the updated Notification before further processing.	MCC.3100160		Start event
Check the completeness of the Notification	The MS of establishment checks if all the mandatory information is included in the Notification. If some mandatory information is missing, which can cause some ambiguity, the taxable person's request to avail himself of the special scheme or update the Notification will be rejected.	MCC.3016220	Article 284a (1) [DIR2020/285]	Task
Is all the mandatory information provided?	The gateway splits the business flow based on whether all mandatory information is provided or not.	MCC.2907400		Exclusive gateway
Check if the business rules are violated	The MS of establishment checks if all the business rules are followed. If some of the business rules are violated and that leads to ambiguity, the Notification will not be accepted.	MCC.2907140		Task
Business rules violated?	The gateway splits the business flow based on whether the business rules are violated or not.	MCC.2907380		Exclusive gateway
Parallel split	The gateway splits the business flow into two parallel business flows.	MCC.3096160		Parallel gateway
Check if the Union annual threshold is exceeded in	The MS of establishment validates whether the change in the total value of supplies initially transmitted in the Prior	MCC.3096200	Article 284 (2) letter a), 288a	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
preceding year	Notification carried out in the MS in which the taxable person is established did not exceed the Union annual threshold referred to in point a) of Article 284 (2) of DIR 2020/285 during the current calendar year. If the validation of the total value of supplies carried out in MS of establishment leads to the fact that the taxable person at the time of the Prior notification was not eligible to benefit from the exemption, the taxable person will be retroactively excluded from the exemption. The MS of establishment may also notify the taxable person. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme.		(2) and 37b (1) [DIR2020/285]	
Check if the Union annual threshold is exceeded in the current year	The MS of establishment validates whether the change in the total value of supplies initially transmitted in the Prior Notification carried out in the MS in which the taxable person is established did not exceed the Union annual threshold referred to in point a) of Article 284 (2) of DIR 2020/285 during the current calendar year. If the validation of the total value of supplies carried out in MS of establishment leads to the fact that the taxable person at the time of the Prior notification was not eligible to benefit from the exemption, the taxable person will be retroactively excluded from the exemption. The MS of establishment may also notify the taxable person. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme.	MCC.3096220	Article 284 (2) letter a), 288a (2) and 37b (1) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
Parallel merge	The gateway merges the incoming business flows.	MCC.3096380		Parallel gateway
Union annual threshold exceeded?	The gateway splits the business flow based on whether the Union annual threshold was exceeded or not (either in the preceding or current year).	MCC.2907440		Exclusive gateway
Approve the update of the Notification	If the taxable person fulfils all the conditions related to annual total values of supplies carried out in the MS of establishment, the update of the Notification will be accepted by that MS of establishment.	MCC.3096280		Task
Merge	The gateway merges the incoming business flows.	MCC.3096140		Gateway
Merge	The gateway merges the incoming business flows.	MCC.3096360		Gateway
Reject the update of the Notification	If the taxable person fails to fulfil all the conditions related to annual total values of supplies carried out in the MS of establishment, the update of the Notification will be rejected by that MS of establishment.	MCC.3096320		Task
Merge	The gateway merges the incoming business flows.	MCC.3096388		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 27: Maintained Properties of the objects

3.3.4.3 Validate the updated Notification - change in yearly total values of supplies in MSEX sub-process

The sub-process describes the validation of the updated Notification at the MS of exemption side, related to change in annual total values of supplies in MS of establishment.

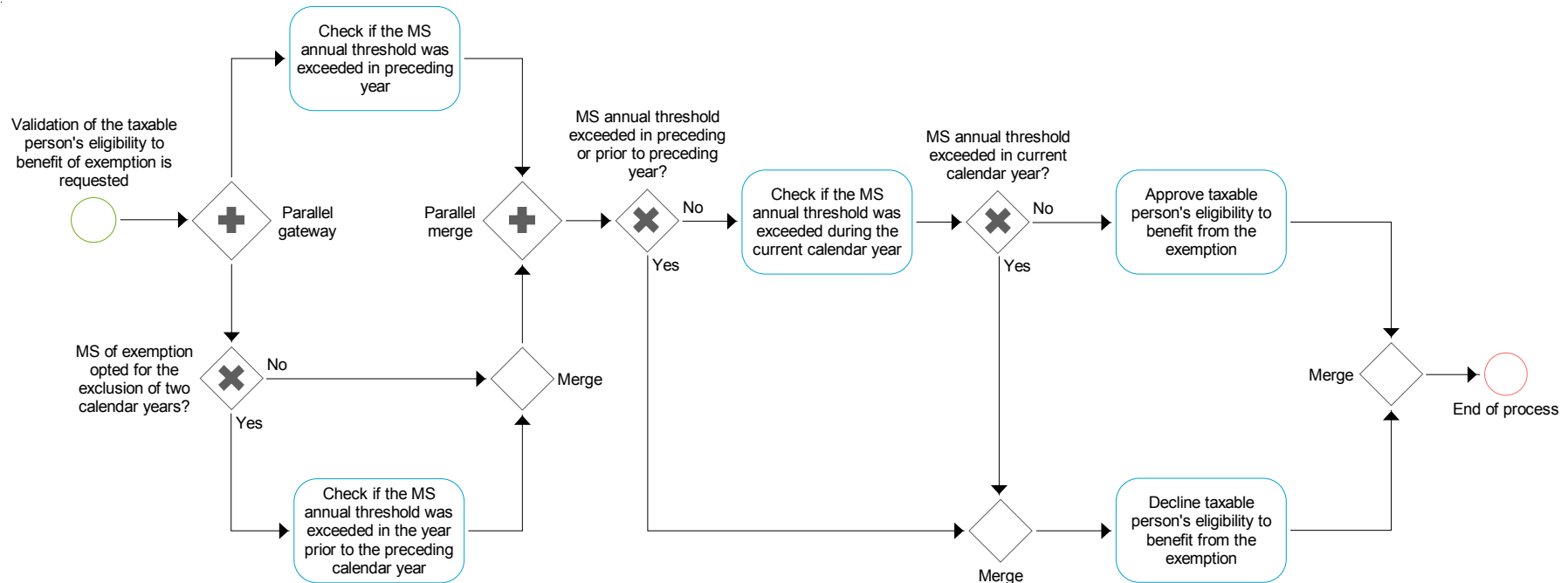


Figure 14: Validate the updated Notification - change in yearly total values of supplies in MSEXE sub-process

3.3.4.3.1 Model maintained properties

Model Property	Property Value
Name	Validate the updated Notification - change in yearly total values of supplies in MSEXE
Identifier	MCC.3098560
Description/Definition	The MS of exemption verifies if the taxable person is still eligible to benefit from the exemption after the taxable person reported change in MSEXE yearly total values of supplies. The MS of exemption has to perform the following checks: * Check if the MS annual threshold was exceeded during the current calendar year; * Check if the MS annual threshold was exceeded in the preceding year;

Model Property	Property Value
	* Check if the MS annual threshold was exceeded in the year prior to the preceding calendar year, if the MS of exemption has opted to extend the exclusion period to two calendar years pursuant to the first subparagraph of Article 288a(1).
Type	BPMN process diagram (BPMN 2.0)

Table: Maintained Properties of the model

3.3.4.3.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
Validation of the taxable person's eligibility to benefit of exemption is requested	The MS of exemption received from the MS of establishment a request to validate if the taxable person is still eligible to benefit of the exemption in that MS of exemption after the taxable person reported changes in the MS yearly total values of supplies carried out in that MS of exemption.	MCC.3098580		Start event
Parallel gateway	The gateway splits the business flow into parallel business flows.	MCC.3098702		Parallel gateway
Check if the MS annual threshold was exceeded in preceding year	The MS of exemption validates whether the change in the total value of supplies initially transmitted in the Prior Notification carried out in the MS other than the MS in which the taxable person is established did not exceed the MS annual threshold referred to in point a) of Article 284 (1) of DIR 2020/285 during the preceding calendar year. The value of the supplies in the MS other than the MS in which the taxable person is established, shall not exceed the threshold set by that MS (which shall not be higher than EUR 85.000). If the validation of the total value of supplies carried out in MS other than the MS of establishment leads to the fact that	MCC.3098620	Article 284 (1) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	the taxable person at the time of the Prior notification was not eligible to benefit from the exemption, the taxable person will be retroactively excluded from the exemption.			
MS of exemption opted for the exclusion of two calendar years?	The gateway splits the business flow based on whether the MS of exemption has opted for the exclusion from the special scheme of two calendar years or not.	MCC.3098660		Exclusive gateway
Check if the MS annual threshold was exceeded in the year prior to the preceding calendar year	The MS of exemption validates whether the change in the total value of supplies initially transmitted in the Prior Notification carried out in the MS other than the MS in which the taxable person is established did not exceed the MS annual threshold referred to in point a) of Article 284 (1) of DIR 2020/285 during the year prior to the preceding calendar year if the MS of exemption has opted to extend the exclusion period to two calendar years pursuant to the first subparagraph of Article 288a(1). The value of the supplies in the MS other than the MS in which the taxable person is established, shall not exceed the threshold set by that MS (which shall not be higher than EUR 85.000). If the validation of the total value of supplies carried out in MS other than the MS of establishment leads to the fact that the taxable person at the time of the Prior notification was not eligible to benefit from the exemption, the taxable person will be retroactively excluded from the exemption.	MCC.3098640	Article 288a (1) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.3100060		Gateway
Parallel merge	The gateway merges the incoming business flows.	MCC.3098711		Parallel gateway
MS annual threshold	The gateway splits the business flow based on whether the	MCC.3098718		Exclusive

Name	Description/Definition	Identifier	Legal Reference	Artefact
exceeded in preceding or prior to preceding year?	MS annual threshold was exceeded either in preceding or in prior to preceding calendar years evaluated in previous step or not.			gateway
Check if the MS annual threshold was exceeded during the current calendar year	The MS of exemption validates whether the change in the total value of supplies initially transmitted in the Prior Notification carried out in the MS other than the MS in which the taxable person is established did not exceed the MS annual threshold referred to in point a) of Article 284 (1) of DIR 2020/285 during the current calendar year. The value of the supplies in the MS other than the MS in which the taxable person is established, shall not exceed the threshold set by that MS (which shall not be higher than EUR 85.000). If the validation of the total value of supplies carried out in MS other than the MS of establishment leads to the fact that the taxable person at the time of the Prior notification was not eligible to benefit from the exemption, the taxable person will be retroactively excluded from the exemption.	MCC.3098707	Article 37b (2) [DIR2020/285]	Task
MS annual threshold exceeded in current calendar year?	The gateway splits the business flow based on whether the MS annual threshold was exceeded in the current calendar year or not.	MCC.3098704		Exclusive gateway
Approve taxable person's eligibility to benefit from the exemption	If the taxable person still fulfils the conditions after the change in the total value of supplies initially transmitted in the Prior Notification carried out in the Member State other than the Member State in which the taxable person is established, the MS of exemption approves the taxable person's eligibility to continue in benefiting from the exemption in that Member State of exemption.	MCC.3098680	Article 37b (2) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
Merge	The gateway merges the incoming business flows.	MCC.3100142		Gateway
Decline taxable person's eligibility to benefit from the exemption	If the taxable person does not fulfil the conditions after the change in the total value of supplies initially transmitted in the Prior Notification carried out in the Member State other than the Member State in which the taxable person is established, the MS of exemption declines the taxable person's eligibility to continue in benefiting from the exemption in that Member State of exemption.	MCC.3098714	Article 37b (2) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.3098700		Gateway
End of process	The process stops at this point.	MCC.3098722		End event

Table 28: Maintained Properties of the objects

3.4 QUARTERLY REPORT BUSINESS PROCESSES

The section contains all the business processes related to the elaboration and processing of the Quarterly report and a correction of the Quarterly report.

3.4.1 Quarterly reporting business process

The section describes the Quarterly reporting business process, which relates to elaboration and processing either of the Quarterly report or a correction of the Quarterly report.

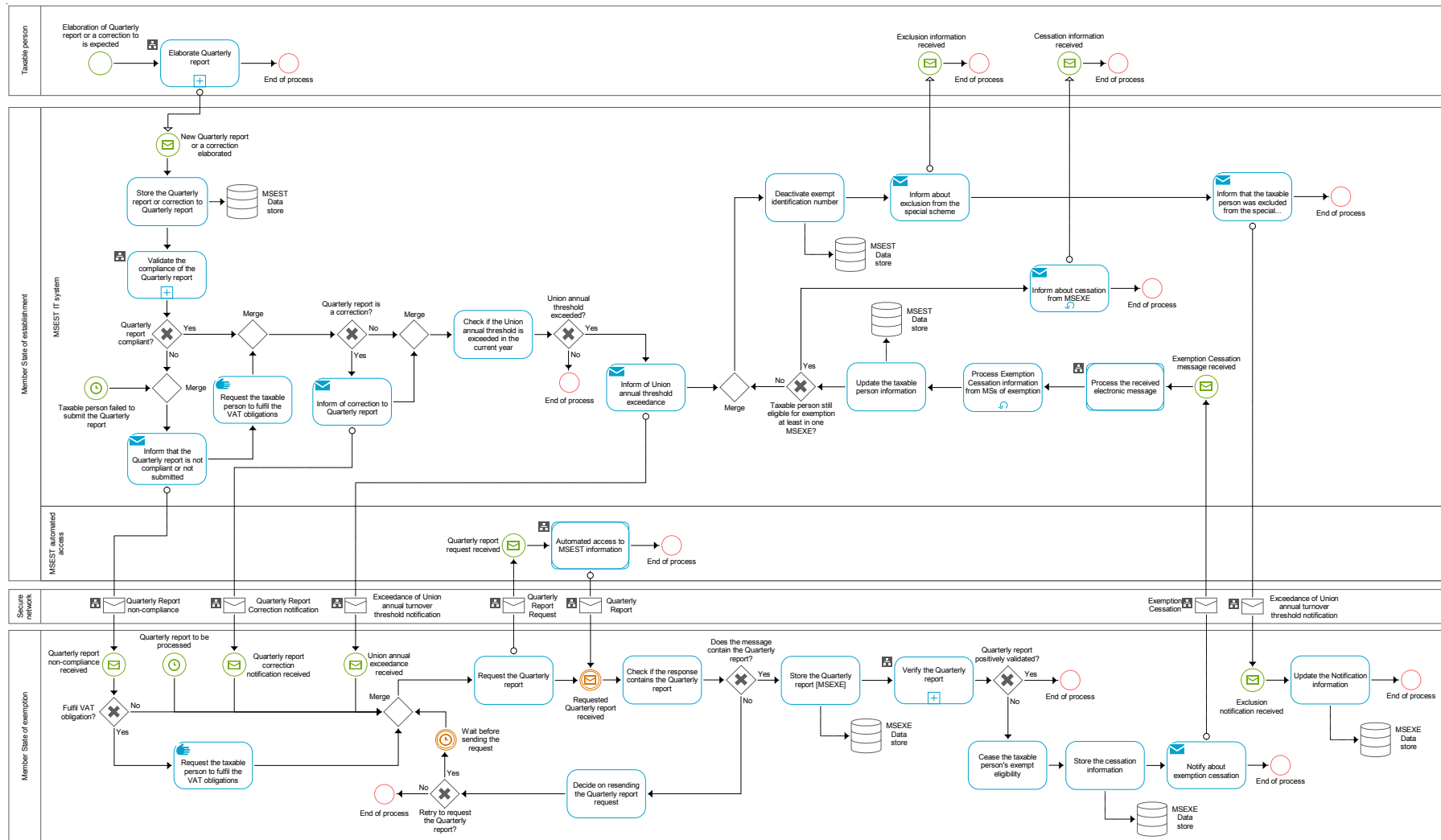


Figure 15: Quarterly reporting business process

3.4.1.1 Model maintained properties

Model Property	Property Value
Name	Quarterly reporting
Identifier	MCC.2905700
Description/Definition	The process describes the overall processing of the Quarterly report, submitted by the taxable person within the special scheme for small enterprises. The process depicts the activities of all involved stakeholders.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 29: Maintained Properties of the model

3.4.1.2 Object maintained properties

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person		The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140				Pool
Elaboration of Quarterly report or a correction to is expected		The taxable person is obliged to elaborate the Quarterly report or a correction to Quarterly report.	MCC.2905880				Start event
Elaborate Quarterly report		The sub-process defines the way how the taxable person elaborates the Quarterly report. The sub-process covers the following	MCC.2906040			Article 284b [DIR2006/11 2/EC], Article 2	Subprocess (collapsed)

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		activities: * calculation of total supplies carried out during the calendar quarter in the MS of establishment, specified by business sector if relevant; * calculation of total supplies carried out during the calendar quarter in each of the Member States other than the MS of establishment, specified by business sector if relevant. If the taxable person exceeded the Union annual threshold, the taxable person shall be required within 15 working days to inform the MS of establishment and report the value of the supplies that have been made from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded in the MS of establishment and in each of the other Member States, specified by business sector if relevant.				[CIR 2021/2007]	
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion information received		The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for	MCC.2956200				Message start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of exclusion.					
End of process		The process stops at this point.	MCC.2904760				End event
Cessation information received		The taxable person received the information that he was ceased from one or more MS(s) of exemption. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the reason and the date of cessation.	MCC.2956220				Message start event
End of process		The process stops at this point.	MCC.2904760				End event
Member State of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860			Article 1 (3) [CIR2021/2007]	Pool
MSEST IT system		The MSEST IT system represents the information system of the MS of establishment, which performs the automatic activities related to special scheme for small enterprises.	MCC.2903020				Lane
Taxable person failed		The MS of establishment awaits the deadline for submission but does not	MCC.2981120				Timer start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
to submit the Quarterly report		receive the Quarterly Report. Within 15 working days from that deadline the MS of establishment notifies the MS of exemption.					
New Quarterly report or a correction elaborated		The taxable person filled in and submitted the Quarterly report or a correction to the Quarterly report.	MCC.2905820				Message start event
Store the Quarterly report or correction to Quarterly report		The MS of establishment stores the information included in the Quarterly report, reported by the taxable person. The MS of establishment assigns a unique reference number to the received Quarterly report. If the Quarterly report is a correction to a previously submitted Quarterly report, it will be stored as a new version. Each version of the Quarterly report will be stored as a history, but only the last one is assumed as the official one.	MCC.2906280			Article 3 [CIR2021/2007]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by			3 [CIR2021/2007]		

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Validate the compliance of the Quarterly report		The MS of establishment validates if the received Quarterly report or a correction to an existing Quarterly report is compliant with the Article 284b (1) and (2) of the Directive 2020/285.	MCC.2906000			Article 284b (1) and (2) [DIR2020/285]	Subprocess (collapsed)
Quarterly report compliant?		The gateway splits the business flow based on whether the received Quarterly report is compliant with the obligations declared in Art. 284b or not.	MCC.2979200				Exclusive gateway
Merge		The gateway merges the incoming business flows.	MCC.2981140				Gateway
Inform that the Quarterly report is not compliant or not submitted		The MS of establishments informs all involved MS of exemption that the received Quarterly report or a correction to Quarterly report is not compliant with Article 284b (1) and (2) of Directive 2020/285 or that the MS of establishment did not receive the Quarterly report within	MCC.2979220			Article 37a(1)(c) [DIR2020/285] and Article 4 (2d) [CIR2021/2007]	Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		the deadline for submission (one month from the end of the quarter). The MS of establishment shall transmit the information to the MS of exemption within 15 working days from the date on which the information becomes available. In case of failure to submit the Quarterly report, this will be within 15 working days after the taxable person's deadline to submit the Quarterly report to MS of establishment (within one month after the end of the calendar quarter to which the information relates). So in case of failure to submit the Quarterly report the overall deadline for MS of establishment to transmit the information is one month and 15 working days after the end of the calendar quarter.					
Request the taxable person to fulfil the VAT obligations		If the taxable person failed to comply with the rules provided for in Article 284b (1) and (2), the MS of establishment may require the non-compliant taxable person to fulfil the VAT obligations, as set out in Article 284d(3) of the VAT Directive.	MCC.2956060			Article 284d (3) [DIR2020/285]	Manual task
Merge		The gateway merges the incoming business flows.	MCC.2979962				Gateway

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Quarterly report is a correction?		The gateway splits the business flow based on whether the received Quarterly report is a new one or correction.	MCC.2956320				Exclusive gateway
Inform of correction to Quarterly report		The MS of establishments informs the MS of exemption that a correction to an existing Quarterly report is ready in Automated access to MEST data store.	MCC.2956360				Send task
Merge		The gateway merges the incoming business flows.	MCC.2981229				Gateway
Check if the Union annual threshold is exceeded in the current year		The MS of establishment calculates on the basis of the total values of supplies reported by the taxable person in current year that the Union annual turnover threshold referred to in Article 284 (2) point (a) of DIR 2020/285 was not exceeded during the current calendar year. The MS of establishment should also notify the taxable person. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme.	MCC.2907180			Article 284 (2) letter a), 288a (2) and 37b (1) [DIR2020/285]	Task
Union annual threshold exceeded?		The gateway splits the business flow based on whether the Union annual threshold was exceeded in the current year or not.	MCC.2906540				Exclusive gateway
Inform of Union		The MS of establishments within 15 working days from the date on which the	MCC.2980460			Article 4 (2) (c)	Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
annual threshold exceedance		information becomes available informs the MS of exemption that the taxable person exceeded the Union annual threshold. The information shall consist of the following: * Exempt identification number of the taxable person issued by the Member State providing the information; * The date on which the Union annual turnover of the taxable person exceeded the amount referred to in point (a) of Article 284(2) of Directive 2006/112/EC. If the exact date of the Union annual threshold exceedance is not known, the last day of the calendar quarter in which the Union annual threshold turnover has been exceeded will be assumed as a day of the Union annual threshold exceedance.				[CIR2021/2007] and 37a(1)(b) [DIR2020/285]	
End of process		The process stops at this point.	MCC.2904760				End event
Exemption Cessation message received		The MS of establishment received the Exemption Cessation message.	MCC.2903060				Message start event
Process the received electronic message		The sub-process depicts the processing of the message, received by MS. The sub-process also covers the treatment of the received message in case of failed parsing.	MCC.2903700				Call activity
Process		The MS of establishment processes the	MCC.2906180			Article 284e	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Exemption Cessation information from MSs of exemption		taxable person's eligibility to benefit from the exemption in the MSs of exemption on the basis of the notifications received from MS of exemption. To allow the taxable person to benefit from the special scheme in a MS other than the MS of establishment, the taxable person must be eligible for exemption at least in one MS of exemption. If the taxable person continues to avail itself of the exemption in at least one Member State, the MS of establishment will have to adapt the information stored on the taxable person with regards to those MSs of exemption, which delivered the Exemption Cessation information. If not, the MS of establishment shall, without delay, deactivate the identification number of the taxable person.				(b) [DIR2020/285]	
Update the taxable person information		The taxable person was ceased from MS(s) of exemption. MS of establishment without delay updates the taxable person information with date of cessation and Member State of exemption, in which the cessation takes effect. The data store will be also updated by the status of all MSs of exemption where the taxable person benefits from the exemption.	MCC.2951245			Article 3 [CIR2021/2007] and Article 284e [DIR2020/285]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		The information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information is stored in data store of the MS of establishment, it will be ready for an automated access.					
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person’s OSS number.					
Taxable		The gateway splits the business flow based	MCC.2906520				Exclusive

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
person still eligible for exemption at least in one MSEXE?		on whether the taxable person is eligible for the exemption at least in one MS of exemption or not.					gateway
Inform about cessation from MSEXE		The taxable person has ceased to benefit from the exemption in one or more MS(s) of exemption. The MS of establishment should submit a notification to the taxable person, informing the latter about that cessation. The notification should contain one or more MS(s) of exemption, from which the taxable person is ceased and the date of cessation. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme . It is proposed that in case the taxable person was not informed about his exclusion from the special scheme due to impossibility on the side of the MS of establishment, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).	MCC.2951232				Send task
End of		The process stops at this point.	MCC.2904760				End event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
process							
Merge		The gateway merges the incoming business flows.	MCC.2952380				Gateway
Deactivate exempt identification number		When the taxable person exceeded the Union annual turnover threshold referred to in point (a) of Article 284(2) or the taxable person is not eligible to benefit from the exemption in any MSs of exemption, the Member State of establishment shall, without delay, deactivate the taxable person's exempt identification number referred to in point (b) of Article 284(3). In case that the taxable person later decides to submit a new Prior Notification to avail of the special scheme again, the same exempt identification number will be assigned to him unless his VAT/Tax or other identifier in the MS of establishment was changed. In such a case, the MS of establishment will assign the taxable person with a new exempt identification number, generated from the taxable person's new VAT/Tax identifier or any other identifier used for VAT purposes in MS of establishment.	MCC.2906020			Article 284e (1) points (a) and (b) [DIR2020/285]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant	MCC.2902100		Article 17(1)(g) and Article		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the			21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Inform about exclusion from the special scheme		The MS of establishment submits a notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the information that the taxable person's exempt identification number was deactivated and the date of exclusion. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme.	MCC.2906160				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		It is proposed that in case of impossibility of the MS of establishment to notify the taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).					
Inform that the taxable person was excluded from the special scheme		The MS of establishment notifies the relevant MSs of exemption about exclusion of the taxable person from the special scheme. The information contains the exempt identification number of the taxable person and the date from which the exclusion is valid.	MCC.3058540				Send task
End of process		The process stops at this point.	MCC.2904760				End event
MSEST automated access		The MSEST automated access is part of the MSEST information system, operated by the MS of establishment. The MSEST automated access provides the other MSs with the automated access to information. The information relates to registration details of the taxable person and the value of supplies of goods and/or services carried out by that taxable person.	MCC.2903040			Article 17(1) (g) and Article 21(2b) [REG2010/9 04] and Article 3 [CIR2021/20 07]	Lane
Quarterly report		The automated access to information of the MS of establishment received an	MCC.2905844				Message start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
request received		information request.					
Automated access to MEST information		The call activity depicts the activities performed by the automated access to MEST information, which is operated by the MS of establishment. The information relates to the special scheme for small enterprises. The minimum information to be provided by the MS of establishment to the other MSs is specified in Article 21 (2b) [REG2010/904].	MCC.2903320			Article 3 [CIR2021/2007]	Call activity
End of process		The process stops at this point.	MCC.2904760				End event
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560			Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool
Member State of exemption		Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940			Article 1 (2) [CIR2021/2007]	Pool
Quarterly		The MS of exemption received the	MCC.2980340				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
report non-compliance received		information that the Quarterly report or its correction is not compliant with Article 284b (1) and (2).					start event
Fulfil VAT obligation?		The gateway splits the business flow based on whether the MS of exemption decided to request the taxable person to fulfil his VAT obligations.	MCC.2956000				Exclusive gateway
Request the taxable person to fulfil the VAT obligations		If the taxable person failed to comply with the rules provided for in Article 284b(1) and (2), the MS of establishment within 15 working days, notifies the MS/s of exemption (ID number and the fact of the failure). MS of exemption may require the non-compliant taxable person to fulfil the VAT obligations in his country, as set out in Article 284d(3) of the VAT Directive.	MCC.3141160			Article 284d (3) [DIR2020/285]	Manual task
Quarterly report to be processed		The MS of exemption awaits the deadline for submission of the Quarterly report, before it requests from the MS of establishment the Quarterly reporting process, via MEST automated access.	MCC.2956400				Timer start event
Quarterly report correction notification received		The MS of exemption received a notification that a correction to Quarterly report is ready in the MS of establishment data store.	MCC.2905800				Message start event
Union annual exceedance		The MS of exemption received the information that the taxable person exceeded the Union annual turnover	MCC.2981020				Message start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
received		threshold.					
Exclusion notification received		The MS of the exemption received from the MS of establishment the information that the taxable person was excluded from the special scheme as he exceeded the Union annual threshold. The notification from MS of establishment to MS of exemption is not foreseen by the legal basis. It can be done on a voluntary basis only.	MCC.2983820				Message start event
Update the Notification information		Based on the exclusion information received in the Exclusion or cessation notification message or through automated access to MSEST data store, the MS of exemption can update the taxable person's information in its data store. The MS of exemption is not obliged to store the information, but it can be used for later reference.	MCC.2935422				Task
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special	MCC.2935426				Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		scheme.					
End of process		The process stops at this point.	MCC.2904760				End event
Quarterly Report non-compliance	IE3Q03	Quarterly Report non-compliance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying that the Quarterly report or a correction to an existing Quarterly report is not compliant with the Article 284b of Directive 2020/285 or that MS of establishment did not receive the Quarterly report at all.	MCC.2979240				Message
Quarterly Report Correction notification	IE3Q04	Quarterly Report Correction notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying the latter that there is a correction to an existing Quarterly report, stored in the MEST automated access. The MS of exemption sends a Quarterly report request message to the MEST automated access in order to gain the correction information. Sending of the message is not provided by the legal basis so it can be done on a voluntary basis.	MCC.2956443				Message
Exceedance of Union		Exceedance of Union Annual Turnover Threshold Notification is a common	MCC.2983900	IE3E04			Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
annual turnover threshold notification		electronic message, transmitted by the MS of establishment to the related MS of exemption, to inform the latter about exceedance of the Union annual turnover threshold. The Exceedance of Union Annual Turnover Threshold Notification consists of the following information: * Exempt identification numbers of the taxable persons issued by the Member State providing the information; * The date on which the Union annual turnover of the taxable person exceeded the amount referred to in Article 284(2)(a) of Directive 2006/112/EC. If the exact date of the Union annual threshold exceedance is not known, the last day of the calendar quarter in which the Union annual threshold turnover has been exceeded will be assumed as a day of Union annual threshold exceedance.					
Quarterly Report Request	IE3Q01	The Quarterly Report Request is a common electronic message, transmitted by any Member State to MS of establishment, to request the Quarterly Report of a specific taxable person. The message contains the following information: * the exempt identification number of the taxable person, issued by the Member	MCC.2906460				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the calendar quarter and a year to which the request relates.					
Quarterly Report	IE3Q02	Quarterly Report is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response to the Quarterly report request message, containing the value of supplies of goods and/or services, performed by the taxable person within a specific quarter. The message contains the following information: * the exempt individual identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the period and year to which the report relates; * the total value of supplies carried out during the calendar quarter in the Member State of establishment or “0” if no supplies have been made, specified by business sector if relevant pursuant to Article 284c(1), point (c), of Directive 2006/112/EC;	MCC.2906480				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		* the total value of supplies carried out during the calendar quarter in each of the Member States other than the Member State of establishment or “0” if no supplies have been made, specified by business sector if relevant pursuant to Article 284c(1), point (c), of Directive 2006/112/EC.					
Exemption Cessation	IE3E01	Exemption Cessation is a common electronic message, transmitted without delay by the MS of exemption to the MS of establishment, to inform the latter about the taxable persons' cessation of benefiting from the exemption in that MS of exemption. The Exemption Cessation message contains the list of the taxable persons that ceased to be eligible for the SME exemption in the MS of exemption and consists of the following information: * the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * according to Article 37b (3), the date on which the taxable person ceased to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC. The message should also contain the	MCC.2906440				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		reason of the cessation from MS of exemption, but this is not mandatory as it is not provided for by the legal text.					
Exceedance of Union annual turnover threshold notification		Exceedance of Union Annual Turnover Threshold Notification is a common electronic message, transmitted by the MS of establishment to the related MS of exemption, to inform the latter about exceedance of the Union annual turnover threshold. The Exceedance of Union Annual Turnover Threshold Notification consists of the following information: * Exempt identification numbers of the taxable persons issued by the Member State providing the information; * The date on which the Union annual turnover of the taxable person exceeded the amount referred to in Article 284(2)(a) of Directive 2006/112/EC. If the exact date of the Union annual threshold exceedance is not known, the last day of the calendar quarter in which the Union annual threshold turnover has been exceeded will be assumed as a day of Union annual threshold exceedance.	MCC.2983900	IE3E04			Message
Requested Quarterly report received		The requesting Member State received the response message as a response to the information request message, transmitted by that MS of exemption in the previous	MCC.2905760				Message intermediate event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		step.					(catch)
Wait before sending the request		The MS of exemption waits some time (a few days) before sending the Quarterly report request again. The MS of exemption could wait for example 15 working days after the expiry of the deadline for submission since the MS of establishment has 15 working days to notify the MS of exemption of failure of the taxable person to comply with Article 284b. The timeframe is a national matter, it is up to the MS of exemption.	MCC.2956040				Timer intermediate event
Cease the taxable person's exempt eligibility		When the MS of exemption discovers that the taxable person has exceeded the MS annual turnover threshold, that MS of exemption shall notify the MS of establishment about the ceased eligibility of that taxable person to benefit from the exemption in this MS of exemption as of the time when the threshold was exceeded unless a transitional period applies pursuant to Article 288a. In case the transitional period applies, the MS of exemption accepts the Quarterly report, but the taxable person is allowed to benefit from the exemption in that MS of exemption until the end of year only. The MS of exemption has to notify the MS of establishment without delay the exempt	MCC.2905960			Article 288a (1) [DIR2020/285]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		identification number of the taxable person and the date (beginning of the following year) on which the taxable person will cease to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC.					
Check if the response contains the Quarterly report		The MS of exemption checks if the received Quarterly report message contains the requested Quarterly report information or the received message is empty (means that the MS of establishment did not find the requested Quarterly report in its data store).	MCC.2959460				Task
Decide on resending the Quarterly report request		The MS of exemption still did not receive the expected Quarterly report. The most probable reason is that the MS of establishment had not received the Quarterly report from the taxable person. The MS of exemption decides whether it will request the Quarterly report from the MS of establishment again. If yes, the MS of exemption will wait some time before requesting the Quarterly report again. The MS of exemption could wait for example 15 working days after the expiry of the deadline for submission since the MS of establishment has 15 working days to notify the MS of exemption of failure of the taxable person to comply with Article	MCC.2956500				Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		284b.					
Notify about exemption cessation		The MS of exemption shall, without delay, notify by electronic means the competent authorities of the MS of establishment of the exempt individual identification number of the taxable person, referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 and the date on which the taxable person has ceased to be eligible for the exemption in that MS of exemption.	MCC.2906120			Article 37b (3) [DIR2020/285] and Article 4 (3) point (b) [CIR 2021/2007]	Send task
Request the Quarterly report		The MS of exemption assumes that there is a new Quarterly report available in the data store of the MS of establishment or received a notification that there is a correction to a Quarterly report in the data store of the MS of establishment or received a notification that the Union turnover has been exceeded. The MS of exemption prepares a request message requesting the Quarterly report and submits the message to MS of establishment using the automated access to information. In case the MS of exemption received information that the taxable person failed to submit the Quarterly report, the MS of exemption ignores this step and will not request the Quarterly report from the MS of establishment.	MCC.2906220			Article 3 [CIR2021/2007]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		For the request of the new Quarterly report, the taxable person's exempt identification number is used. The following dates are proposed to request the Quarterly report from the MS of establishment: * Q1 - 01/05 + 15 working days; * Q2 - 01/08 + 15 working days; * Q3 - 01/11 + 15 working days; * Q4 - 01/02 + 15 working days.					
Store the cessation information		The MS of exemption stores the cessation information in its data store. The MS of exemption is not obliged to store the data, but it can be used for later reference.	MCC.2906260				Task
Store the Quarterly report [MSEXE]		The MS of exemption, after having asked for automated access to MS of establishment, stores the Quarterly report and any correction to it submitted by the taxable person. The MS of exemption is not obliged to store the data, but it can be used for later reference.	MCC.2906300				Task
Verify the Quarterly report		The MS of exemption verifies the Quarterly report, if the taxable person is still eligible to benefit from the exemption in that MS of exemption. The following conditions are evaluated: * the MS annual threshold is not exceeded	MCC.2906360			Articles 288a (1)(2) and 37b (2) [DIR2020/285]	Subprocess (collapsed)

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		during the current calendar year; * the eligibility of the taxable person to continue benefiting from the exemption in case he already exceeded the MS annual threshold (transitional period).					
Does the message contain the Quarterly report?		The gateway splits the business flow based on whether the received Quarterly report message contains the Quarterly report information or the Quarterly report message is empty.	MCC.2959480				Exclusive gateway
Merge		The gateway merges the incoming business flows.	MCC.2956446				Gateway
Quarterly report positively validated?		The gateway splits the business flow based on whether the Quarterly report of the taxable person is positively validated or not. If the Quarterly report is positively validated, the process ends as there is no other obligation on the MS of exemption to complete. If the quarterly report is positively validated, but the MS annual turnover threshold is exceeded and a transitional period applies, MS of exemption has to notify the MS of establishment without delay the exempt individual identification number of the taxable person and the date (beginning of the following year) on which the taxable person will cease to be eligible for the exemption under Article 288a(1) of	MCC.2906500				Exclusive gateway

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		Directive 2006/112/EC.					
Retry to request the Quarterly report?		The gateway splits the business flow based on whether the MS of exemption retries to request the Quarterly report from the MS of establishment.	MCC.2956520				Exclusive gateway

Table 30: Maintained Properties of the objects

3.4.2 Elaborate Quarterly report sub-process

The sub-process describes the activities at the taxable person side leading to elaboration and submission of the Quarterly report or a correction of the already submitted Quarterly report.

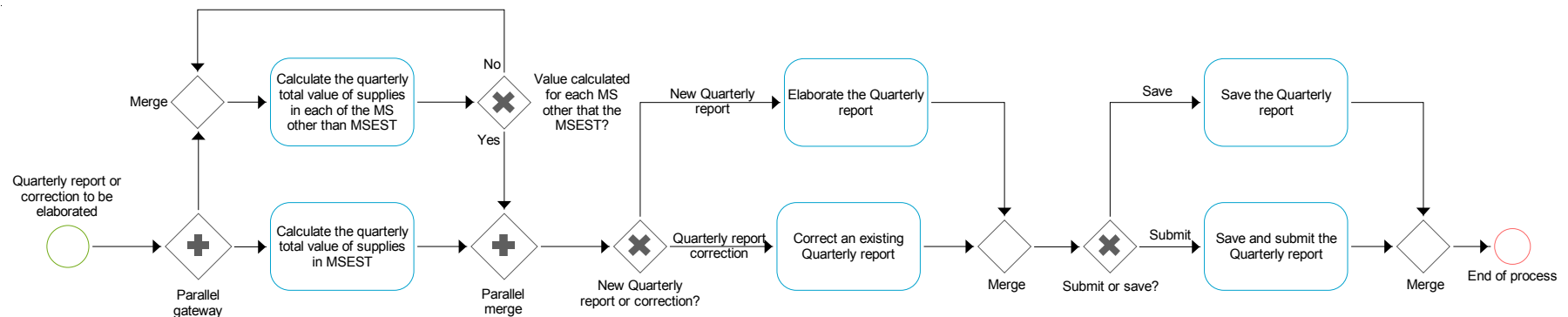


Figure 16: Elaborate Quarterly report sub-process

3.4.2.1 Model maintained properties

Model Property	Property Value
Name	Elaborate Quarterly report
Identifier	MCC.2906060

Model Property	Property Value
Description/Definition	The sub-process defines the way in which the taxable person elaborates the Quarterly report. The sub-process is reusable for elaboration of a new or update of an existing Quarterly report. The sub-process covers the following activities: * calculation of the value of total supplies carried out during the calendar quarter in the MS of establishment; * calculation of the value of total supplies carried out during the calendar quarter in each of the Member States other than the MS of establishment.
Type	BPMN process diagram (BPMN 2.0)

Table 31: Maintained Properties of the model

3.4.2.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
Quarterly report or correction to be elaborated	The taxable person is obliged to elaborate the Quarterly report. The taxable person may also correct an already submitted Quarterly report.	MCC.2907822		Start event
Parallel gateway	The gateway splits the business flow into parallel business flows.	MCC.2908161		Parallel gateway
Calculate the quarterly total value of supplies in MEST	The taxable person is obliged on a quarterly basis to calculate the total value of supplies carried out during the calendar quarter in the MS of establishment or report “0” if no supplies have been made. The values shall consist of the amounts listed in Article 288 and be denominated in euro. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on	MCC.2908120	Article 284b (1) and 284c [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	the next day of publication. Where the MS of exemption applies varying thresholds, the values shall be specified by business sector.			
Parallel merge	The gateway merges the incoming business flows.	MCC.2908160		Parallel gateway
New Quarterly report or correction?	The gateway splits the business flow based on whether the taxable person elaborates a new Quarterly report, or corrects an existing Quarterly report.	MCC.2994360		Exclusive gateway
Elaborate the Quarterly report	The taxable person enters all the relevant information required for the Quarterly report. The minimum amount of information to be filled in is the following: * the exempt identification number of the taxable person; * the total value of supplies carried out during the calendar quarter in the Member State of establishment or “0” if no supplies have been made; * the total value of supplies carried out during the calendar quarter in each of the Member States other than the Member State of establishment or “0” if no supplies have been made.	MCC.2994320	Article 284b [DIR2020/285]	Task
Correct an existing Quarterly report	The taxable person may correct an already submitted Quarterly report. The following information may be updated: * the total value of supplies carried out during the calendar quarter in the Member State of establishment or “0” if no supplies have been made; * the total value of supplies carried out during the calendar quarter in each of the Member States other than the Member State of establishment or “0” if no supplies	MCC.2994340	Article 284b [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	have been made. The correction is represented by a Quarterly report, which must refer to the same quarter. It will represent a new version of the same Quarterly report. For the record-keeping reasons, all versions of the Quarterly report will be stored and only the last one will be valid.			
Merge	The gateway merges the incoming business flows.	MCC.2994401		Gateway
Submit or save?	The gateway splits the business flow based on whether the taxable person wants to submit the Quarterly report to the MS of establishment or to store the information for later submission.	MCC.2907820		Exclusive gateway
Save the Quarterly report	The taxable person filled in the Quarterly report but have decided not to submit the Quarterly report yet. The taxable person is permitted to change that information later (and probably to submit it). The semi-finished Quarterly report is stored to allow later completion by the taxable person.	MCC.2994560		Task
Save and submit the Quarterly report	The taxable person has elaborated the Quarterly report. The taxable person has to submit the Quarterly report within one month from the end of the calendar quarter.	MCC.2908320	Article 284b [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
End of process	The process stops at this point.	MCC.2904760		End event
Calculate the quarterly total value of supplies in each of the MS other than MEST	The taxable person is obliged on a quarterly basis to calculate the total value of supplies, carried out during the calendar quarter in each of the Member States other than the MS of establishment or report “0” if no supplies have been made. The values shall consist of the amounts listed in Article	MCC.2908140	Article 284b (1) and 284c [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	288 and be denominated in euro. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on the next day of publication. Where the Member State granting the exemption applies varying thresholds, the values shall be specified by business sector.			
Merge	The gateway merges the incoming business flows.	MCC.2956940		Gateway
Value calculated for each MS other than the MEST?	The gateway splits the business flow based on whether the total value of supplies carried out during the calendar quarter is calculated for each MS other than the MS of establishment or not.	MCC.2908380		Exclusive gateway

Table 32: Maintained Properties of the objects

3.4.3 Validate the compliance of the Quarterly report sub-process

The sub-business process describes the validation of the Quarterly report by the MS of establishment.

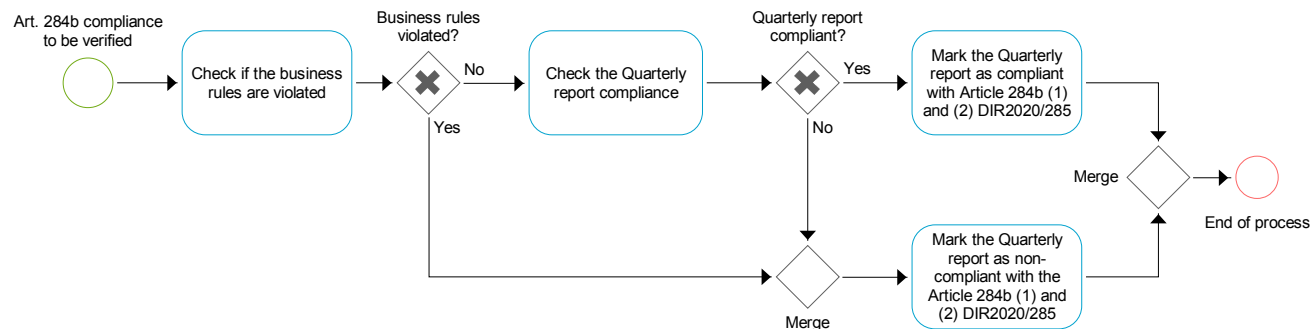


Figure 17: Validate the compliance of the Quarterly report sub-process

3.4.3.1 Model maintained properties

Model Property	Property Value
Name	Validate the compliance of the Quarterly report
Identifier	MCC. 2967660
Description/Definition	The MS of establishment validates the received Quarterly report or a correction to Quarterly report.
Type	BPMN process diagram (BPMN 2.0)

Table 33: Maintained Properties of the model

3.4.3.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
Art. 284b compliance to be verified	The MS of establishment needs to verify the received Quarterly report or a correction to Quarterly report in compliance with Art. 284b.	MCC.2967720		Start event
Check if the business rules are violated	The MS of establishment checks whether all the business rules are followed. If some of the business rules are	MCC.2967460		Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	violated and that leads to ambiguity, the Quarterly report will not be accepted.			
Business rules violated?	The gateway splits the business flow based on whether the business rules are violated or not.	MCC.2907380		Exclusive gateway
Check the Quarterly report compliance	As regards the Quarterly report or a correction to Quarterly report, the MS of establishment checks if the taxable person is compliant with the obligations set out in Article 284b points (1) and (2) of Directive 2020/285: * the taxable person has sent the Quarterly report on time, within one month from the end of the calendar quarter; * the taxable person entered all the mandatory information: * the individual exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the total value of supplies carried out during the calendar quarter in the MS of establishment or “0” if no supplies have been made; * the total value of supplies carried out during the calendar quarter in each of the Member States other than the MS of establishment or “0” if no supplies have been made.	MCC.2979180	Article 284b (1) and (2) [DIR2020/285]	Task
Quarterly report compliant?	The gateway splits the business flow based on whether the Quarterly report is compliant with Article 284 points (1) and (2) or not.	MCC.2979560		Exclusive gateway
Mark the Quarterly report as compliant with Article 284b (1) and (2) DIR2020/285	The MS of establishment accepts the Quarterly report as compliant with the Article 284b (1) and (2) of Directive 2020/285.	MCC.2981700		Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Mark the Quarterly report as non-compliant with the Article 284b (1) and (2) DIR2020/285	The MS of establishment does not accept the Quarterly report as compliant with the Article 284b (1) and (2) of Directive 2020/285. Where a taxable person fails to comply with the rules provided for in Article 284b (1) and (2), MS of establishment has to notify the MS of exemption within 15 working days the exempt identification number and the fact of the failure. Consequently, both MS of exemption and MS of establishment may then require such a taxable person to fulfil VAT obligations.	MCC.2981720		Task
Merge	The gateway merges the incoming business flows.	MCC.2967829		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 34: Maintained Properties of the objects

3.4.4 Verify the Quarterly report sub-process

The sub-business process describes the verification of the Quarterly report by the MS of exemption.

Table 35: Maintained Properties of the model

3.4.4.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
Quarterly report validation to be performed	The MS of exemption has to validate the Quarterly report, or the correction to a Quarterly report, elaborated by the taxable person.	MCC.2908940		Start event
Check if the MS annual threshold was exceeded during the current year	The MS of exemption verifies whether the MS annual threshold was exceeded during the current calendar year. The value of the supplies in the MS of exemption, where the taxable person is not established, shall not exceed the threshold set by that Member State, which cannot exceed EUR 85.000.	MCC.2909000	Article 37b (3) [DIR2020/285]	Task
MS annual turnover threshold exceeded in the current year?	The gateway splits the business flow based on whether the MS annual threshold is exceeded during the current calendar year or not.	MCC.2909080		Exclusive gateway
Transitional period in force?	The gateway splits the business flow based on whether the transitional period in the MS of exemption is in force or not.	MCC.2909120		Exclusive gateway
What ceiling does the MS of exemption apply?	The gateway splits the business flow based on whether the MS of exemption applies a ceiling of 10%, or 25%, or none.	MCC.2923520		Complex gateway
Check if the MS annual turnover threshold is exceeded by more than 10%	If The MS of exemption applies a transitional period with a ceiling of 10%, it verifies whether the taxable person exceeded the MS annual threshold by more than 10% during the current year. If the threshold referred to in Article 284(1) is exceeded by not more than 10%, the taxable person	MCC.2966060	Article 288a (1) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	will be able to continue to benefit from the exemption provided for in Article 284(1) during that calendar year. If the threshold is exceeded by more than 10 %, the exemption provided for in Article 284(1) will cease to apply as of that time.			
Is the ceiling of 10% exceeded?	The gateway splits the business flow based on whether the ceiling of 10% was exceeded during the current calendar year or not.	MCC.2923640		Exclusive gateway
Check if the ceiling of 25% exceeded	The MS of exemption verifies whether it has opted for a ceiling of 25%. If the ceiling of 25% is not exceeded, then the result from the validation is positive. Otherwise, the result from the validation is negative. However, the application of this ceiling may not result in exempting a taxable person whose turnover within the Member State granting the exemption exceeds EUR 100.000. If the value of EUR 100.000 is exceeded, then the result from the validation is negative.	MCC.2966100	Article 288a (1) [DIR2020/285]	Task
Is the ceiling 25% exceeded?	The gateway splits the business flow based on whether the ceiling of 25% was exceeded during the current calendar year or not.	MCC.2950660		Exclusive gateway
Merge	The gateway merges the incoming business flows.	MCC.2950700		Gateway
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Check if the taxable person's turnover exceeded EUR 100.000	The MS of exemption verifies if the application of no ceiling or of 25% ceiling does not result in the turnover of the taxable person in that MS exceeding EUR 100.000.	MCC.2916380	Article 288a (1) [DIR2020/285]	Task
Turnover of EUR 100.000 exceeded?	The gateway splits the business flow based on whether the turnover of the taxable person in that MS of	MCC.2909460		Exclusive

Name	Description/Definition	Identifier	Legal Reference	Artefact
	exemption exceeded EUR 100 000 or not.			gateway
Merge	The gateway merges the incoming business flows.	MCC.2950680		Gateway
Allow the taxable person to benefit from the exemption until end of the year	The MS annual threshold is exceeded, and a transitional period applies. The MS of exemption has to notify the MS of establishment without delay the exempt individual identification number of the taxable person and the date (beginning of the following year) on which the taxable person will cease to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC.	MCC.2921100		Task
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Mark the Quarterly report as negatively validated.	As the validation of the Quarterly report does not follow the conditions required for benefiting from the exemption, the MS of exemption marks the Quarterly report as negatively validated and notifies the MS of establishment without delay the exempt individual identification number of the taxable person and the date on which the taxable person has ceased to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC.	MCC.2909040		Task
Mark the Quarterly report as positively validated.	As the validation of the Quarterly report follows the conditions required for benefiting from the exemption, the MS of exemption marks the Quarterly report as positively validated. If the quarterly report is positively validated but the MS annual threshold is exceeded and a transitional period applies, MS of exemption has to notify the MS of establishment without delay the exempt individual identification number of the taxable person and the date (beginning of the following year) on which the	MCC.2909060		Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	taxable person will cease to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC.			
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 36: Maintained Properties of the objects

3.5 EXCLUSION AND CESSATION PROCESSES

The section contains the business processes related to exclusion of the taxable person from the SME special scheme or its cessation from a particular MS of exemption.

3.5.1 It is assumed that the activities of the taxable person are ceased business process

The process describes the exclusion of the taxable person from the special scheme as his activities are assumed as ceased.

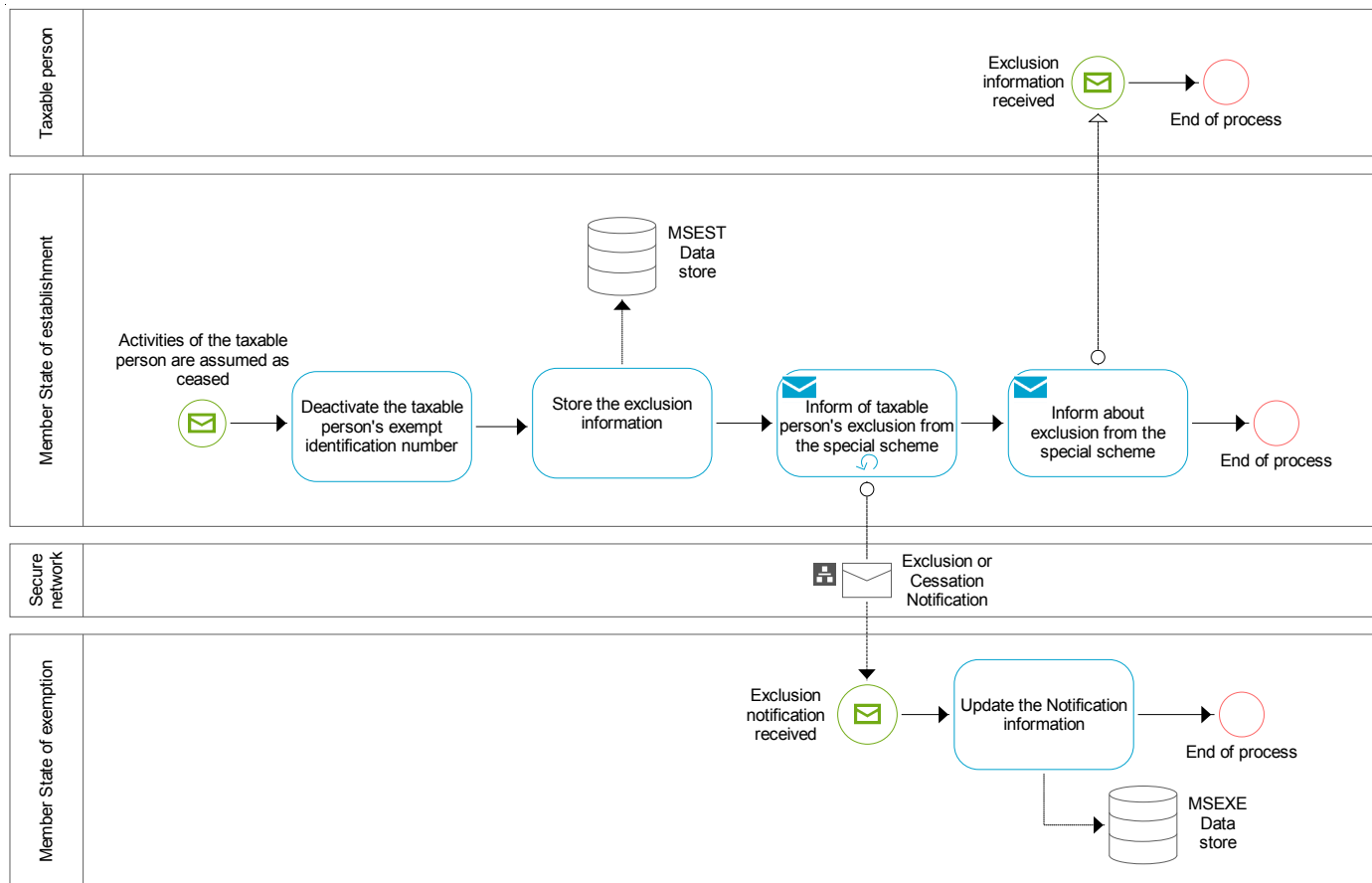


Figure 19: It is assumed that the activities of the taxable person are ceased business process

3.5.1.1 Model maintained properties

Model Property	Property Value
Name	It is assumed that the activities of the taxable person are ceased.
Identifier	MCC.2952080
Description/Definition	It is assumed that the activities of the taxable person are ceased.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 37: Maintained Properties of the model

3.5.1.2 Object maintained properties

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person	The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140				Pool
Exclusion information received	The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of exclusion.	MCC.2956200				Message start event
End of process	The process stops at this point.	MCC.2904760				End event
Member State of establishment	Member State of establishment (MSEST) means the Member State in which the taxable	MCC.2902860			Article 1 (3) [CIR2021/2007]	Pool

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	person availing itself of the special scheme is established.				]	
Activities of the taxable person are assumed as ceased	It is assumed that the activities of the taxable person have ceased.	MCC.2952100			Article 284e (d) [DIR2020/285]	Message start event
Deactivate the taxable person's exempt identification number	When it is assumed that the activities of the taxable person have ceased, the MS of establishment deactivates his exempt identification number without delay. However, the exempt identification number will not be eliminated. If the taxable person decides to avail himself of the special scheme again, he will be assigned with the same exempt identification number in that MS of establishment unless his VAT/Tax or other identifier in the MS of establishment was changed. In such a case, the MS of establishment will assign the taxable person with a new exempt identification number, generated from the taxable person's new VAT/Tax identifier or any other identifier used in MS of establishment.	MCC.3016920			Articles 284e [DIR2020/285]	Task
Store the exclusion information	The MS of establishment stores all information related to exclusion of the taxable person. Once the information will be stored in MEST data store, it will be ready for other	MCC.2952140			Article 3 [CIR2021/2007]	Task

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	Member States via automated access.					
MSEST Data store	Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and					

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Inform of taxable person's exclusion from the special scheme	After the taxable person was excluded from the special scheme, the MS of establishment may notify each relevant MSs of exemption about the exclusion although this is not foreseen by the legal basis. The information contains the exempt identification number of the taxable person and the Exclusion effective date. It should also contain the exclusion reason. As there is no obligation in the legal text for the MS of establishment to inform the MS of exemption, it can be done on a voluntary basis.	MCC.2938861				Send task

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Inform about exclusion from the special scheme	The MS of establishment submits a notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the information that the taxable person's exempt identification number was deactivated and the date of exclusion. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. It is proposed that in case of impossibility of the MS of establishment to notify the taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).	MCC.2906160				Send task
End of process	The process stops at this point.	MCC.2904760				End event
Secure network	The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560			Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Member State of exemption	Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940			Article 1 (2) [CIR2021/2007]	Pool
Exclusion notification received	The MS of the exemption received from the MS of establishment the information that the taxable person was excluded from the SME special scheme. The legal text does not require the MS of establishment to notify the MS of exemption in case where it is assumed that the activities of the taxable person have ceased. It can be done on a voluntary basis only.	MCC.3018520				Message start event
Update the Notification information	Based on the exclusion information received in the Notification message or an automated access to MS of establishment, the MS of exemption can update the taxable person's information in its data store. The MS of exemption is not obliged to store the information, but it can be used for later reference.	MCC.2938893				Task
MSEXE Data store	Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base	MCC.2935426				Data store

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	does not oblige the MS of exemption to store the information related to the special scheme.					
End of process	The process stops at this point.	MCC.2904760				End event
Exclusion or Cessation Notification	Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption. These notifications are not foreseen by the legal basis except the case, when the MS of establishment notifies the MS of exemption when the Union annual threshold is exceeded (Article 37a (b)). In other cases, sending of the notification can be done on a voluntary basis. The Exclusion or cessation notification should consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the exclusion or cessation reason (optional); * the Exclusion effective date or the	MCC.2935400	IE3E03			Message

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	Cessation effective date. The Exemption or cessation notification message may contain a list of multiple taxable persons, which were excluded from the special scheme or ceased from the MS of exemption.					

Table 38: Maintained Properties of the objects

3.5.2 Exclusion and cessation - change in legislation in MS of exemption business process

The process describes the potential exclusion of the taxable person from the special scheme following the changes in MS of exemption's legislation.

3.5.2.1 Exclusion and cessation - change in legislation in MS of exemption main business process

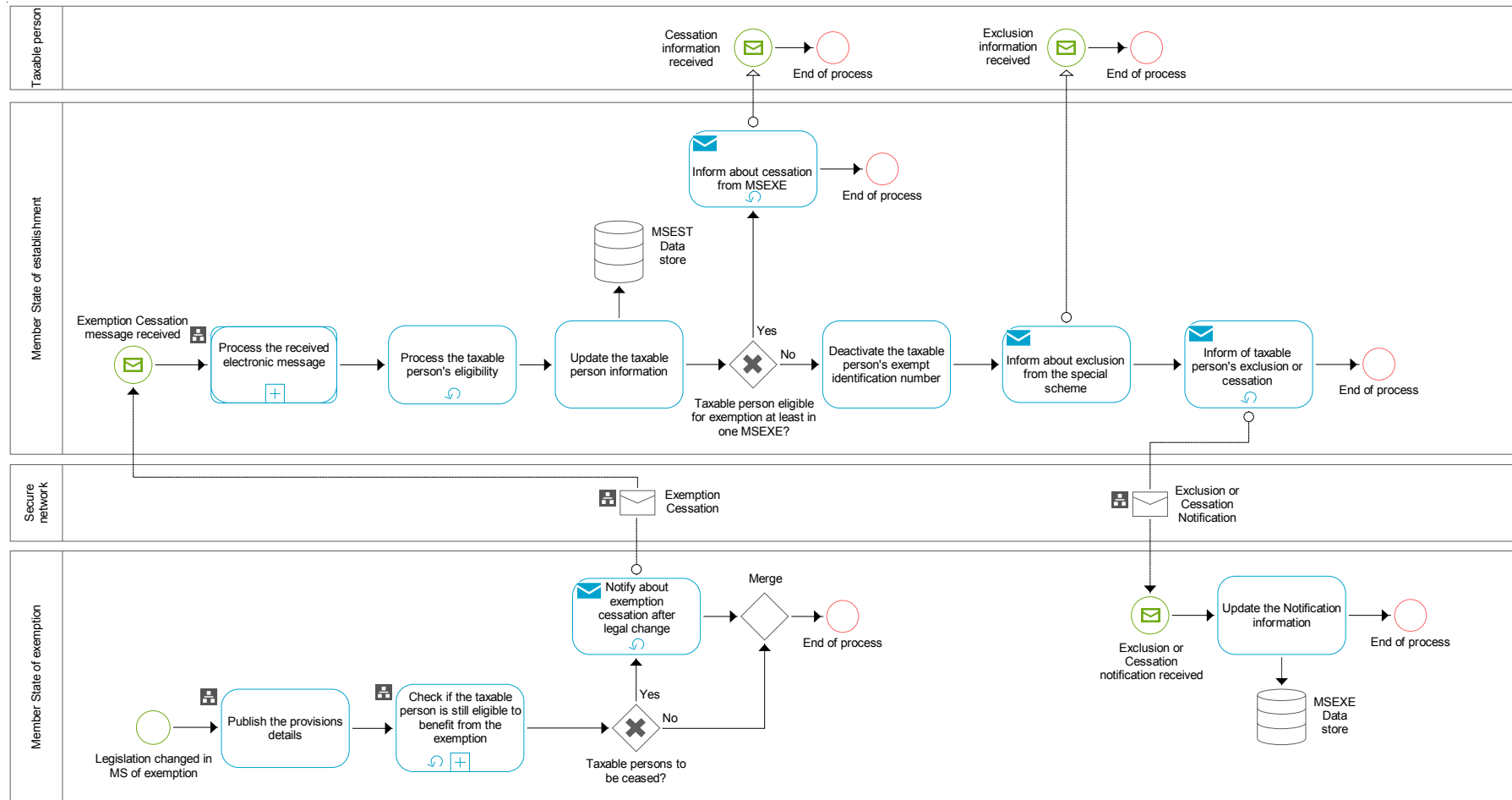


Figure 20: Exclusion and cessation - change in legislation in MS of exemption business process

3.5.2.1.1 Model maintained properties

Model Property	Property Value
Name	Exclusion and cessation - change in legislation in MS of exemption
Identifier	MCC.2931200
Description/Definition	The business process describes the following potential activities following the changes in MS of exemption's legislation: 1. Exclusion of the taxable person from the special scheme; 2. Cessation of the taxable person from benefiting of the exemption in MS of exemption.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 39: Maintained Properties of the model

3.5.2.1.2 Object maintained properties

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person		The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140				Pool
Cessation information received		The taxable person received the information that he was ceased from one or more MS(s) of exemption. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the reason	MCC.2956220				Message start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		and the date of cessation.					
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion information received		The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of exclusion.	MCC.2956200				Message start event
End of process		The process stops at this point.	MCC.2904760				End event
Member State of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860			Article 1 (3) [CIR2021/2007]	Pool
Exemption Cessation message received		The MS of establishment received the Exemption Cessation message.	MCC.2903060				Message start event
Process the received electronic message		The sub-process depicts the processing of the message, received by MS. The sub-process also covers the treatment of the received message in case of failed parsing.	MCC.2903700				Call activity (collapsed)
Process the taxable person's		The MS of establishment processes the Exemption Cessation message received	MCC.2951180			Article 284e (b)	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
eligibility		from MS of exemption. The information will be used for evaluation whether the taxable person can continue using the special scheme. To be eligible to continue benefiting from the special scheme, the taxable person must be eligible to benefit from the exemption at least in one MS of exemption. Otherwise, the taxable person will be excluded from the special scheme. The activity is performed in loop to evaluate each taxable person listed in the Exemption Cessation message.				[DIR2020/285]	
Update the taxable person information		The MS of establishment without delay updates the taxable person information with one of the following: * if the taxable person was excluded from the special scheme, the following information will be stored: deactivation of the exempt identification number, date of exclusion; * if the taxable person was ceased from MS(s) of exemption but continues to benefit from the exemption in at least one Member State, the following information will be stored: date of cessation and Member State of exemption, in which the	MCC.3121980			Article 3 [CIR2021/2007] and Article 284e [DIR2020/285]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		cessation takes effect. The data store will be also updated by the status of all MSs of exemption where the taxable person benefits from the exemption. The information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010). Once all information will be stored in data store of the MS of establishment, it will be ready for an automated access.					
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Taxable person eligible for exemption at least in one MSEXE?		The gateway splits the business flow based on whether the taxable person is eligible for the exemption at least in one MS of exemption.	MCC.3018440				Exclusive gateway
Inform about cessation from MSEXE		The taxable person has ceased to benefit from the exemption in one or more MS(s) of exemption. The MS of establishment should submit a notification to the taxable person, informing the latter about that cessation. The notification should contain one or more MS(s) of exemption, from which the taxable person is ceased and the date of cessation. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme . It is proposed that in case the taxable person was not informed about his exclusion from the special scheme due to	MCC.2951232				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		impossibility on the side of the MS of establishment, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).					
End of process		The process stops at this point.	MCC.2904760				End event
Deactivate the taxable person's exempt identification number		When the taxable person is not eligible anymore for the exemption at least in one MS of exemption, the MS of establishment deactivates his exempt identification number without delay. However, the exempt identification number will not be eliminated. If the taxable person decides to avail himself in the special scheme again, he will be assigned with the same exempt identification number in that MS of establishment unless his VAT/Tax or other identifier in the MS of establishment was changed. In such a case, the MS of establishment will assign the taxable person with a new exempt identification number, generated from the taxable person's new VAT/Tax identifier or any other identifier in MS of establishment.	MCC.2951282			Articles 284e [DIR2020/285]	Task
Inform about		The MS of establishment submits a	MCC.2906160				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
exclusion from the special scheme		notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the information that the taxable person's exempt identification number was deactivated and the date of exclusion. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. It is proposed that in case of impossibility of the MS of establishment to notify the taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).					
Inform of taxable person's exclusion or cessation		After the taxable person was excluded from the special scheme, the MS of establishment may notify each relevant MS of exemption about the exclusion from the special scheme. The information contains the exempt identification number of the taxable person and the Exclusion effective date.	MCC.2951280				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		These notifications are not foreseen by the legal basis except the case, when the MS of establishment notifies the MS of exemption when the Union annual threshold is exceeded (Article 37a (b)). In other cases, sending of the notification can be done on a voluntary basis.					
End of process		The process stops at this point.	MCC.2904760				End event
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560			Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool
Member State of exemption		Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940			Article 1 (2) [CIR2021/2007]	Pool
Legislation changed in MS of exemption		MS of exemption changes its legislation (e.g. change in threshold or in criteria for sectoral threshold or transaction excluded from the threshold). Resulting from that change, the taxable person has to be	MCC.2950900				Start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		rechecked if he is still eligible to benefit from the exemption in that MS of exemption.					
Publish the provisions details		The MS of exemption publishes the updated provisions details of the SME special scheme on the Commission web site.	MCC.2956100			Article 32 (1) [REG2010/904], Article 4 (1) [CIR2021/2007]	Task
Check if the taxable person is still eligible to benefit from the exemption		The legislation was changed in MS of exemption. The MS of exemption has to check if the taxable person is still eligible to benefit from the exemption and fulfils the changed pre-conditions in that MS of exemption. The following pre-conditions have to be rechecked by the MS of exemption: * in case that the MS annual threshold is subject of the change, whether the supplies reported by the taxable person until that time do not exceed the MS annual threshold; * whether the taxable person is still conforming with the criteria for sectoral threshold if such criteria have been changed;	MCC.2950920			Articles 284 (1), Article 283 (2), and Article 288a (1) [DIR2020/285], Article 37b (2) [DIR2020/285]	Subprocess (collapsed)

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		* whether the transactions performed by the taxable person will not be excluded after the legal change if excluded supplies have been changed. This activity has to be performed on each taxable person benefiting from the exemption in this MS of exemption.					
Taxable persons to be ceased?		The gateway splits the business flow based on whether at least one taxable person will be ceased from benefiting of exemption in that MS of exemption or not.	MCC.2955100				Exclusive gateway
Notify about exemption cessation after legal change		Once the MS of exemption validated the taxable persons' eligibility to benefit from the exemption in that MS of exemption after the legal change, it without delay informs the MS of establishment about the taxable persons which have been ceased from benefiting of the exemption in that MS of exemption. The Exemption Cessation message contains the list of ceased taxable persons and the date of cessation. Part of the information are the exempt identification numbers of ceased taxable persons.	MCC.2951720			Articles 284e (b) and 37b (3) [DIR2020/285] Article 4 (3) letter b) [CIR2021/2007]	Send task
Merge		The gateway merges the incoming business flows.	MCC.2955120				Gateway

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion or Cessation notification received		The MS of the exemption received from the MS of establishment the information that the taxable person was either excluded from the special scheme of ceased from the MS of exemption. The notification from MS of establishment to MS of exemption is not foreseen by the legal basis. It can be done on a voluntary basis only.	MCC.2938886				Message start event
Update the Notification information		Based on the exclusion information received in the Exclusion or cessation notification message or through automated access to MEST data store, the MS of exemption can update the taxable person's information in its data store. The MS of exemption is not obliged to store the information, but it can be used for later reference.	MCC.2935422				Task
MSEXE Data store		Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special	MCC.2935426				Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		scheme.					
End of process		The process stops at this point.	MCC.2904760				End event
Exemption Cessation	IE3E01	Exemption Cessation is a common electronic message, transmitted without delay by the MS of exemption to the MS of establishment, to inform the latter about the taxable persons' cessation of benefiting from the exemption in that MS of exemption. The Exemption Cessation message contains the list of the taxable persons that ceased to be eligible for the SME exemption in the MS of exemption and consists of the following information: * the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * according to Article 37b (3), the date on which the taxable person ceased to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC. The message should also contain the reason of the cessation from MS of exemption, but this is not mandatory as it is not provided for by the legal text.	MCC.2906440				Message
Exclusion or		Exclusion or Cessation Notification is a	MCC.2935400	IE3E03			Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Cessation Notification		common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption. These notifications are not foreseen by the legal basis except the case, when the MS of establishment notifies the MS of exemption when the Union annual threshold is exceeded (Article 37a (b)). In other cases, sending of the notification can be done on a voluntary basis. The Exclusion or cessation notification should consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the exclusion or cessation reason (optional); * the Exclusion effective date or the Cessation effective date. The Exemption or cessation notification message may contain a list of multiple					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		taxable persons, which were excluded from the special scheme or ceased from the MS of exemption.					

Table 40: Maintained Properties of the objects

3.5.2.2 Check if the taxable person is still eligible to benefit from the exemption sub-process

The sub-process describes the mandatory checks to be performed by the MS of exemption to evaluate the taxable person's eligibility to benefit from the exemption after the legal change made by the MS of exemption.

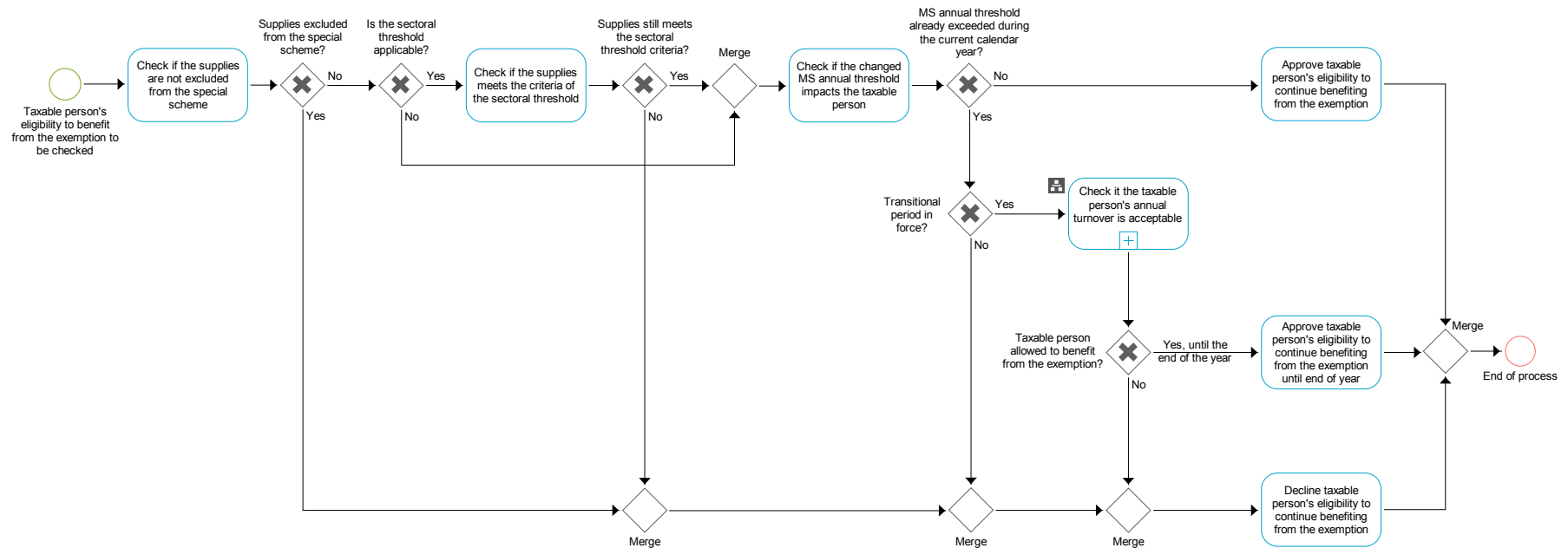


Figure 21: Check if the taxable person is still eligible to benefit from the exemption sub-process

3.5.2.2.1 Model maintained properties

Model Property	Property Value
Name	Check if the taxable person is still eligible to benefit from the exemption
Identifier	MCC.2950940
Description/Definition	The process describes the mandatory checks to be performed by the MS of exemption to evaluate the taxable person's eligibility to benefit from the exemption.
Type	BPMN process diagram (BPMN 2.0)

Table 41: Maintained Properties of the model

3.5.2.2.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
Taxable person's eligibility to benefit from the exemption to be checked	After the legal change impacting the special scheme in MS of exemption, the conditions for benefiting from the exemption in that MS of exemption have to be rechecked to ensure that the taxable person is still eligible to benefit from the exemption.	MCC.2951007		Start event
Check if the supplies are not excluded from the special scheme	The MS of exemption verifies whether the supplies performed by the taxable person are not excluded from the special scheme after the legal change in that MS of exemption (if the list of excluded supplies has changed in the MS of exemption).	MCC.2951008	Article 283 (2) [DIR2006/112]	Task
Supplies excluded from the special scheme?	The gateway splits the business flow based on whether the supplies performed by the taxable person will be excluded from the special scheme after the legal change in the MS of exemption or not.	MCC.2951005		Exclusive gateway
Is the sectoral threshold applicable?	The gateway splits the business flow based on whether the MS of exemption applies different sectoral thresholds or not.	MCC.2999320		Exclusive gateway
Check if the supplies meets	If sectoral thresholds are applicable in the MS of	MCC.2951014	Article 284(1)	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
the criteria of the sectoral threshold	exemption, the Member State verifies whether the supplies performed by the taxable person still meet the criteria of the sectoral threshold after the legal change in MS of exemption (if the criteria for the sectoral thresholds have been changed in the MS of exemption).		[DIR2020/285]	
Supplies still meets the sectoral threshold criteria?	The gateway splits the business flow based on whether the supplies performed by the taxable person still meet the criteria of the sectoral threshold after the legal change in the MS of exemption or not.	MCC.2951012		Exclusive gateway
Merge	The gateway merges the incoming business flows.	MCC.2999360		Gateway
Check if the changed MS annual threshold impacts the taxable person	The MS of exemption verifies whether or not the changed MS annual threshold impacts the taxable person turnover exceedance in the current calendar year (if the change is applicable during the current calendar year). This case could happen when the supplies already performed and reported by the taxable person will exceed the new MS annual threshold.	MCC.2951030	Article 288a (1) [DIR2020/285]	Task
MS annual threshold already exceeded during the current calendar year?	The gateway splits the business flow based on whether the changed MS annual threshold is already exceeded by the taxable person in the current calendar year or not.	MCC.2951026		Exclusive gateway
Approve taxable person's eligibility to continue benefiting from the exemption	If the taxable person after the legal change in the MS of exemption still fulfils all the requested conditions, the Member State of exemption confirms to the MS of establishment the taxable person's eligibility to benefit from the exemption in that Member State of the exemption.	MCC.2951032		Task
Transitional period in force?	The gateway splits the business flow based on whether the transitional period in the MS of exemption is in	MCC.2951027		Exclusive gateway

Name	Description/Definition	Identifier	Legal Reference	Artefact
	force or not.			
Check if the taxable person's annual turnover is acceptable	If after the change in the MS annual threshold the taxable person's annual turnover is exceeded during the current calendar year, the MS of exemption checks, in case the transitional period applies, whether that turnover is still acceptable by that MS of exemption or not.	MCC.2951018	Article 288a (1) [DIR2020/285]	Subprocess (collapsed)
Taxable person allowed to benefit from the exemption?	The gateway splits the business flow based on whether the taxable person is allowed to continue benefiting from the exemption until end of the year or not.	MCC.2951019		Exclusive gateway
Approve taxable person's eligibility to continue benefiting from the exemption until end of year	Based on the value of supplies already made and reported by the taxable person, the Member State of exemption allows the taxable person to benefit from the exemption in that Member State of the exemption until end of the year.	MCC.2951024		Task
Merge	The gateway merges the incoming business flows.	MCC.2963380		Gateway
Merge	The gateway merges the incoming business flows.	MCC.2951021		Gateway
Merge	The gateway merges the incoming business flows.	MCC.2951680		Gateway
Decline taxable person's eligibility to continue benefiting from the exemption	If the taxable person does not fulfil the changed conditions, the Member State of exemption declines the taxable person's eligibility to continue benefiting from the exemption in that Member State of the exemption. In this case the MS of exemption has to notify it without delay to the MS of establishment (exempt identification number and date of ceased eligibility).	MCC.2951022	Article 37b (3) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.2951700		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 42: Maintained Properties of the objects

3.5.2.3 Check if the taxable person's annual turnover is acceptable sub-process

The sub-process describes the verification if the taxable person is still eligible to benefit from the exemption after the change in the MS of exemption legislation.

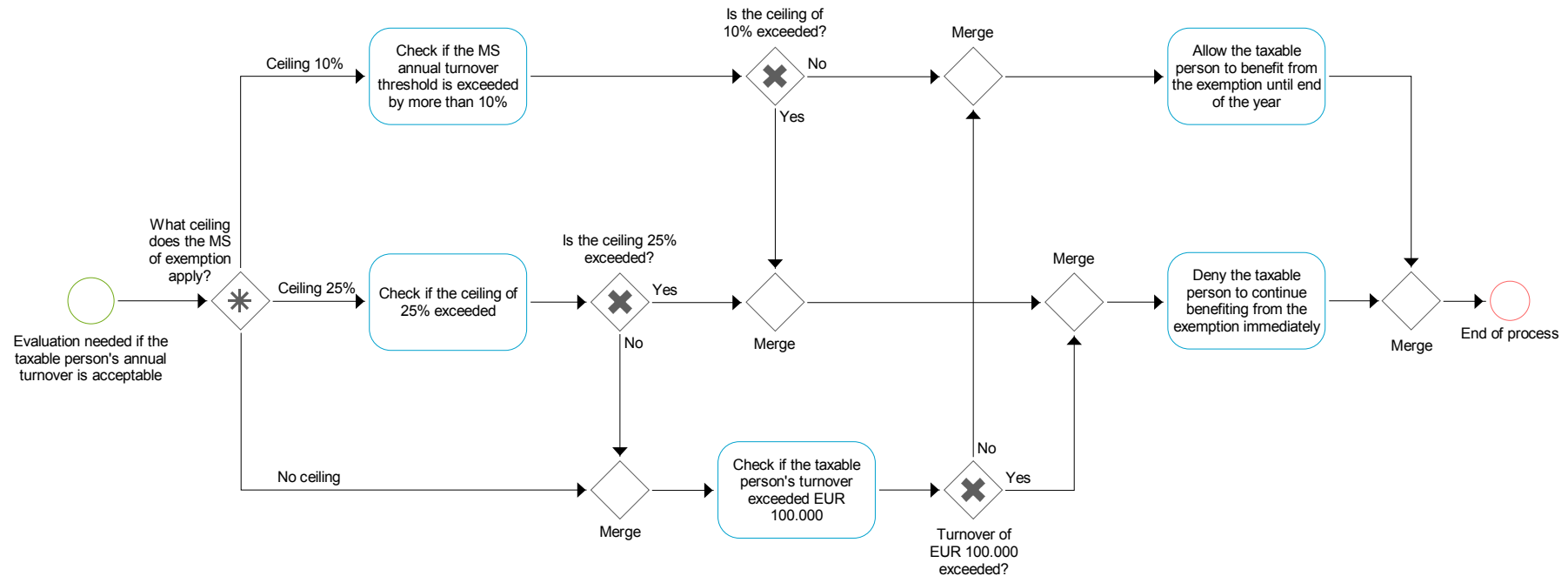


Figure 22: Check it the taxable person's annual turnover is acceptable sub-process

3.5.2.3.1 Model maintained properties

Model Property	Property Value
Name	Check it the taxable person's annual turnover is acceptable
Identifier	MCC. 3036820
Description/Definition	The business process describes the verification if the taxable person's annual turnover is still acceptable.
Type	BPMN process diagram (BPMN 2.0)

Table 43: Maintained Properties of the model

3.5.2.3.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
Evaluation needed if the taxable person's annual turnover is acceptable	The MS of exemption needs to evaluate if the taxable person's annual turnover is at acceptable level or not.	MCC.2916080		Start event
What ceiling does the MS of exemption apply?	The gateway splits the business flow based on whether the MS of exemption applies a ceiling of 10%, or 25%, or none.	MCC.2923520		Complex gateway
Check if the MS annual turnover threshold is exceeded by more than 10%	If The MS of exemption applies a transitional period with a ceiling of 10%, it verifies whether the taxable person exceeded the MS annual threshold by more than 10% during the current year. If the threshold referred to in Article 284(1) is exceeded by not more than 10%, the taxable person will be able to continue to benefit from the exemption provided for in Article 284(1) during that calendar year. If the threshold is exceeded by more than 10 %, the exemption provided for in Article 284(1) will cease to apply as of that time.	MCC.2966060	Article 288a (1) [DIR2020/285]	Task
Is the ceiling of 10% exceeded?	The gateway splits the business flow based on whether the ceiling of 10% was exceeded during the current calendar year or not.	MCC.2923640		Exclusive gateway
Check if the ceiling of 25% exceeded	The MS of exemption verifies whether it has opted for a ceiling of 25%. If the ceiling of 25% is not exceeded, then the result from the validation is positive. Otherwise, the result from validation is negative. However, the application of this ceiling may not result in exempting a taxable person whose turnover	MCC.3121320	Article 288a (1) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	within the Member State granting the exemption exceeds EUR 100.000. If the value of EUR 100.000 is exceeded, then the validation is negative.			
Is the ceiling 25% exceeded?	The gateway splits the business flow based on whether the ceiling of 25% was exceeded during the current calendar year or not.	MCC.2950660		Exclusive gateway
Merge	The gateway merges the incoming business flows.	MCC.2950700		Gateway
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Check if the taxable person's turnover exceeded EUR 100.000	The MS of exemption verifies if the application of no ceiling or of 25% ceiling does not result in the turnover of the taxable person in that MS exceeding EUR 100.000.	MCC.2916380	Article 288a (1) [DIR2020/285]	Task
Turnover of EUR 100.000 exceeded?	The gateway splits the business flow based on whether the turnover of the taxable person in that MS of exemption exceeded EUR 100 000 or not.	MCC.2909460		Exclusive gateway
Merge	The gateway merges the incoming business flows.	MCC.2950680		Gateway
Allow the taxable person to benefit from the exemption until end of the year	The MS annual threshold is exceeded, and a transitional period applies. The MS of exemption has to notify the MS of establishment without delay the exempt individual identification number of the taxable person and the date (beginning of the following year) on which the taxable person will cease to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC.	MCC.2921100		Task
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
Deny the taxable person to continue benefiting from the exemption immediately	If the taxable person does not fulfil all the expected conditions, the Member State of exemption declines the taxable person's eligibility to continue to benefit	MCC.3036860		Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	from the exemption in that Member State of the exemption.			
Merge	The gateway merges the incoming business flows.	MCC.2904620		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 44: Maintained Properties of the objects

3.5.3 Taxable person informs of exceeding Union annual threshold business process

The business process describes the exclusion of the taxable person from the special scheme following his notification of exceedance of the Union annual threshold.

3.5.3.1 Taxable person informs of exceeding Union annual threshold main business process

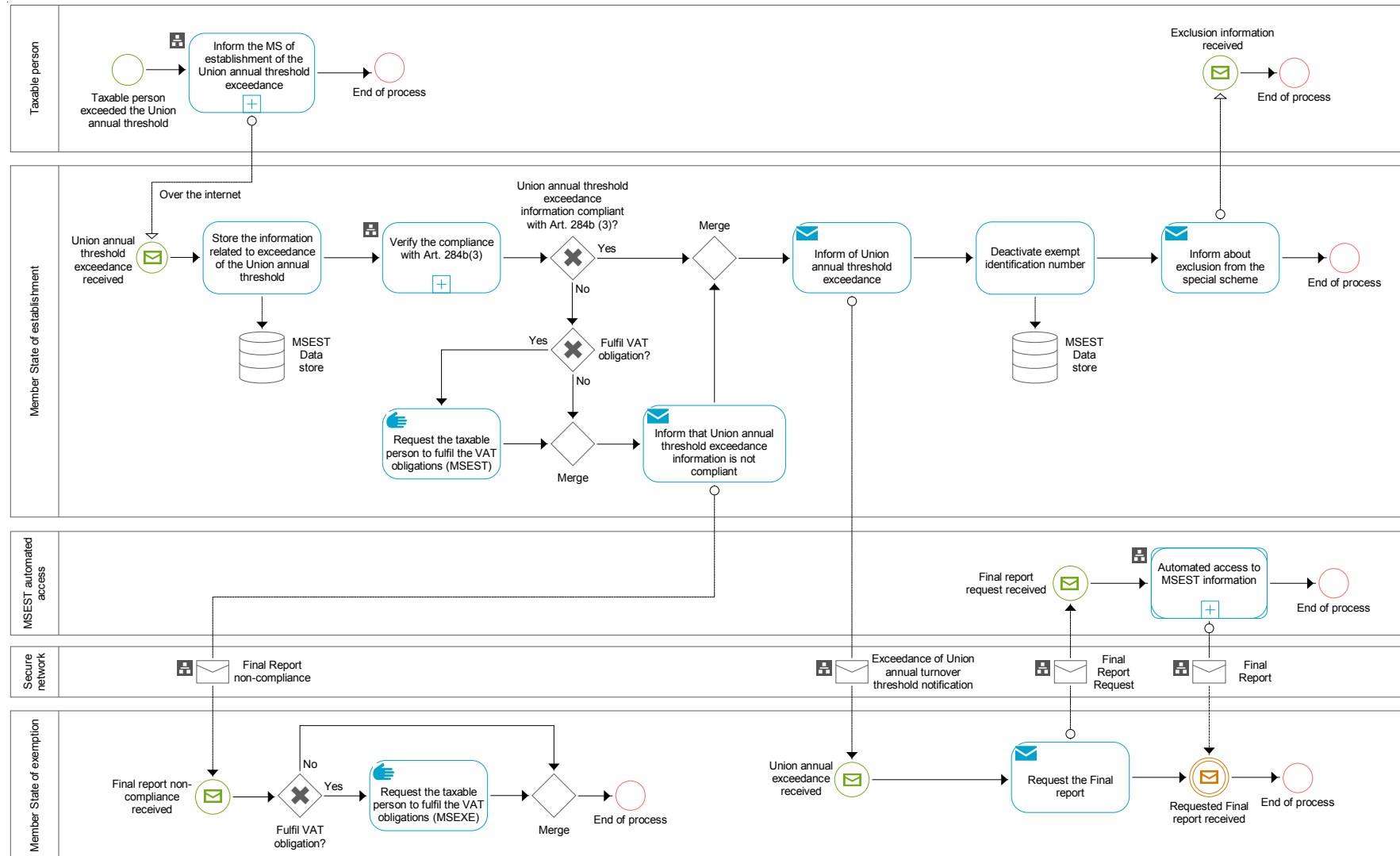


Figure 23: Taxable person informs of exceeding Union annual threshold business process

3.5.3.1.1 Model maintained properties

Model Property	Property Value
Name	Taxable person informs of exceeding Union annual threshold
Identifier	MCC.2936240
Description/Definition	When the Union annual turnover threshold referred to in point (a) of Article 284(2) is exceeded, the taxable person shall inform the Member State of establishment within 15 working days. At the same time, the taxable person shall be required to report the value of the supplies, which have been made from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded.
Type	BPMN collaboration diagram (BPMN 2.0)
Legal Reference	Article 284b (3) [DIR2020/285]

Table: Maintained Properties of the model

3.5.3.1.2 Object maintained properties

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person		The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140				Pool

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person exceeded the Union annual threshold		The taxable person is obliged to continuously check whether the Union annual threshold is exceeded (not only at the time of the Quarterly reporting). If the taxable person exceeded the Union annual threshold, he must inform the MS of establishment about this fact within 15 working days from the date of that exceedance.	MCC.2936260				Start event
Inform the MS of establishment of the Union annual threshold exceedance		If the taxable person exceeds the Union annual threshold, he has to inform the MS of establishment within 15 working days. The Union annual threshold exceedance contains the following information : * the exempt identification number of the taxable person; * the total value of supplies carried out in the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, or "0" if no supplies have been made; * the total value of supplies carried out in each of Member State other than the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was	MCC.2994800			Article 284b (3) and 284c [DIR2020/285]	Subprocesses (collapsed)

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		exceeded, specified by business sector if relevant, of "0" if no supplies have been made; * the date of Union annual threshold exceedance. The values shall consist of the amounts listed in Article 288 where the Member State granting the exemption applies varying thresholds as referred to in the second subparagraph of Article 284(1), the taxable person shall be obliged in respect of that Member State to report separately the total value of supplies of goods and/or services as regards each threshold that may be applicable.					
End of process		The process stops at this point.	MCC.2904760				End event
Exclusion information received		The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of exclusion. Where, during a calendar year, the Union annual turnover threshold referred to in	MCC.3141340				Message start event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		point (a) of Article 284(2) is exceeded, the exemption provided for in Article 284(1) granted to a taxable person not established in the Member State granting that exemption shall cease to apply as of that time.					
End of process		The process stops at this point.	MCC.2904760				End event
Member State of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860			Article 1 (3) [CIR2021/2007]	Pool
Union annual threshold exceedance received		The MS of establishment received the information, that the taxable person exceeded the Union annual threshold.	MCC.2936420				Message start event
Store the information related to exceedance of the Union annual threshold		The MS of establishment stores the information related to exceedance of the Union annual threshold, submitted by the taxable person. The information will be stored as a Final Report and will be made accessible for MSs of exemption via MSEST automated access.	MCC.2936440			Article 3 [CIR2021/2007]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the			904/2010 and Article 3 [CIR2021/2007]		

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Verify the compliance with Art. 284b(3)		The MS of establishment verifies whether the Union annual threshold exceedance information received from the taxable person is compliant with the Article 284b(3): * The taxable person informed the MS of establishment about the Union annual threshold exceedance referred to in Article 284(2) within 15 working days; * The taxable person reported the value of supplies referred to in Article 284b(1) that have been made from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded.	MCC.3030100			Article 284b (3) [DIR2020/285]	Subprocess (collapsed)
Union annual threshold exceedance		The gateway splits the business flow based on whether the Union annual threshold exceedance information is compliant with	MCC.3031460				Exclusive gateway

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
information compliant with Art. 284b (3)?		Article 284b (3).					
Fulfil VAT obligation?		The gateway splits the business flow based on whether the MS of establishment decided to request the taxable person to fulfil his VAT obligation.	MCC.3031700				Exclusive gateway
Request the taxable person to fulfil the VAT obligations (MSEST)		If the taxable person failed to comply with the rules provided for in Article 284b (3) on reporting in case of exceedance of the Union threshold, the MS of establishment may require the non-compliant taxable person to fulfil the VAT obligations in his country, as set out in Article 284d(3) of the VAT Directive.	MCC.3031720			Article 284d (3) [DIR2020/285]	Manual task
Merge		The gateway merges the incoming business flows.	MCC.3031300				Gateway
Inform that Union annual threshold exceedance information is not compliant		The MS of establishments informs the MS of exemption that the received Union annual threshold exceedance information is not compliant with Article 284b (3) of Directive 2020/285. The MS of establishment shall transmit this information by electronic means within 15 working days from the date on which the information becomes available. The notification shall contain the exempt identification number of the taxable person	MCC.3031760			Article 37a(1)(c) [DIR2020/285] and Article 4 (2) letter (d) [CIR2021/2007]	Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		and the fact of failure.					
Merge		The gateway merges the incoming business flows.	MCC.3031440				Gateway
Inform of Union annual threshold exceedance		The MS of establishments within 15 working days from the date on which the information becomes available informs the MS of exemption that the taxable person exceeded the Union annual threshold. The information shall consist of the following: * Exempt identification number of the taxable person issued by the Member State providing the information; * The date on which the Union annual turnover of the taxable person exceeded the amount referred to in point (a) of Article 284(2) of Directive 2006/112/EC. If the exact date of the Union annual threshold exceedance is not known, the last day of the calendar quarter in which the Union annual threshold turnover has been exceeded will be assumed as a day of the Union annual threshold exceedance.	MCC.2980460			Article 4 (2) (c) [CIR2021/2007] and 37a(1)(b) [DIR2020/285]	Send task
Deactivate exempt identification number		When the taxable person exceeded the Union annual turnover threshold referred to in point (a) of Article 284(2), the Member State of establishment shall, without delay, deactivate the taxable person's exempt identification number referred to in point	MCC.3017620			Article 284e (1) point (a) [DIR2020/285]	Task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		(b) of Article 284(3). Where, during a calendar year, the Union annual turnover threshold is exceeded, the exemption granted to a taxable person not established in the Member State granting that exemption shall cease to apply as of that time. A taxable person not established in the Member State granting the exemption shall not be able to benefit from that exemption, where the Union annual turnover threshold was exceeded in the preceding calendar year. In case that the taxable person after this period decides to submit a new Prior Notification to avail of the special scheme again, the same exempt identification number will be assigned to him unless his VAT/Tax or other identifier in the MS of establishment was changed. In such a case, the MS of establishment will assign the taxable person with a new exempt identification number, generated from the taxable person's new VAT/Tax identifier or any other identifier in MS of establishment.					
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No		Data store

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the			904/2010 and Article 3 [CIR2021/2007]		

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying					

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.					
Inform about exclusion from the special scheme		The MS of establishment submits a notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the information that the taxable person's exempt identification number was deactivated and the date of exclusion. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. It is proposed that in case of impossibility of the MS of establishment to notify the taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed	MCC.2906160				Send task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		either via administrative cooperation or by a separate message (not part of the specifications).					
End of process		The process stops at this point.	MCC.2904760				End event
MSEST automated access		The MSEST automated access is part of the MSEST information system, operated by the MS of establishment. The MSEST automated access provides the other MSs with the automated access to information. The information relates to registration details of the taxable person and the value of supplies of goods and/or services carried out by that taxable person.	MCC.2901520			Article 3 [CIR2021/2007]	Pool
Final report request received		The automated access to information of the MS of establishment received an information request.	MCC.3117660				Message start event
Automated access to MSEST information		The call activity depicts the activities performed by the automated access to MSEST information, which is operated by the MS of establishment. The information relates to the special scheme for small enterprises. The minimum information to be provided by the MS of establishment to the other MSs is specified in Article 21 (2b) [REG2010/904].	MCC.2903320			Article 3 [CIR2021/2007]	Call activity (collapsed)
End of process		The process stops at this point.	MCC.2904760				End event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560			Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool
Member State of exemption		Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940			Article 1 (2) [CIR2021/2007]	Pool
Final report non-compliance received		The MS of exemption received the information that the Final report or its correction is not compliant with the Article 284b, or the Union annual threshold has been exceeded and that the communication of the exceedance (together with the turnover made up until exceedance) has not been done by the taxable person within the required 15 working days.	MCC.3031793				Message start event
Fulfil VAT obligation?		The gateway splits the business flow based on whether the MS of exemption decided to request the taxable person to fulfil his VAT obligations.	MCC.2956000				Exclusive gateway
Request the taxable person		If the taxable person failed to comply with the rules provided for in Article 284b (3) on	MCC.3031740			Article 284d (3)	Manual task

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
to fulfil the VAT obligations (MSEXE)		reporting in case of exceedance of the Union threshold, the MS of exemption may require the non-compliant taxable person to fulfil the VAT obligations in his country, as set out in Article 284d(3) of the VAT Directive.				[DIR2020/285]	
Merge		The gateway merges the incoming business flows.	MCC.3031400				Gateway
End of process		The process stops at this point.	MCC.2904760				End event
Union annual exceedance received		The MS of exemption received the information that the taxable person exceeded the Union annual turnover threshold.	MCC.2981020				Message start event
Request the Final report		The MS of exemption received a notification that the taxable person exceeded the Union annual threshold. The MS of exemption may prepare a request message requesting the related Final report and submits the message to MS of establishment using the automated access to information.	MCC.3018660			Article 3 [CIR2021/2007]	Send task
Requested Final report received		The requesting Member State received the response message as a response to the information request message, transmitted by that MS in the previous step.	MCC.3117600				Message intermediate event (catch)
End of process		The process stops at this point.	MCC.2904760				End event

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Final Report non-compliance	IE3Q05	Final Report non-compliance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying that the taxable person having exceeded the Union annual turnover threshold has not notified the exceedance within 15 working days or not reported the value of the supplies made from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded pursuant to Article 284b(3).	MCC.3117440				Message
Exceedance of Union annual turnover threshold notification		Exceedance of Union Annual Turnover Threshold Notification is a common electronic message, transmitted by the MS of establishment to the related MS of exemption, to inform the latter about exceedance of the Union annual turnover threshold. The Exceedance of Union Annual Turnover Threshold Notification consists of the following information: * Exempt identification numbers of the taxable persons issued by the Member State providing the information; * The date on which the Union annual turnover of the taxable person exceeded the amount referred to in Article 284(2)(a) of Directive 2006/112/EC. If the exact date of the Union annual	MCC.2983900	IE3E04			Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		threshold exceedance is not known, the last day of the calendar quarter in which the Union annual threshold turnover has been exceeded will be assumed as a day of Union annual threshold exceedance.					
Final Report Request	IE3Q06	The Final Report Request is a common electronic message, transmitted by any Member State to MS of establishment, to request the Final Report of a specific taxable person. The message contains the following information: * the exempt identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the calendar quarter to which the Final report relates.	MCC.3117620				Message
Final Report	IE3Q07	Final Report is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response to the Final report request message, containing the value of supplies that have been made by the taxable person from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded. The message contains the following	MCC.3117684				Message

Name	Remark / Example	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
		information: * the exempt individual identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the period to which the report relates; * the total value of supplies carried out in the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, or "0" if no supplies have been made; * the total value of supplies carried out in each of Member State other than the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, of "0" if no supplies have been made.					

Table 45: Maintained Properties of the objects

3.5.3.2 Inform the MS of establishment of the Union annual threshold exceedance sub-process

The sub-process describes how the taxable person is expected to notify the MS of establishment of exceedance of the Union annual threshold.

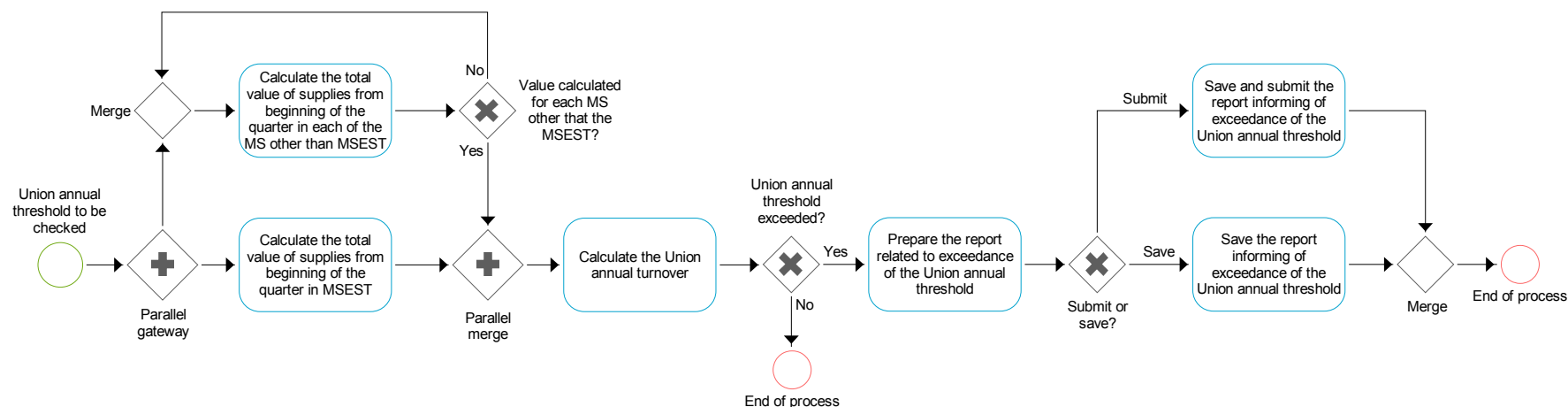


Figure 24: Inform the MS of establishment of the Union annual threshold exceedance sub-process

3.5.3.2.1 Model maintained properties

Model Property	Property Value
Name	Inform the MS of establishment of the Union annual threshold exceedance
Identifier	MCC.2994280
Description/Definition	If the taxable person exceeds the Union annual threshold, he has to inform the MS of establishment within 15 working days. The information to be reported by the taxable person is the following: * the exempt identification number of the taxable person; * the total value of supplies carried out in the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, or "0" if no supplies have been made; * the total value of supplies carried out in each of Member State other than the MS of establishment from the

Model Property	Property Value
	beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, of "0" if no supplies have been made; * the date of Union annual threshold exceedance.
Type	BPMN process diagram (BPMN 2.0)

Table 46: Maintained Properties of the model

3.5.3.2.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
Union annual threshold to be checked	The taxable person is obliged to check if the Union annual threshold has been exceeded or not. The taxable person may freely decide how often he will perform the calculation. However, he must report the exceedance of the Union annual threshold within 15 working days from the day when the Union annual threshold was exceeded.	MCC.2994460		Start event
Parallel gateway	The gateway splits the business flow into parallel business flows.	MCC.2994504		Parallel gateway
Calculate the total value of supplies from beginning of the quarter in MEST	The taxable person calculates the total value of supplies carried out from the beginning of the calendar quarter in the MS of establishment. If no supplies have been made in particular Member State, the taxable person uses value "0". The values shall consist of the amounts listed in Article 288 and be denominated in euro. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on the	MCC.2994440	Article 284b (3) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	next day of publication.			
Parallel merge	The gateway merges the incoming business flows.	MCC.2994509		Parallel gateway
Calculate the Union annual turnover	The taxable person is obliged to keep track of performed supplies made in the Union throughout of the calendar year and calculate if the Union annual turnover threshold referred to in point (a) of Article 284(2) is exceeded or not. In order to perform this check, the taxable person has to sum the value of the supplies made in the Union in the current calendar quarter to the values from the previous calendar quarters since the beginning of the calendar year. The taxable person may freely decide how often he will perform the calculation. However, he must report the exceedance of the Union annual threshold within 15 working days from the day when the Union annual threshold was exceeded. The values shall consist of the amounts listed in Article 288 and be denominated in euro. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on the next day of publication.	MCC.2908220	Articles 284b (3), 288a (3), and 284c (1) [DIR2020/285]	Task
Union annual threshold exceeded?	The gateway splits the business flow based on whether the Union annual threshold was exceeded or not.	MCC.2908360		Exclusive gateway
Prepare the report related to exceedance of the Union annual threshold	In case, the Union annual threshold was exceeded, the taxable person is obliged within 15 days to notify the MS of establishment. The taxable person elaborates a report, related to the exceedance	MCC.2994700	Article 284b (3) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
	of the Union annual threshold. The minimum amount of information to be filled in is the following: * the taxable person's exempt identification number; * the value of the supplies that have been made from the beginning of the current calendar quarter in the Member State of establishment up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, or “0” if no supplies have been made; * the value of the supplies that have been made from the beginning of the current calendar quarter in each of the Member States other than the Member State of establishment up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, or “0” if no supplies have been made; * the date when the Union annual threshold was exceeded. The values shall consist of the amounts listed in Article 288 and be denominated in euro. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on the next day of publication.			
Submit or save?	The gateway splits the business flow based on whether the taxable person wants to submit the report related to exceedance of the Union annual threshold to the MS of establishment or to store the information for later submission.	MCC.2994520		Exclusive gateway
Save and submit the report informing of	The taxable person has elaborated a report related to the exceedance of the Union annual threshold. The taxable person has	MCC.2994540	Article 284b (3)	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
exceedance of the Union annual threshold	to submit that report to the MS of establishment within 15 working days from the date the Union annual threshold was exceeded.		[DIR2020/285]	
Save the report informing of exceedance of the Union annual threshold	The taxable person elaborated a report informing of exceedance of the Union annual threshold but have decided not to submit the report yet. The taxable person is permitted to change that information later (and probably to submit it). The semi-finished report is stored to allow later accomplishment by the taxable person.	MCC.2908340		Task
Merge	The gateway merges the incoming business flows.	MCC.2994603		Gateway
End of process	The process stops at this point.	MCC.2904760		End event
End of process	The process stops at this point.	MCC.2904760		End event
Calculate the total value of supplies from beginning of the quarter in each of the MS other than MEST	The taxable person calculates the total value of supplies carried out from the beginning of the calendar quarter in each of the Member State other than the MS of establishment. If no supplies have been made in particular Member State, the taxable person uses value “0”. The values shall consist of the amounts listed in Article 288 and be denominated in euro. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on the next day of publication.	MCC.2994420	Article 284b (3) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.2994500		Gateway
Value calculated for each MS other than the MEST?	The gateway splits the business flow based on whether the total value of supplies carried out from the beginning of the calendar quarter is calculated for each MS other than the MS of	MCC.2994480		Exclusive gateway

Name	Description/Definition	Identifier	Legal Reference	Artefact
	establishment or not.			

Table 47: Maintained Properties of the objects

3.5.3.3 Verify the compliance with Art. 284b(3) sub-process

The sub-process describes how the MS of establishment verifies whether the Union annual threshold exceedance information received from the taxable person is compliant with Art. 284b(3).

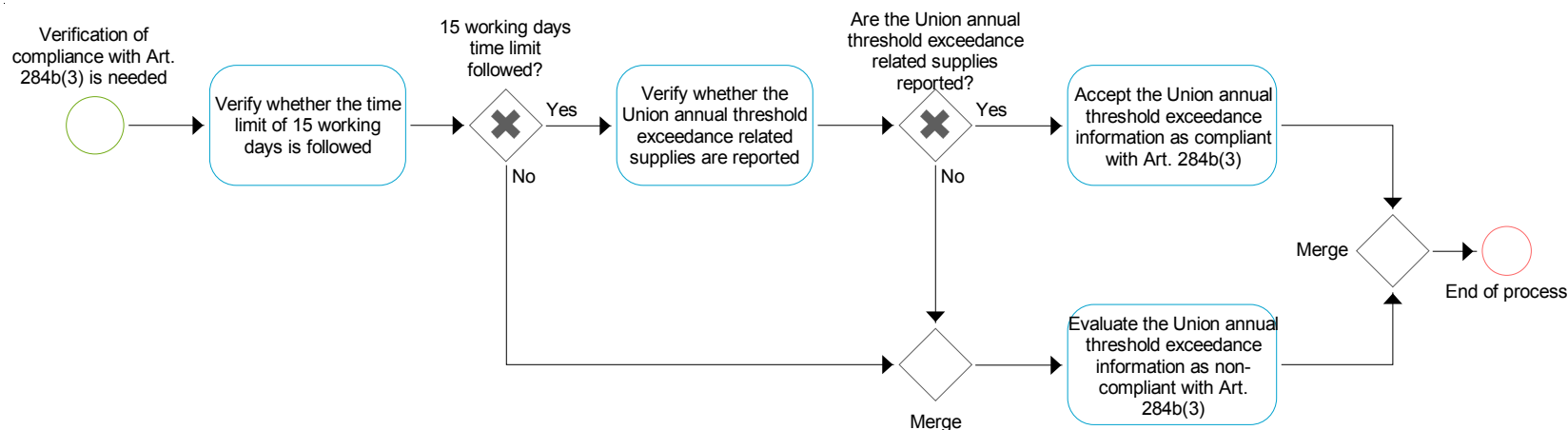


Figure 25: Verify the compliance with Art. 284b(3) sub-process

3.5.3.3.1 Model maintained properties

Model Property	Property Value
Name	Verify the compliance with Art. 284b(3)
Identifier	MCC.3030120
Description/Definition	The MS of establishment verifies whether the Union annual threshold exceedance information received from

Model Property	Property Value
	the taxable person is compliant with the Article 284b(3): * The taxable person informed the MS of establishment about the Union annual threshold exceedance referred to in Article 284(2) within 15 working days; * The taxable person reported the value of supplies referred to in Article 284b(1) that have been made from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded.
Type	BPMN process diagram (BPMN 2.0)

Table 48: Maintained Properties of the model

3.5.3.3.2 Object maintained properties

Name	Description/Definition	Identifier	Legal Reference	Artefact
Verification of compliance with Art. 284b(3) is needed	The Union annual threshold exceedance information received from the taxable person must be verified whether it is compliant with Article 284b (3).	MCC.3030140		Start event
Verify whether the time limit of 15 working days is followed	The MS of establishment verifies whether the taxable person submitted the Union annual threshold exceedance information within the 15 working days time limit. If the taxable person fails to comply with this obligation, he may be requested by MS of establishment and/or MS of exemption to fulfil VAT obligations .	MCC.3030280	Article 284b (3) [DIR2020/285]	Task
15 working days time limit followed?	The gateway splits the business flow based on whether the taxable person informed the MS of establishment about exceedance of the Union annual threshold within 15 working days.	MCC.3030300		Exclusive gateway
Verify whether the Union annual threshold exceedance related supplies	The MS of establishment verifies whether the taxable person reported the value of supplies referred to in Article 284b(1) that have been made from the beginning of the current	MCC.3030320	Article 284b (3) [DIR2020/285]	Task

Name	Description/Definition	Identifier	Legal Reference	Artefact
are reported	calendar quarter up until the date the Union annual turnover threshold was exceeded. If the taxable person fails to comply with this obligation, he may be requested by MS of establishment and/or MS of exemption to fulfil VAT obligations .			
Are the Union annual threshold exceedance related supplies reported?	The gateway splits the business flow based on whether the taxable person reported value of the supplies that have been made from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded.	MCC.3030380		Exclusive gateway
Accept the Union annual threshold exceedance information as compliant with Art. 284b(3)	The MS of establishment accepts the Union annual threshold exceedance information as compliant with Article 284b (3).	MCC.3030460	Article 284b (3) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.3030360		Gateway
Evaluate the Union annual threshold exceedance information as non-compliant with Art. 284b(3)	The MS of establishment evaluates the Union annual threshold exceedance information as non-compliant with Article 284b (3).	MCC.3030480	Article 284b (3) [DIR2020/285]	Task
Merge	The gateway merges the incoming business flows.	MCC.3030563		Gateway
End of process	The process stops at this point.	MCC.2904760		End event

Table 49: Maintained Properties of the objects

3.5.4 Update to a Prior notification - Taxable person ceases to apply the special scheme business process

The process describes the exclusion of the taxable person from the special scheme as he notifies its intention to ceases to apply the special scheme.

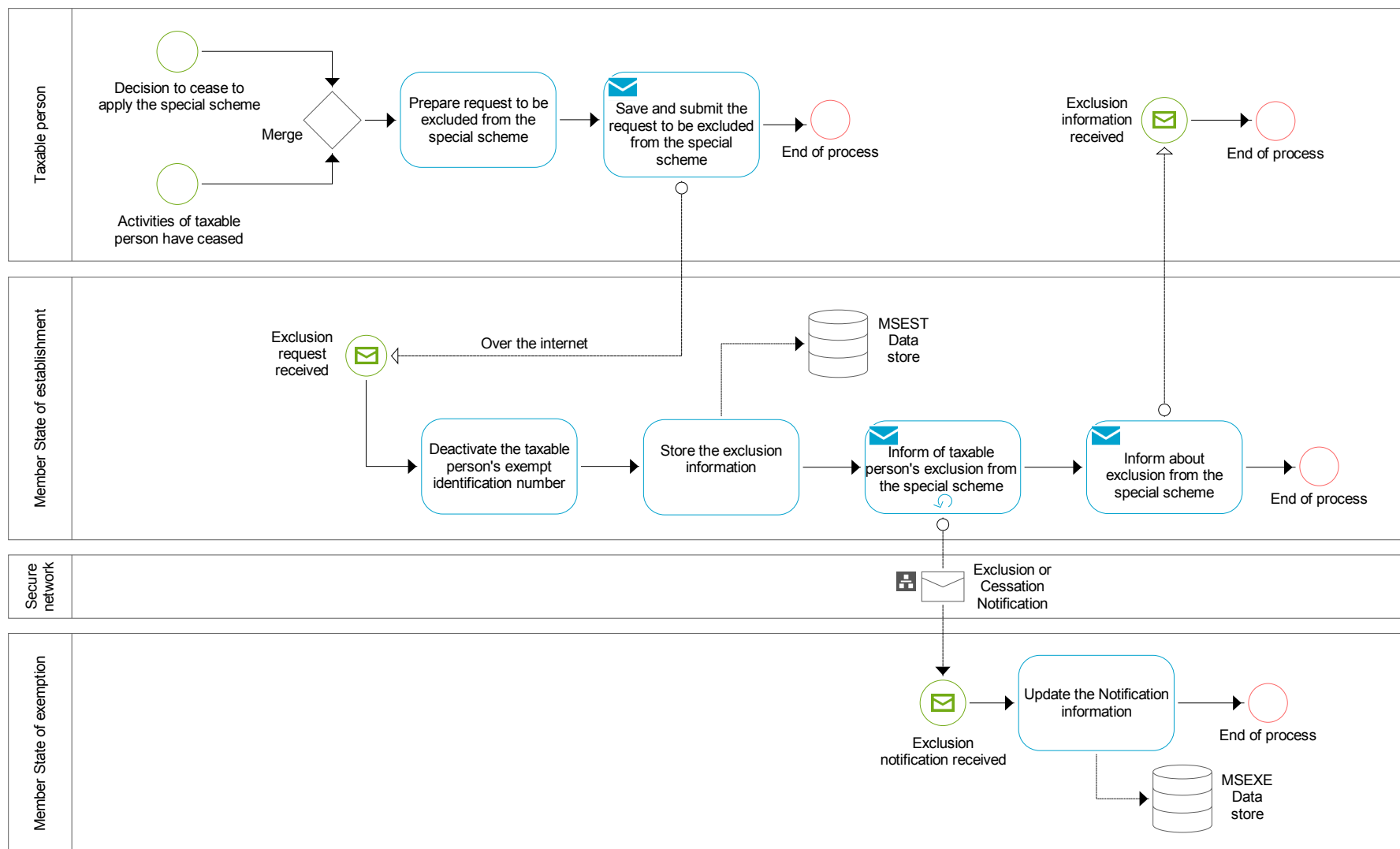


Figure 26: Update to a Prior information - Taxable person ceases to apply the special scheme business process

3.5.4.1 Model maintained properties

Model Property	Property Value
Name	Update to a Prior information - Taxable person ceases to apply the special scheme
Identifier	MCC.2938968
Description/Definition	The taxable person shall inform the Member State of establishment in advance, by means of an update to a prior notification, of any changes to the information previously provided. The process describes the activities to be performed when the taxable person is excluded from the special scheme as a result of the following two updates to a prior notification: * the taxable person decided to cease to apply the special scheme; * the taxable person informs that his activities have ceased. The cessation shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 50: Maintained Properties of the model

3.5.4.2 Object maintained properties

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person	The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140				Pool
Decision to cease to apply the special scheme	The taxable person has decided to cease to apply the special scheme.	MCC.2950860			Article 284e (c) [DIR2020/285]	Start event

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Activities of taxable person have ceased	The taxable person wants to inform the MS of establishment that his activities have ceased.	MCC.2938882			Article 284e (d) [DIR2020/285]	Start event
Merge	The gateway merges the incoming business flows.	MCC.2950881				Gateway
Prepare request to be excluded from the special scheme	The taxable person requests his exclusion from the special scheme for one of the following reasons: * the taxable person decided to cease to apply the special scheme; * the taxable person informs that his activities have ceased. The cessation shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter. The taxable person shall submit his request in advance to leave enough time to MS of establishment to process the request. The taxable person identifies itself with his exempt identification number.	MCC.2938873			Articles 284e (c) and (d) and 284(4) [DIR2020/285]	Task
Save and submit	The taxable person requests his exclusion	MCC.2938888			Article 284e (c)	Send task

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
the request to be excluded from the special scheme	from the special scheme through an update to a prior notification. The taxable person saves and submits the request to MS of establishment. The update to a prior notification shall include the exempt individual identification number of the taxable person. The means of submission is a national matter of the MS of establishment.				and (d) and Article 284(4) [DIR2020/285]	
End of process	The process stops at this point.	MCC.2904760				End event
Exclusion information received	The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of exclusion.	MCC.2956200				Message start event
End of process	The process stops at this point.	MCC.2904760				End event
Member State of establishment	Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860			Article 1 (3) [CIR2021/2007]	Pool
Exclusion request received	The MS of establishment is notified that the taxable person has informed of its decision to cease to apply the exemption	MCC.2938889				Message start event

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	or has informed that his activities have ceased.					
Deactivate the taxable person's exempt identification number	When the taxable person has informed of its decision to cease to apply the exemption or has informed that his activities have ceased, the MS of establishment deactivates his exempt identification number. The cessation shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter. However, the exempt identification number will not be eliminated. If the taxable person decides to avail himself in the special scheme again, he will be assigned with the same exempt identification number in that MS of establishment unless his VAT/Tax or other identifier in the MS of establishment was changed. In such a case, the MS of establishment will assign the taxable person with a new exempt identification number, generated from the taxable person's new VAT/Tax identifier or any	MCC.3017120			Articles 284 (4) and 284e [DIR2020/285]	Task

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	other identifier in MS of establishment.					
Store the exclusion information	The MS of establishment stores all information related to exclusion of the taxable person. Once the information will be stored in MEST data store, it will be ready for other Member States via automated access.	MCC.2952140			Article 3 [CIR2021/2007]	Task
MEST Data store	Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been					

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable					

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	person's OSS number.					
Inform of taxable person's exclusion from the special scheme	After the taxable person was excluded from the special scheme, the MS of establishment may notify each relevant MSs of exemption about the exclusion although this is not foreseen by the legal basis. The information contains the exempt identification number of the taxable person and the Exclusion effective date. It should also contain the exclusion reason. As there is no obligation in the legal text for the MS of establishment to inform the MS of exemption, it can be done on a voluntary basis.	MCC.2938861				Send task
Inform about exclusion from the special scheme	The MS of establishment submits a notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the information that the taxable person's exempt identification number was deactivated and the date of exclusion. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. It is proposed that in case of impossibility of the MS of establishment to notify the	MCC.2906160				Send task

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).					
End of process	The process stops at this point.	MCC.2904760				End event
Secure network	The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560			Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool
Member State of exemption	Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940			Article 1 (2) [CIR2021/2007]	Pool
Exclusion notification received	The MS of the exemption received from the MS of establishment the information that the taxable person ceases to apply the special scheme.	MCC.3018560				Message start event

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	The notification from MS of establishment to MS of exemption is not foreseen by the legal basis. It can be done on a voluntary basis only.					
Update the Notification information	Based on the exclusion information received in the Notification message or an automated access to MS of establishment, the MS of exemption can update the taxable person's information in its data store. The MS of exemption is not obliged to store the information, but it can be used for later reference.	MCC.2938893				Task
MSEXE Data store	Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.	MCC.2935426				Data store
End of process	The process stops at this point.	MCC.2904760				End event
Exclusion or Cessation Notification	Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS	MCC.2935400	IE3E03			Message

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	of exemption. These notifications are not foreseen by the legal basis except the case, when the MS of establishment notifies the MS of exemption when the Union annual threshold is exceeded (Article 37a (b)). In other cases, sending of the notification can be done on a voluntary basis. The Exclusion or cessation notification should consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the exclusion or cessation reason (optional); * the Exclusion effective date or the Cessation effective date. The Exemption or cessation notification message may contain a list of multiple taxable persons, which were excluded from the special scheme or ceased from the MS of exemption.					

Table 51: Maintained Properties of the objects

3.5.5 Update to a Prior Notification - Taxable person informs of the change of MS of establishment

The process describes the update to a prior notification with which the taxable person informs in advance of the change of his MS of establishment. The process describes this as a separate exclusion of the taxable person from the current MS of establishment and subsequently a new registration in the new MS of establishment.

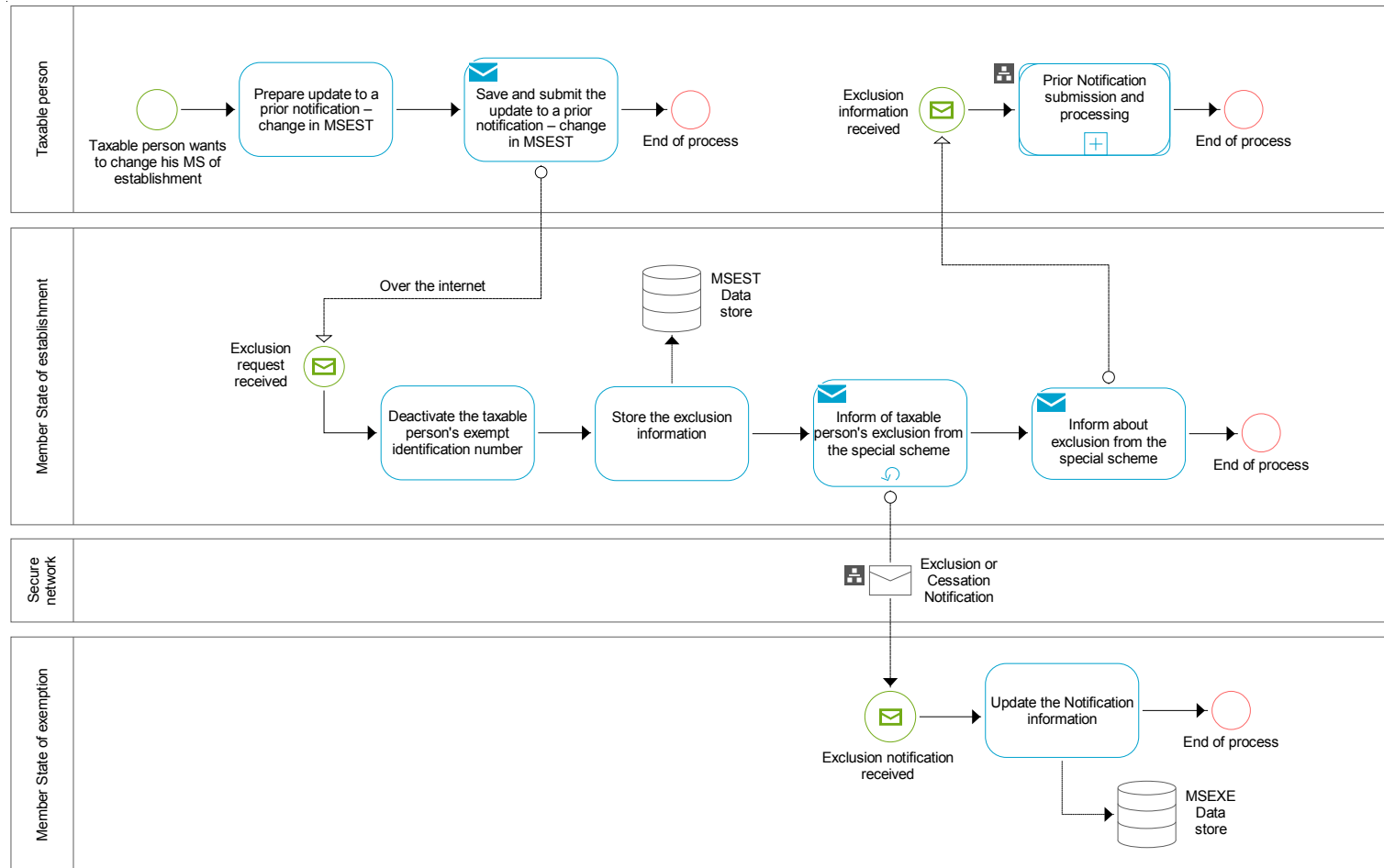


Figure 27: Update to a Prior Notification - Taxable person informs of the change of MS of establishment business process

3.5.5.1 Model maintained properties

Model Property	Property Value
Name	Update to a Prior Notification - Taxable person informs of the change of MS of establishment
Identifier	MCC.2934180
Description/Definition	The process describes the way how the taxable person notifies an update to a prior notification informing in advance of the change of the MS of establishment.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 52: Maintained Properties of the model

3.5.5.2 Object maintained properties

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
Taxable person	The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140				Pool
Taxable person wants to change his MS of establishment	The taxable person has decided to change the MS of establishment therefore the taxable person requests his exclusion from the special scheme. The taxable person shall inform the MS of establishment in advance, by means of an update to a prior notification, of this change. The notification should contain the date from which such change takes effect and, optionally, the Member State in which the taxable person has decided to establish itself.	MCC.2934500			Article 284 (4) [DIR2020/285] and Article 3(1) letter (c) [CIR2021/2007]	Start event

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	The cessation shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter.					
Prepare update to a prior notification – change in MEST	The taxable person prepares an update to a Prior notification as he wants to change his MS of establishment. The notification should contain the date from which such change takes effect and, optionally, the Member State in which the taxable person has decided to establish itself. The cessation shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter. In any case, the taxable person should submit his request in advance to leave enough time to MS of establishment to process the request. The taxable person identifies himself with his exempt identification number.	MCC.3003520			Article 284e (c) and (d) [DIR2020/285]	Task
Save and submit the update to a	The taxable person submits the update to a prior notification – change in MS of	MCC.3017820			Article 284e (c) and (d)	Send task

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
prior notification – change in MEST	establishment. The taxable person saves and submits the request to MS of establishment. The means of submission is a national matter of the MS of establishment.				and Article 284(4) [DIR2020/285]	
End of process	The process stops at this point.	MCC.2904760				End event
Exclusion information received	The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of exclusion.	MCC.2956200				Message start event
Prior Notification submission and processing	Once the taxable person was excluded from his MS of establishment, he can request his registration in the new MS of establishment through a new prior notification. It is in the interest of the taxable person to submit the update to a prior notification well in advance so to minimise the time-gap between the effective date of exclusion from the special scheme and the moment it can submit a new prior notification.	MCC.2935140				Call activity (collapsed)
End of process	The process stops at this point.	MCC.2904760				End event
Member State of establishment	Member State of establishment (MEST) means the Member State in which the taxable person availing itself of the special scheme is	MCC.2902860			Article 1 (3) [CIR2021/2007]	Pool

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	established.					
Exclusion request received	The MS of establishment received the update to a prior notification from the taxable person that informed in advance of the change in the MS of establishment.	MCC.2935000				Message start event
Deactivate the taxable person's exempt identification number	When the taxable person informs the MS of establishment in advance, by means of an update to a prior notification, of the change in MS of establishment, the MS of establishment deactivates his exempt identification number taking into account that the exclusion shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter. If the taxable person decides to avail himself of the special scheme again, he will have to do a new Prior notification to his new MS of establishment and he will be assigned with new exempt identification number in that MS of establishment. It is in the interest of the taxable person to submit the update to a prior notification well in advance so to minimise the time-gap between the effective date of exclusion from the special scheme and the moment it can submit a new prior	MCC.3017760			Articles 284 (4) and 284e [DIR2020/285]	Task

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	notification.					
Store the exclusion information	The MS of establishment stores all information related to exclusion of the taxable person. Once the information will be stored in MEST data store, it will be ready for other Member States via automated access.	MCC.2952140			Article 3 [CIR2021/2007]	Task
MEST Data store	Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to	MCC.2902100		Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business					

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person’s OSS number.					
Inform of taxable person's exclusion from the special scheme	After the taxable person was excluded from the special scheme, the MS of establishment may notify each relevant MS of exemption about this fact (this is not provided by the legal basis so it can be done on a voluntary basis). The information contains the exempt identification number of the taxable person	MCC.2935215				Send task

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	and the Exclusion effective date.					
Inform about exclusion from the special scheme	The MS of establishment submits a notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the information that the taxable person's exempt identification number was deactivated and the date of exclusion. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. It is proposed that in case of impossibility of the MS of establishment to notify the taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).	MCC.2906160				Send task
End of process	The process stops at this point.	MCC.2904760				End event
Secure network	The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an	MCC.2901560			Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	equivalent secure network or system.					
Member State of exemption	Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940			Article 1 (2) [CIR2021/2007]	Pool
Exclusion notification received	The MS of the exemption received from the MS of establishment the information that the taxable person was excluded from the special scheme. This notification is not provided by the legal basis so it can be made on a voluntary basis.	MCC.2952980				Message start event
Update the Notification information	Based on the exclusion information received in the Exclusion or cessation notification message or through automated access to MSEST data store, the MS of exemption can update the taxable person's information in its data store. The MS of exemption is not obliged to store the information, but it can be used for later reference.	MCC.2935422				Task
MSEXE Data store	Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store	MCC.2935426				Data store

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	the information related to the special scheme.					
End of process	The process stops at this point.	MCC.2904760				End event
Exclusion or Cessation Notification	Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption. These notifications are not foreseen by the legal basis except the case, when the MS of establishment notifies the MS of exemption when the Union annual threshold is exceeded (Article 37a (b)). In other cases, sending of the notification can be done on a voluntary basis. The Exclusion or cessation notification should consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the exclusion or cessation reason (optional); * the Exclusion effective date or the Cessation effective date.	MCC.2935400	IE3E03			Message

Name	Description/Definition	Identifier	Short description	Reference ID	Legal Reference	Artefact
	The Exemption or cessation notification message may contain a list of multiple taxable persons, which were excluded from the special scheme or ceased from the MS of exemption.					

Table 53: Maintained Properties of the objects

3.6 SPECIFIC BUSINESS PROCESSES

The section depicts the processes, which do not relate to the previous groups of processes but are related to a specific subject.

3.6.1 Publish details of provisions business process

The process describes the publication of provisions details, performed by the Member States applying the special scheme for small enterprises and the cash accounting scheme.

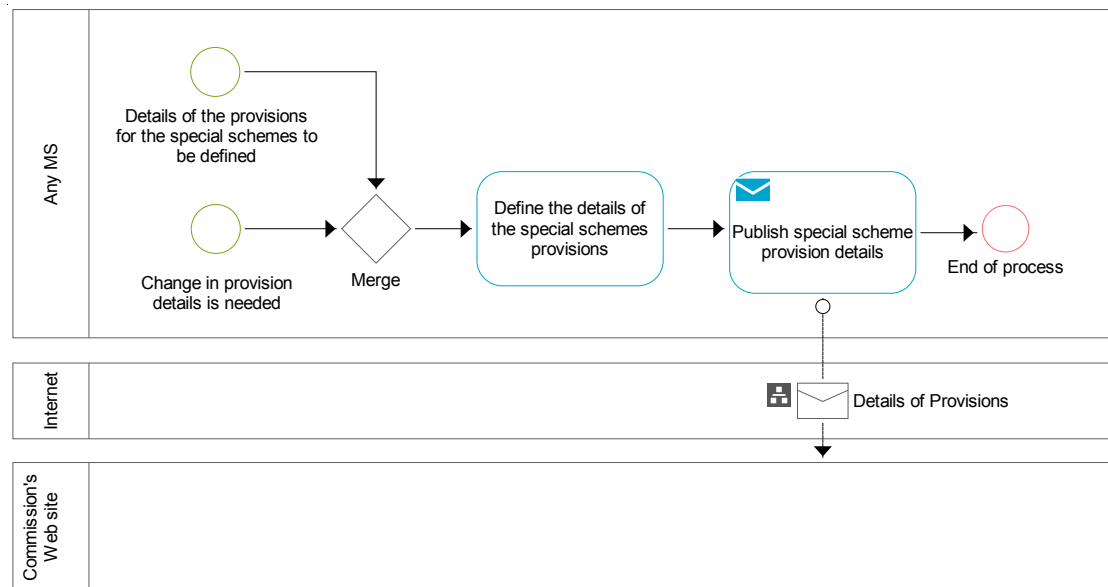


Figure 28: Publish details of provisions business process

3.6.1.1 Model maintained properties

Model Property	Property Value
Name	Publish details of provisions
Identifier	MCC.2953280
Description/Definition	Member States shall, without delay, provide the details listed in Annex I to CIR2021/207 and their updates as regards the provisions which transpose the SME scheme and the cash accounting scheme. That information shall be submitted via the web portal established by the Commission. The Commission shall, on the basis of the information provided by the Member States, publish on its website the details of the provisions approved by each Member State.
Type	BPMN collaboration diagram (BPMN 2.0)

Model Property	Property Value
Legal Reference	Article 32 (1) [REG2010/904], Article 4 (1) [CIR2021/207]

Table 54: Maintained Properties of the model

3.6.1.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Legal Reference	Artefact
Any MS		Any Member State of the European Union.	TAX.503987		Pool
Details of the provisions for the special schemes to be defined		The Member State, applying the SME special scheme of exemption or the cash accounting scheme, needs to define the details of provisions applicable for these special schemes, as updated, in that Member State.	MCC.2953380		Start event
Change in provision details is needed		The Member State, applying the SME special scheme or the cash accounting scheme, changes the details of provisions applicable for these special schemes in that Member State.	MCC.2953300		Start event
Merge		The gateway merges the incoming business flows.	MCC.2953404		Gateway
Define the details of the special schemes provisions		The Member State changes the details of the existing provisions for applying the special schemes or, if the provisions were not defined yet, it defines new ones.	MCC.2953360	Article 4 (1) [CIR2021/2007]	Task
Publish special scheme provision details		The Member State logs in into the Commission's web portal and defines/updates the details of provisions for applying the SME special scheme or cash accounting scheme in that Member State.	MCC.2953401	Article 32 (1) [REG2010/904] and Article 4 (1) [CIR2021/2007]	Send task
End of process		The process stops at this point.	MCC.2904760		End event
Internet		A global computer network providing a variety of	MCC.3119620		Pool

Name	Remark/ Example	Description/Definition	Identifier	Legal Reference	Artefact
		information and communication facilities, consisting of interconnected networks using standardized communication protocols.			
Commission's Web site		The European Commission is the executive branch of the European Union.	MCC.2953321		Pool
Details of Provisions	IE3A01	Details of Provisions represents the national provisions details, related to SME scheme and cash accounting scheme, to be published by the Member State on the Commission's web site (content of Annex I of [CIR2021/2007]).	MCC.2953420		Message

Table 55: Maintained Properties of the objects

3.6.2 Special scheme has ceased to apply in MS of exemption business process

The process describes the activities at the MS of exemption side, when it decides to cease to apply the special scheme.

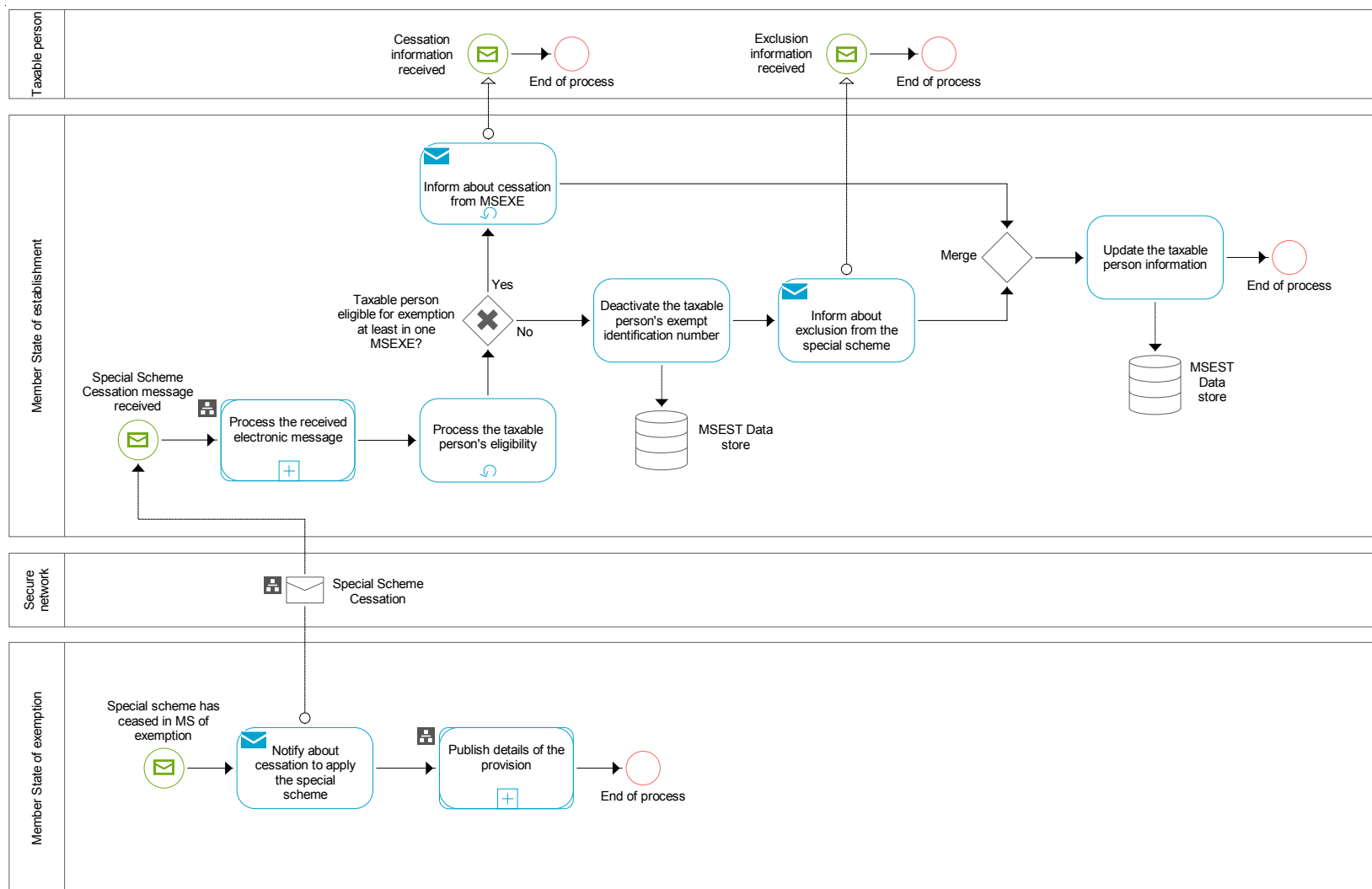


Figure 29 Special scheme has ceased to apply in MS of exemption business process

3.6.2.1 Model maintained properties

Model Property	Property Value
Name	Special scheme has ceased to apply in MS of exemption
Identifier	MCC.2951660
Description/Definition	The process describes the way how the MS of exemption proceed in case when it ceases to apply the SME special scheme. If after the change the taxable person will not be eligible to benefit from the exemption in neither MS of exemption, the taxable person will be excluded from the special scheme.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 56: Maintained Properties of the model

3.6.2.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
Taxable person		The taxable person represents the small enterprise, which carries out supplies of good and/or services and avails itself of exemption in Member State other than the Member State of Establishment.	MCC.2903140			Pool
Cessation information received		The taxable person received the information that he was ceased from one or more MS(s) of exemption since they have ceased to apply the special scheme in their territory. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the reason and the date of cessation.	MCC.3119640			Message start event

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
End of process		The process stops at this point.	MCC.2904760			End event
Exclusion information received		The taxable person received the information that he was excluded from the special scheme. His exempt identification number was deactivated. The notification is a national matter not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. The notification should contain the Exclusion effective day and the reason of exclusion.	MCC.2956200			Message start event
End of process		The process stops at this point.	MCC.2904760			End event
Member State of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.2902860		Article 1 (3) [CIR2021/2007]	Pool
Special Scheme Cessation message received		The MS of establishment received the Special Scheme Cessation message.	MCC.3014280			Message start event
Process the received electronic message		The sub-process depicts the processing of the message, received by MS. The sub-process also covers the treatment of the received message in case of failed parsing.	MCC.2903700			Call activity (collapsed)
Process the taxable person's eligibility		The MS of establishment processes the Exemption Cessation message received from MS of exemption. The information will be used for evaluation whether the taxable person can continue using the special scheme. To be eligible to continue	MCC.2951180		Article 284e (b) [DIR2020/285]	Task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		benefiting from the special scheme, the taxable person must be eligible to benefit from the exemption at least in one MS of exemption. Otherwise, the taxable person will be excluded from the special scheme. The activity is performed in loop to evaluate each taxable person listed in the Exemption Cessation message.				
Taxable person eligible for exemption at least in one MSEXE?		The gateway splits the business flow based on whether the taxable person is eligible for the exemption at least in one MS of exemption.	MCC.2951240			Exclusive gateway
Inform about cessation from MSEXE		The taxable person has ceased to benefit from the exemption in one or more MS(s) of exemption. The MS of establishment should submit a notification to the taxable person, informing the latter about that cessation. The notification should contain one or more MS(s) of exemption, from which the taxable person is ceased and the date of cessation. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme . It is proposed that in case the taxable person was not informed about his exclusion from the special scheme due to impossibility on	MCC.2951232			Send task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		the side of the MS of establishment, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a separate message (not part of the specifications).				
Deactivate the taxable person's exempt identification number		When the taxable person is not eligible anymore for the exemption at least in one MS of exemption, the MS of establishment deactivates his exempt identification number without delay. However, the exempt identification number will not be eliminated. If the taxable person decides to avail himself in the special scheme again, he will be assigned with the same exempt identification number in that MS of establishment unless his VAT/Tax or other identifier in the MS of establishment was changed. In such a case, the MS of establishment will assign the taxable person with a new exempt identification number, generated from the taxable person's new VAT/Tax identifier or any other identifier in MS of establishment.	MCC.2951282		Articles 284e [DIR2020/285]	Task
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to	MCC.2902100	Article 17(1)(g) and Article 21(2b) of Regulation		Data store

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the		(EU) No 904/2010 and Article 3 [CIR2021/2007]		

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the				

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.				
Inform about exclusion from the special scheme		The MS of establishment submits a notification to the taxable person, informing the latter about exclusion from the special scheme. The notification should contain the reason of the exclusion and the information that the taxable person's exempt identification number was deactivated and the date of exclusion. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the SME scheme. It is proposed that in case of impossibility of the MS of establishment to notify the taxable person about its exclusion from the special scheme, the MS of establishment shall notify the MS of exemption about this fact. This notification can be performed either via administrative cooperation or by a	MCC.2906160			Send task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		separate message (not part of the specifications).				
Merge		The gateway merges the incoming business flows.	MCC.2951480			Gateway
Update the taxable person information		The MS of establishment without delay updates the taxable person information with one of the following: * if the taxable person was excluded from the special scheme, the following information will be stored: deactivation of the exempt identification number, date of exclusion; * if the taxable person was ceased from MS(s) of exemption but continues to benefit from the exemption in at least one Member State, the following information will be stored: date of cessation and Member State of exemption, in which the cessation takes effect. The data store will be also updated by the status of all MSs of exemption where the taxable person benefits from the exemption. The information shall be available for at least five years from the end of the first calendar year in which access to the information is to be granted (Article 18 Council Regulation (EU) No 904/2010).	MCC.3119720		Article 3 [CIR2021/2007] and Article 284e [DIR2020/285]	Task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		Once all information will be stored in data store of the MS of establishment, it will be ready for an automated access.				
MSEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a	MCC.2902100	Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union				

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.				
End of process		The process stops at this point.	MCC.2904760			End event
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560		Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
Member State of exemption		Member State of exemption (MSEXE) means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MCC.2902940		Article 1 (2) [CIR2021/2007]	Pool
Special scheme has ceased in MS of exemption		The MS of exemption has decided to cease applying the special scheme.	MCC.2951520			Message start event
Notify about cessation to apply the special scheme		The MS of exemption without delay notifies the MS of establishment that it ceased to apply the special scheme and the date on which the special scheme for small enterprises has ceased to apply in that Member State.	MCC.2951540		Article 284e (b) [DIR2020/285] and Article 4(3) letter c) [CIR2021/2007]	Send task
Publish details of the provision		As the Member State has ceased to apply the special scheme, it updates the European Commission web site.	MCC.2954540		ANNEX I [CIR2021/2007]	Call activity (collapsed)
End of process		The process stops at this point.	MCC.2904760			End event
Special Scheme Cessation	IE3E02	Special Scheme Cessation is a common electronic message, transmitted by the MS of exemption to the MS of establishment, to inform the latter without delay about the cessation to apply the special scheme in that MS of exemption. The message contains the date on which the special scheme for small enterprises has ceased to apply in that Member State.	MCC.2951600			Message

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		Even not provided by the legal basis, the message may contain the exempt identification numbers of the taxable persons, which were benefiting from the exemption in that MS of exemption.				

Table 57: Maintained Properties of the objects

3.7 COMMON BUSINESS PROCESSES

3.7.1 Process the Received Electronic Message business process

The process describes the activities at the MS side when receiving a message from other MS.

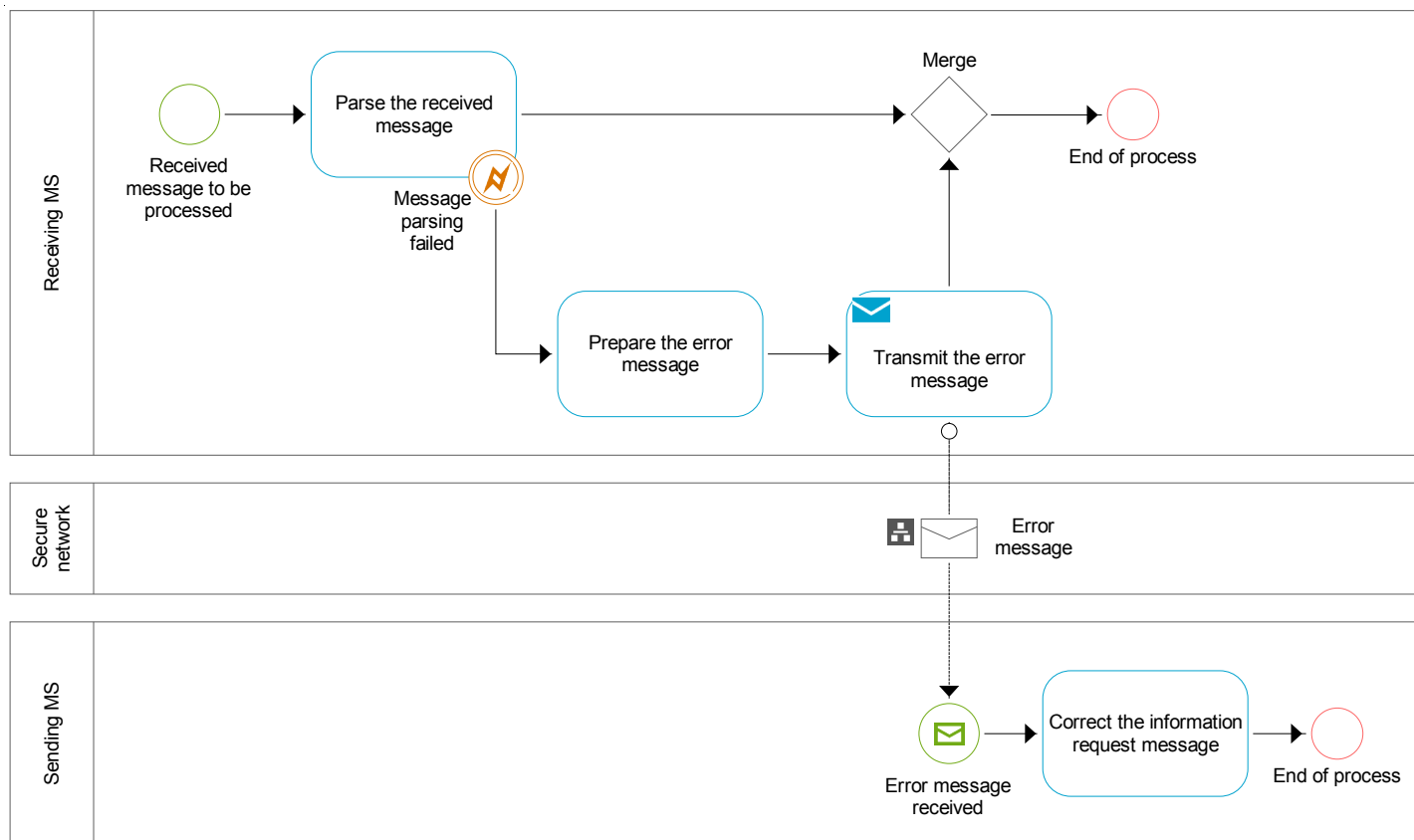


Figure 30: Process the received electronic message business process

3.7.1.1 Model maintained properties

Model Property	Property Value
Name	Process the received electronic message
Identifier	MCC.2903720
Description/Definition	The sub-process depicts the processing of the message, received by MS. The sub-process also covers the

Model Property	Property Value
	treatment of the received message in case of failed parsing.
Type	BPMN collaboration diagram (BPMN 2.0)

Table 58: Maintained Properties of the model

3.7.1.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Legal Reference	Artefact
Receiving MS		The MS, which receives an electronic message.	MCC.2905583		Pool
Received message to be processed		The MS received a message, which needs to be processed.	MCC.2905620		Start event
Parse the received message		The receiving MS parses the received message. Failure of parsing will raise an error.	MCC.2901900		Task
Message parsing failed		The parsing of the received message failed.	MCC.2902340		Error intermediate event
Prepare the error message		The parsing of the received message failed; the requested information cannot be processed. The MS receiving the message generates an error message. The error message contains the reference to the request message and the reason of the failed parsing.	MCC.2901940		Task
Transmit the error message		After the error message is generated, the MS sends an error message to the MS sending the original message. Sending of the error message is not provided by the legal basis so it can be done on a	MCC.2902040		Send task

Name	Remark/ Example	Description/Definition	Identifier	Legal Reference	Artefact
		voluntary basis.			
Merge		The gateway merges the incoming business flows.	MCC.2904620		Gateway
End of process		The process stops at this point.	MCC.2904760		End event
Secure network		The secure network ensures secure communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.	MCC.2901560	Articles 3 and Article 4 (2) and (3) [CIR2021/2007]	Pool
Sending MS		The MS, which transmits the message to other MS.	MCC.2905584		Pool
Error message received		The MS received an error message.	MCC.2905580		Message start event
Correct the information request message		The MS receiving the error message checks and analysis the error(s) listed in the message. In case of need, the MS receiving the error message corrects the original message and resends it again to the MEST automated access.	MCC.2902020		Task
End of process		The process stops at this point.	MCC.2904760		End event
Error message	IE3E01	Error message is a common electronic message, informing the sender of a business message of some errors raised during the processing of the received message (both technical and/or business errors). The	MCC.2902160		Message

Name	Remark/ Example	Description/Definition	Identifier	Legal Reference	Artefact
		recipient of the original business message detected the errors. The error message contains a reference to the original message, the error definition and the reason that raised the error. Sending of the error message is not provided by the legal basis so it can be done on a voluntary basis.			

Table 59: Maintained Properties of the objects

3.7.2 Automated Access to MEST Information business process

The process describes, how the MSs requesting and receiving special scheme related information using the MS of establishment automated access to information.

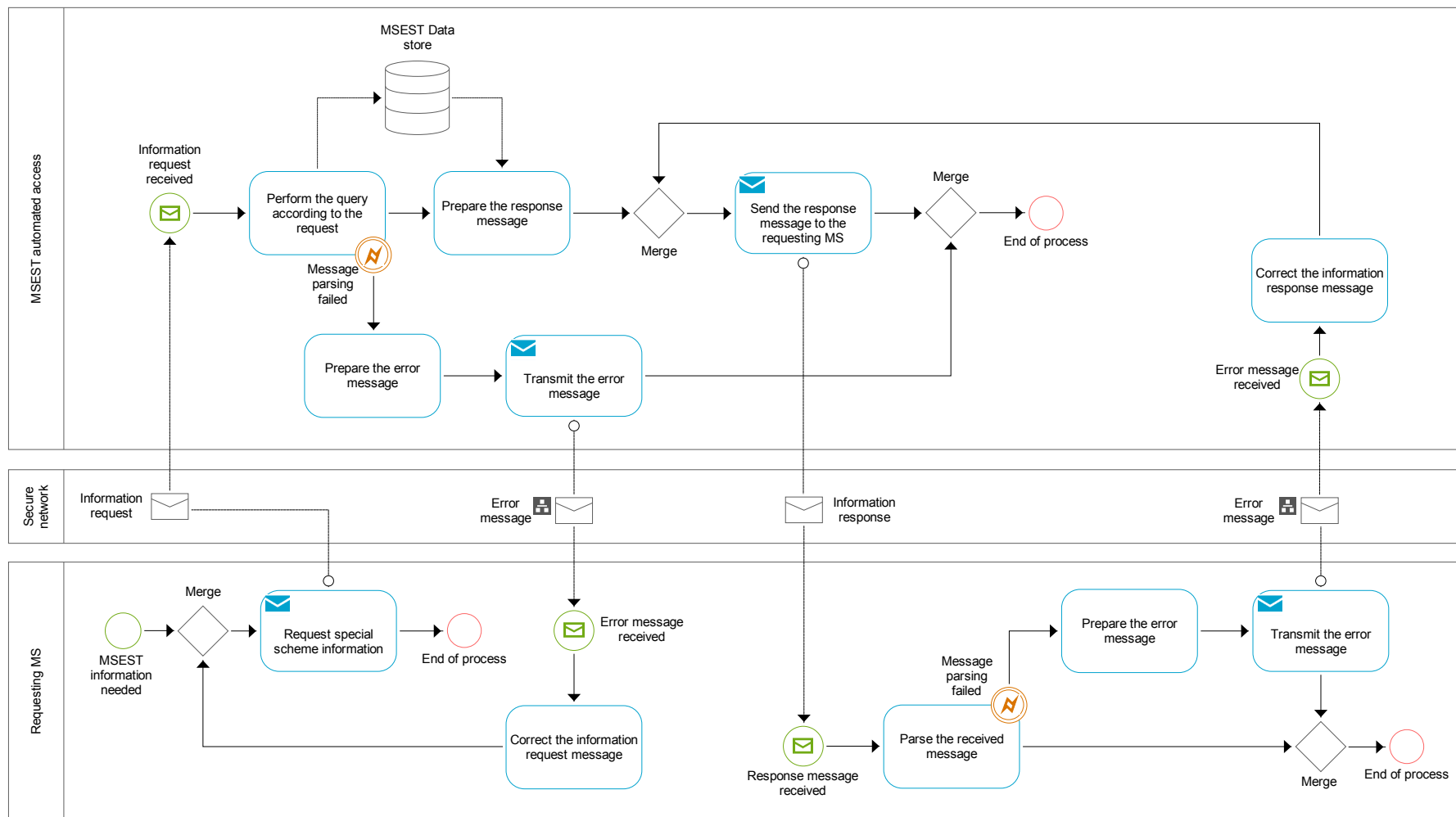


Figure 31: Automated access to MEST information business process

3.7.2.1 Model maintained properties

Model Property	Property Value
Name	Automated access to MEST information
Identifier	MCC.2901480
Description/Definition	The call activity depicts the activities performed by the automated access to MEST information, which is operated by the MS of establishment. The information relates to the special scheme for small enterprises. The minimum information to be provided by the MS of establishment to the other MSs is declared in Article 21 (2b) [DIR2020/285].
Type	BPMN collaboration diagram (BPMN 2.0)
Legal Reference	Article 21 (2b) [DIR2020/285] and Article 3 [CIR2021/2007]

Table 60: Maintained Properties of the model

3.7.2.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
MEST automated access		The MEST automated access is part of the MEST information system, operated by the MS of establishment. The MEST automated access provides the other MSs with the automated access to information. The information relates to registration details of the taxable person and the value of supplies of goods and/or services carried out by that taxable person.	MCC.2901520		Article 3 [CIR2021/2007]	Pool
Information request received		MS of establishment received an information request.	MCC.2901800			Message start event
Perform the query according to the		The MS of establishment received an information request. According to the	MCC.2901820		Article 3 [CIR2021/2007]	Task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
request		request attributes, the MS of establishment providing the automated access to information will perform a query over the MEST data store.			]	
MEST Data store		Data Store of the MS of establishment. It contains all the information needed for using the special scheme stored pursuant to Article 17(1)(g) of Regulation (EU) No 904/2010. The Member State is permitted to automatically access at least a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity, and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as	MCC.2902100	Article 17(1)(g) and Article 21(2b) of Regulation (EU) No 904/2010 and Article 3 [CIR2021/2007]		Data store

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union				

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned, * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person's OSS number.				
Prepare the response message		The query performed over the MEST data store will result in the requested information. The MEST automated access will prepare the response message containing that requested information.	MCC.2901960		Article 3 [CIR2021/2007]	Task
Message parsing failed		The parsing of the received message failed.	MCC.2902340			Error intermediate event
Prepare the error		The parsing of the received message failed;	MCC.2901940			Task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
message		the requested information cannot be processed. The MS receiving the message generates an error message. The error message contains the reference to the request message and the reason of the failed parsing.				
Transmit the error message		After the error message is generated, the MS sends an error message to the MS sending the original message. Sending of the error message is not provided by the legal basis so it can be done on a voluntary basis.	MCC.2902040			Send task
Error message received		The MS received an error message.	MCC.2902320			Message start event
Correct the information response message		The MS of establishment, taking into the account the reason of the information response message rejection, corrects the information response message and resends it again to the requesting MS.	MCC.2956460			Task
Merge		The gateway merges the incoming business flows.	MCC.2956482			Gateway
Send the response message to the requesting MS		The MEST automated access sends the response message generated in the previous step to the requesting MS.	MCC.2902060		Article 3 [CIR2021/2007]	Send task
Merge		The gateway merges the incoming business flows.	MCC.2904620			Gateway
End of process		The process stops at this point.	MCC.2904760			End event
Secure network		The secure network ensures secure	MCC.2901560		Articles 3 and	Pool

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		communication between the MS of establishment and the MS of exemption and also to all other Member States. According to Commission Implementing Regulation 2021/2007, the secure network is represented by the CCN/CSI network or via an equivalent secure network or system.			Article 4 (2) and (3) [CIR2021/2007]	
Requesting MS		The requesting MS means any MS, which requests the MS of establishment of an information related to special scheme for small enterprises.	MCC.2901660		Article 3 [CIR2021/2007]	Pool
MSEST information needed		The requesting MS requests the MSEST automated access some special scheme related information.	MCC.2914500			Start event
Error message received		The MS received an error message.	MCC.2902320			Message start event
Correct the information request message		The MS receiving the error message checks and analysis the error(s) listed in the message. In case of need, the MS receiving the error message corrects the original message and resends it again to the MSEST automated access.	MCC.2902020			Task
Merge		The gateway merges the incoming business flows.	MCC.3125280			Gateway
Request special scheme information		The requesting MS needs some special scheme related information. The requesting MS prepares a request message and sends the message to MS of establishment using	MCC.2914560			Send task

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		the automated access to information.				
End of process		The process stops at this point.	MCC.2904760			End event
Response message received		The requesting MS received a response from the MS of establishment on its information request.	MCC.2902500			Message start event
Parse the received message		The receiving MS parses the received message. Failure of parsing will raise an error.	MCC.2901900			Task
Message parsing failed		The parsing of the received message failed.	MCC.2902340			Error intermediate event
Prepare the error message		The parsing of the received message failed; the requested information cannot be processed. The MS receiving the message generates an error message. The error message contains the reference to the request message and the reason of the failed parsing.	MCC.2901940			Task
Transmit the error message		After the error message is generated, the MS sends an error message to the MS sending the original message. Sending of the error message is not provided by the legal basis so it can be done on a voluntary basis.	MCC.2902040			Send task
Merge		The gateway merges the incoming business flows.	MCC.2904620			Gateway
End of process		The process stops at this point.	MCC.2904760			End event
Information request		Information request is a common electronic	MCC.2914580			Message

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		message, submitted by the requesting MS to the MS of establishment, requesting some special scheme related information. The message represents the Notification Request, or the Quarterly Report Request, or any other informational request.				
Error message	IE3E01	Error message is a common electronic message, informing the sender of a business message of some errors raised during the processing of the received message (both technical and/or business errors). The recipient of the original business message detected the errors. The error message contains a reference to the original message, the error definition and the reason that raised the error. Sending of the error message is not provided by the legal basis so it can be done on a voluntary basis.	MCC.2902160			Message
Information response		Information response is a common electronic message, submitted by the MS of establishment to the requesting MS as a response on the Information request message. The message is represented by the Notification, or Quarterly Report, or any other informational messages.	MCC.2902200			Message
Error message	IE3E01	Error message is a common electronic message, informing the sender of a business message of some errors raised during the	MCC.2902160			Message

Name	Remark/ Example	Description/Definition	Identifier	Reference ID	Legal Reference	Artefact
		processing of the received message (both technical and/or business errors). The recipient of the original business message detected the errors. The error message contains a reference to the original message, the error definition and the reason that raised the error. Sending of the error message is not provided by the legal basis so it can be done on a voluntary basis.				

Table 61: Maintained Properties of the objects

4 FUNCTIONAL MODEL

This section defines the functional model of the SME processes using UML sequence diagrams.

4.1 NOTIFICATION PROCESS FUNCTIONAL MODEL

The Notification process functional model describes the information exchanges between the main stakeholders, following the business processes.

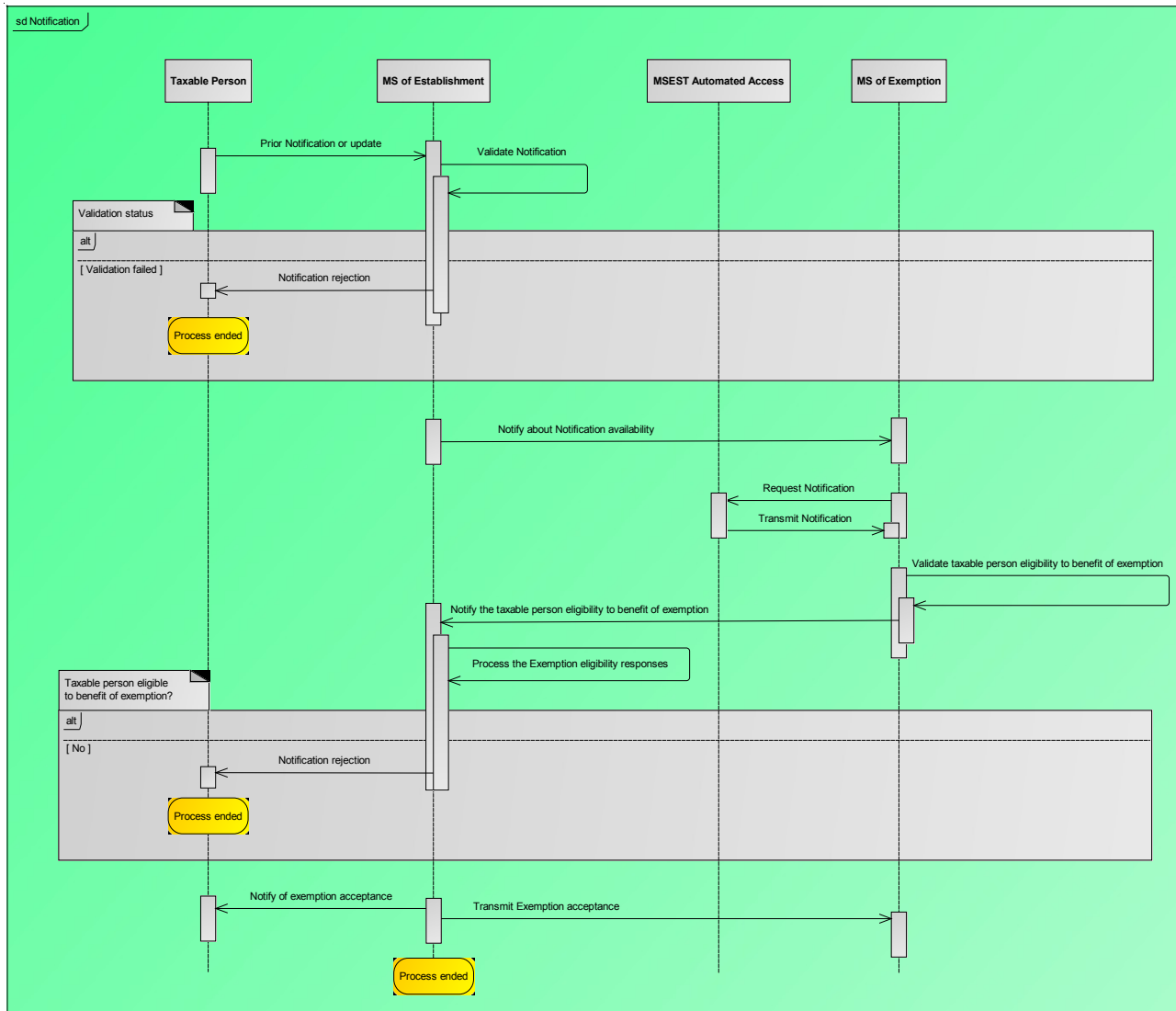


Figure 32: Notification process functional model

4.2 QUARTERLY REPORT PROCESS FUNCTIONAL MODEL

The Quarterly report process functional model describes the information exchanges between the main stakeholders, following the business processes.

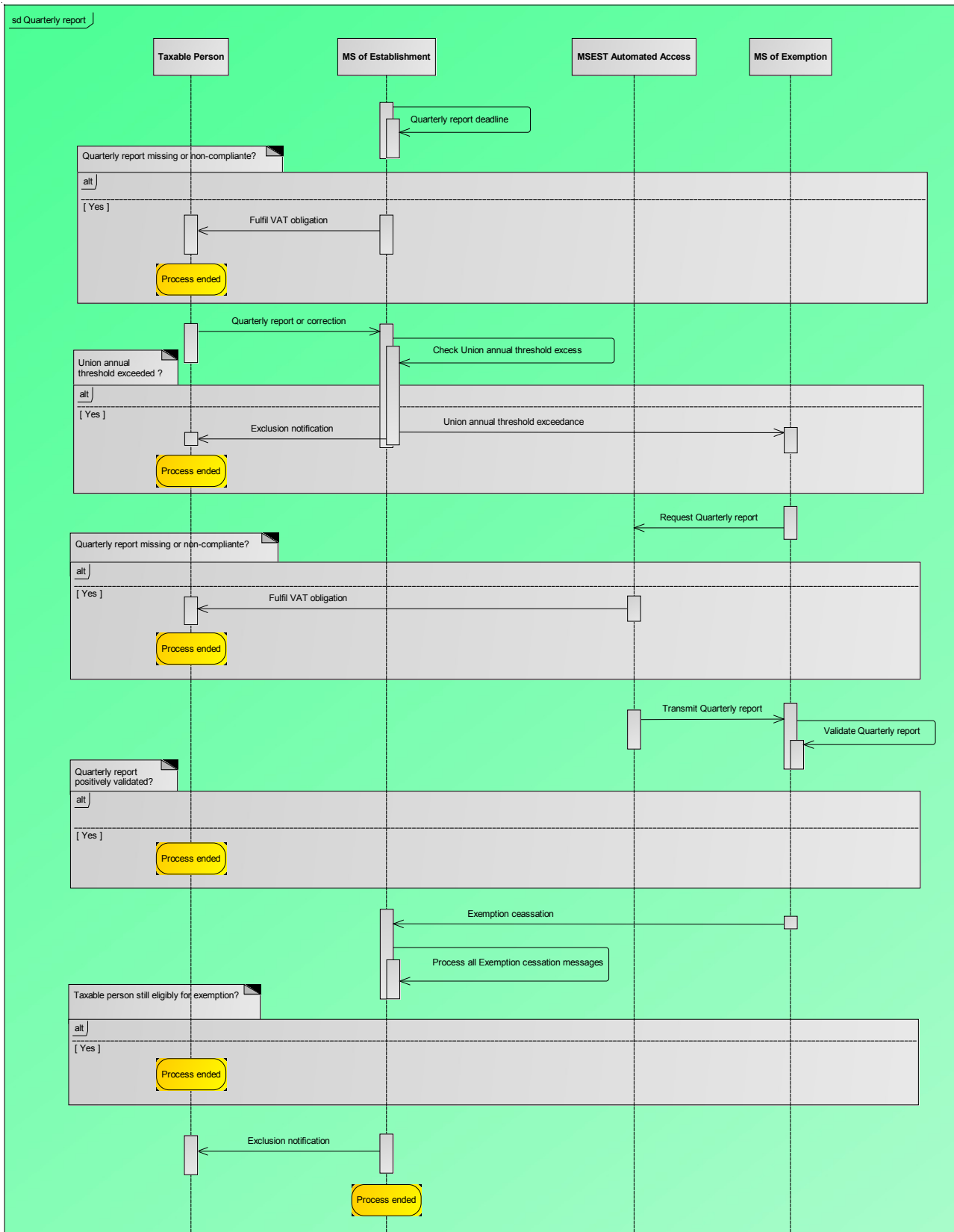


Figure 33: Quarterly reporting process functional model

5 LOGICAL DATA MODEL

The logical data model defines all the functional data elements that are managed by the system, as well as the relationships between them. Any part of the system that must use such data elements or any external system interacting with the system must adhere to this model.

5.1 NOTIFICATION LOGICAL DATA MODEL ENTITIES

Notification is the information that the MS of establishment must know about the taxable person to allow him to register for the special scheme. The logical data model for the Notification information shows the data entities and the relationships between them.

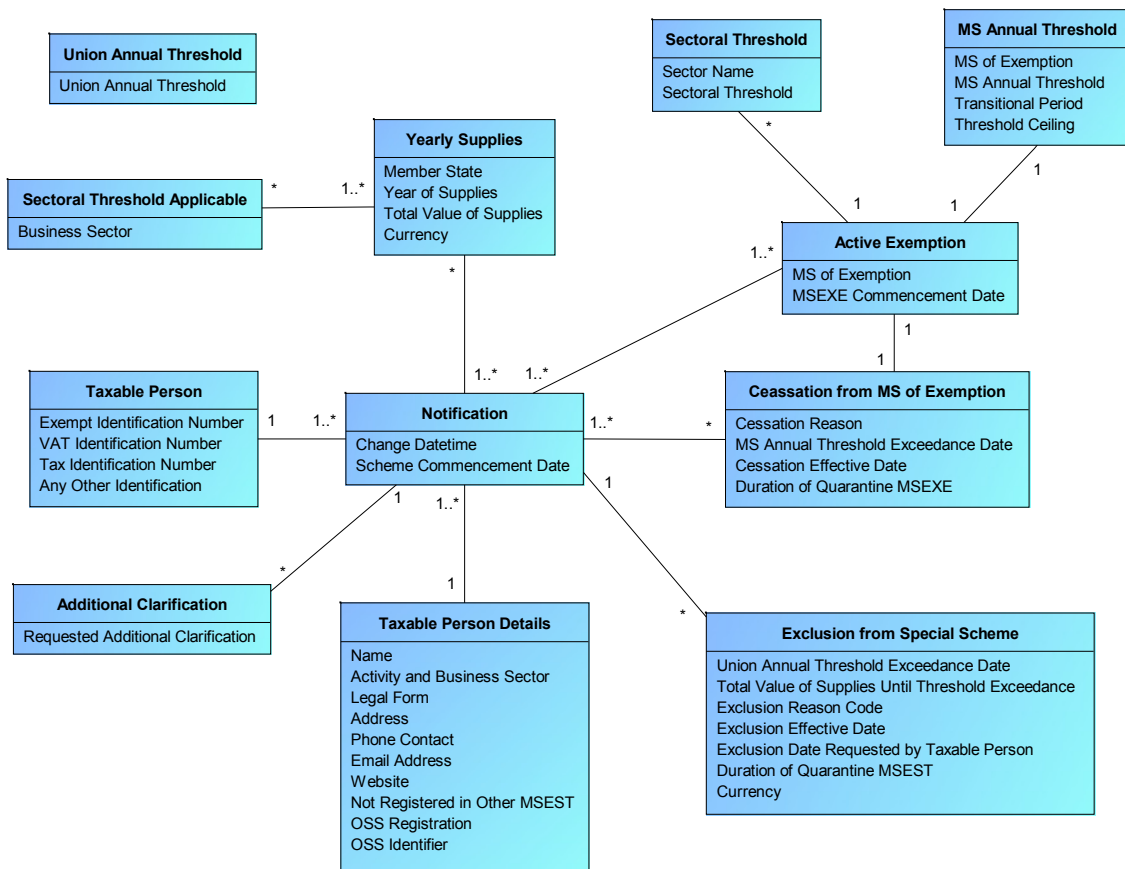


Figure 34: Logical data model - Notification

5.1.1 Taxable Person

The Taxable person entity defines the identifiers of the taxable person used within the special scheme.

Attribute name	Description	Type	Legal reference
Exempt Identification Number	Individual identification number of exempt taxable persons issued by the Member State of the establishment.	GEN-DT-EXEMPT-NUMBER	Art. 21 (2b) [DIR2020/285]
VAT Identification	The VAT identification number of the taxable person in the MS of	GEN-DT-VAT-NUMBER	Art. 284 (3) [DIR2020/285]

Attribute name	Description	Type	Legal reference
Number	establishment, if available.		
Tax Identification Number	The national tax identification number of the taxable person.	GEN-DT-TOKEN	Art. 284 (3) [DIR2020/285]
Any Other Identification	Any other number of the taxable person in the MEST, if available..	GEN-DT-TOKEN	Art. 284 (3) [DIR2020/285]

Table 62: Logical data model – Attributes definitions – Taxable person

Relationship	Description
Taxable Person - Notification	Each Taxable Person is associated with one or more Notification. The multiplicity arises from the possibility for the taxable person to be excluded from the special scheme and to avail itself for the special scheme again. The multiplicity also relates to history of the Notification updates.

Table 63: Logical data model – Relationships – Taxable person

Rule identifier	Description
NOT-RU-VATID	The VAT identification number of the taxable person, if available, can be only used in the following information exchanges AND under the condition that the exempt identification number was not yet assigned to the taxable person: • IE3N01 – Notification Notice; • IE3N02 – Notification Request; • IE3N03 – Notification; • IE3N04 - Exemption Eligibility; • IE3N05 - Exemption Acceptance; • IE3N06 - Exemption Eligibility reminder; • IE3N07 - Additional Clarification Request; • IE3N08 - Additional Clarification; • IE3C01 - Error message. In each other communication, the exempt identification number of the taxable person must be used.

Rule identifier	Description
NOT-RU-TIN	The national TAX identification number of the taxable person, if available, can be only used in the following information exchanges AND under the condition that the exempt identification number was not yet assigned to the taxable person: • IE3N01 – Notification Notice; • IE3N02 – Notification Request; • IE3N03 – Notification; • IE3N04 - Exemption Eligibility; • IE3N05 - Exemption Acceptance; • IE3N06 - Exemption Eligibility reminder; • IE3N07 - Additional Clarification Request; • IE3N08 - Additional Clarification; • IE3C01 - Error message. In each other communication, the exempt identification number of the taxable person must be used.
NOT-RU-OTHERID	The any other identification number of the taxable person, if available, can be only used in the following information exchanges AND under the condition that the exempt identification number was not yet assigned to the taxable person: • IE3N01 – Notification Notice; • IE3N02 – Notification Request; • IE3N03 – Notification; • IE3N04 - Exemption Eligibility; • IE3N05 - Exemption Acceptance; • IE3N06 - Exemption Eligibility reminder; • IE3N07 - Additional Clarification Request; • IE3N08 - Additional Clarification; • IE3C01 - Error message. In each other communication, the exempt identification number of the taxable person must be used.

Table 64: Logical data model – Rules – Taxable person

5.1.2 Notification

The main purpose of this entity is to link the Taxable person to the Notification entities and to record the date of the change of the information included in the Notification. The entity refers to all history of

taxable person's Prior Notifications and related updates of them (it means, also for the previous registrations).

Attribute name	Description	Type	Legal reference
Change Datetime	The Change Datetime corresponds to the date and time that the MS of establishment stores the information in the database. The Change Datetime is thus the date and time that the MS of establishment made the registration information available to the other MS.	GEN-DT-TIMESTAMP	N/A
Scheme	The date of commencement of the	GEN-DT-	Art. 21 (2b), letter

Commencement Date	exemption in respect of the taxable person in a Member State or Member States.	TIMESTAMP	d) and Art. 284 (5), first subparagraph, points (a) and (b) [DIR2020/285]

Table 65: Logical data model – Attributes definitions – Notification

Relationship	Description
Notification – Taxable Person	Each Notification is associated with exactly one Taxable Person.
Notification – Active Exemption	Each Notification is associated with one or more Active Exemption.
Notification – Exclusion from Special Scheme	Each Notification is associated with zero or more Exclusion from Special Scheme.
Notification – Cessation from MS of Exemption	Each Notification is associated with zero or more Cessation from MS of Exemption
Notification – Yearly Supplies	Each Notification is associated with zero or more Taxable Yearly Supplies
Notification – Taxable Person Details	Each Notification is associated with exactly one Taxable Person Details
Notification – Additional Clarification	Each Notification is associated with zero or more Additional Clarifications

Table 66: Logical data model – Relationships – Notification

Rule identifier	Description
NOT-RU-COMMENCEMENT-DATE	The commencement date of the special scheme may be only one of the following: 1. The date of informing the taxable person of the exempt identification number by the MS of establishment; or 2. In case of update to a prior notification, from the date of confirming the number to the taxable person in consequence of his update by the MS of establishment.
NOT-RU-HISTORY	The MS of establishment must maintain a history of all changes to the registration information even if the taxable person ceased or is excluded. The date and time of the change must be recorded in the Change Datetime attribute.
NOT-RU-CHANGE-DATETIME	For a given taxable person all Change Datetime must be unique.
NOT-RU-CHANGE-DATETIME-INIT-VAL	For the registration or re-registration of a taxable person in the special scheme, the date of Change Datetime attribute must have the same value as the Registration Date of the Active exemption entity.
NOT-RU-TP	A Registration must be associated to exactly one taxable person.

Table 67: Logical data model – Rules – Notification

5.1.3 Taxable Person Details

The Taxable Person Details entity represents the information related to the taxable person.

Attribute name	Description	Type	Legal reference
Name	The official name of the taxable person.	GEN-DT-TOKEN	Art. 284a (a) [DIR2020/285]
Activity and Business Sector	Activity and business sector if relevant pursuant to Article 284(1), second subparagraph of Directive 2006/112/EC. If the taxable person has different activities, he has to report all of them.	GEN-DT-TOKEN	Art. 284a (a) [DIR2020/285]
Legal Form	The legal form of the taxable person.	GEN-DT-NAME	Art. 284a (a) [DIR2020/285]
Address	The address of the taxable person.	GEN-DT-ADDRESS	Art. 284a (1) (a) [DIR2020/285]
Phone Contact	The phone contact of the taxable person to be used in matters concerning the special scheme.	GEN-DT-TELEPHONE	N/A
Email Address	The email address of the taxable person to be used in matters concerning the special scheme.	GEN-DT-EMAIL	N/A
Website	The Website of the taxable person.	GEN-DT-TOKEN	N/A
Not registered in other MEST	By this tick box the taxable person declares not to be already identified by an individual number in another Member State of establishment for the application of the exemption pursuant to Article 284 (3)(b) of Directive 2006/112/EC.	GEN-DT-BOOLEAN	Art. 284(3)(b) [DIR2020/285]
OSS registration	By this tick box the taxable person informs whether he is registered in the OSS Union scheme.	GEN-DT-BOOLEAN	N/A
OSS identifier	The identifier of the taxable person used for identification in the OSS Union scheme.	GEN-DT-TOKEN	N/A

Table 68: Logical data model – Attributes definitions – Taxable Person Details

Relationship	Description
Taxable Person Details - Notification	Each Taxable Person Details is associated with one or more Notification.

Table 69: Logical data model – Relationships – Taxable Person Details

Rule identifier	Description
NOT-REG-OTHER-MEST	The value of the ‘Not registered in other MEST’ data element must equal to ‘TRUE’,

	means that the taxable person declares not to be already identified by an individual number in another Member State of establishment for the application of the exemption pursuant to Article 284 (3)(b) of Directive 2006/112/EC.
NOT-REG-OSS-UNION	If the value of the ‘OSS registration’ is ‘TRUE’, also the ‘OSS identifier’ must be provided. Otherwise, the ‘OSS identifier’ cannot be provided.

Table 70: Logical data model – Rules – Taxable Person Details

5.1.4 Additional Clarification

The Additional Clarification entity defines the additional information needed by the MS of exemption to evaluate the taxable person’s eligibility to benefit from the exemption.

Attribute name	Description	Type	Legal reference
Requested Additional Clarification	Additional clarification on Notification, transmitted by the MS of establishment as a reply on the MS of exemption request.	GEN-DT-FREETEXT	Article 4 (3)(iv) [CIR2021/2007]

Table 71: Logical data model – Attributes definitions – Additional Clarification

Relationship	Description
Additional Clarification - Notification	Each Additional Clarification is associated with exactly one Notification.

Table 72: Logical data model – Relationships – Additional Clarification

5.1.5 Yearly Supplies

The Yearly Supplies entity defines the total value of supplies in MS of establishment and each of the MS other than the MS of establishment for a calendar year.

Attribute name	Description	Type	Legal reference
Member State	The Member State which concerns the total value of supplies.	GEN-DT-MS-COUNTRY	Art. 284a (1) (c) and (d) [DIR2020/285]
Year of supplies	The year in which the taxable person performed the supplies.	GEN-DT-YEAR	Art. 284a (1) (c) and (d) [DIR2020/285]
Total Value of Supplies	The total value of supplies supplied by the taxable person in Member State (MS of establishment and each of the other MSs). The value of supplies to be reported only consists of the amounts listed in Article 288 of Directive 2020/285.	GEN-DT-AMOUNT	Art. 284a (1) (c) and (d), Article 284c (1) and Article 288 [DIR2020/285]
Currency	The currency used for supplies of good and services.	GEN-DT-CURRENCY	Art. 284 (6) and Art. 284c

			[DIR2020/285]

Table 73: Logical data model – Attributes definitions – Yearly Supplies

Relationship	Description
Yearly Supplies - Notification	Each Yearly Supplies is associated with one or more Notification.
Yearly Supplies – Sectoral Threshold Applicable	Each Yearly Supplies is associated with zero or more Sectoral Threshold Applicable.

Table 74: Logical data model – Relationships – Yearly Supplies

Rule identifier	Description
NOT-RU-YEAR	There can be only one combination of the Member State and year for one single taxable person.
NOT-RU-YEAR-SUPPLIES	The year of supplies can bear only the following values: • Present year (N year); or • Previous year (N-1 year). If the MS of exemption chosen two calendar years of exclusion in case of exceedance of the threshold, also the year prior to previous year is mandatory (N-2 year).

Table 75: Logical data model – Rules – Yearly Supplies

5.1.6 Sectoral Threshold Applicable

The Sectoral Threshold Applicable entity defines the business sector to which the supplies reported by the taxable person relate in case the MS of exemption applies different sectoral thresholds for goods and services.

Attribute name	Description	Type	Legal reference
Business Sector	Business sector specifying the supplies, if the MS of exemption applies different sectoral thresholds for goods and services.	GEN-DT-TOKEN	Article 284c (1) point (c) [DIR2006/112]

Table 76: Logical data model – Attributes definitions – Sectoral Threshold Applicable

Relationship	Description
Sectoral Threshold Applicable – Yearly Supplies	Each Sectoral Threshold Applicable is associated with one or more Yearly Supplies.

Table 77: Logical data model – Relationships – Sectoral Threshold Applicable

5.1.7 Union Annual Threshold

The entity defines the Union annual threshold in Community. This entity is not connected to any other entities as it is not stored in the datastore, it is defined in the properties. However, it is highlighted here because of the importance of this element.

Attribute name	Description	Type	Legal reference
Union Annual Threshold	The entity defines the Union annual threshold, which represents the maximum level of total annual value of supplies of goods and services, exclusive of VAT, which can be made by a taxable person within the Union during a calendar year .	GEN-DT-AMOUNT	Art. 280a (2) [DIR2020/285]

Table 78: Logical data model – Attributes definitions – Union Annual Threshold

5.1.8 Active Exemption

The Active Exemption entity defines the main attributes of the taxable person's involvement in the exemption benefiting in a specific MS of exemption.

Attribute name	Description	Type	Legal reference
MS of Exemption	1. The Member State or Member States in which the taxable person avails itself of the exemption" (Article 21 (2b) letter c)); 2. The Member States in which the taxable person intends to avail itself of exemption as regards Prior notification or update to a prior notification, as referred to in Article 284(3) or (4) of Directive 2006/112/EC" (Article 3(1)letter (d) of CIR).	GEN-DT-MS-COUNTRY	Art. 1, point 2 [CIR2021/2007]
MSEXE Commencement Date	The date from which the exemption will apply in the MS of exemption in which the taxable person wants to avail itself of the exemption.	GEN-DT-DATE	Art. 21 (2b), letter f) and Art. 284 (5), first subparagraph, points (a) and (b) [DIR2020/285]

Table 79: Logical data model – Attributes definitions – Active Exemption

Relationship	Description
Active Exemption – Notification	Each Active Exemption is associated with one or more Notification.
Active Exemption – Sectoral Threshold	Each Active Exemption is associated with zero or more Sectoral Threshold.
Active Exemption – MS Annual Threshold	Each Active Exemption is associated with exactly one MS Annual Threshold.
Active Exemption – Cessation from MS of Exemption	Each Active Exemption is associated with exactly one Cessation from MS of Exemption.

Table 80: Logical data model – Relationships – Active Exemption

5.1.9 Sectoral Threshold

The entity defines the sectoral threshold of exemption, if applicable.

Attribute name	Description	Type	Legal reference
Sector Name	Name of the sector, to which the sectoral threshold relates.	GEN-DT-TOKEN	Art. 284 (1) second paragraph [DIR2020/285]
Sectoral Threshold	The value of the sectoral threshold.	GEN-DT-AMOUNT	Art. 284 (1) second paragraph [DIR2020/285]

Table 81: Logical data model – Attributes definitions – Sectoral Threshold

Relationship	Description
Sectoral Threshold – Active Exemption	Each Sectoral Threshold is associated with exactly one Active Exemption.

Table 82: Logical data model – Relationships – Sectoral Threshold

5.1.10 MS Annual Threshold

The entity defines the MS annual threshold in MS of exemption.

Attribute name	Description	Type	Legal reference
MS of Exemption	The entity defines the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	GEN-DT-MS-COUNTRY	Art. 1, point 2 [CIR2021/2007]
MS Annual Threshold	The entity defines the maximum level of total annual value of supplies of goods and services, exclusive of VAT, that can be made by a taxable person within a certain Member State during a calendar year.	GEN-DT-AMOUNT	Art. 284 (1) [DIR2020/285]
Transitional period	The entity defines whether the transitional period is in force in the MS of exemption.	GEN-DT-BOOLEAN	Article 288a (1) [DIR2020/285]
Threshold Ceiling	The level of the threshold ceiling, if the transitional period is in force in the MS of exemption.	GEN-DT-TOKEN	Article 288a (1) [DIR2020/285]

Table 83: Logical data model – Attributes definitions – MS Annual Threshold

Relationship	Description
MS Annual Threshold – Active Exemption	Each MS Annual Threshold is associated with exactly one Active Exemption.

Table 84: Logical data model – Relationships – MS Annual Threshold

5.1.11 Exclusion from Special Scheme

The entity defines the exclusion of the taxable person from the special scheme.

Attribute name	Description	Type	Legal reference
Union Annual Threshold Exceedance Date	The date on which the taxable person exceeded the Union annual threshold.	GEN-DT-DATE	Art. 284b (3) [DIR2020/285]
Total Value of Supplies Until Threshold Exceedance	Total value of supplies until threshold exceedance are total supplies that have been made from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded.	GEN-DT-AMOUNT	Art. 284b(3) [DIR2020/285]
Exclusion Reason Code	Code representing the reason of taxable person's exclusion from the special scheme.	GEN-DT-CODE	As defined in Table 86
Exclusion Effective Date	The date from which the taxable person's exclusion from the special scheme is effective.	GEN-DT-DATE	N/A
Exclusion Date Requested by Taxable person	The exclusion date requested by the taxable person in case of changing MS of establishment.	GEN-DT-DATE	N/A
Duration of quarantine MEST	The duration of the time for which the taxable person is not allowed to benefit from the exemption where the Union annual threshold or MS annual threshold was exceeded.	GEN-DT-INTEGER	Art. 288a point (2), Art. 284e point (b), Art. 284 point (2)(a) [DIR2020/285]
Currency	The currency used for supplies of good and services.	GEN-DT-CURRENCY	Art. 284 (6) [DIR2020/285]

Table 85: Logical data model – Attributes definitions – Exclusion from Special Scheme

Code	Definition	Originator	Decision	Exclusion/cessation effective date	Duration of Quarantine	Legal Basis
1	Exclusion of taxable person from the special scheme - exceeding the Union annual threshold in the current year (or in another year if resulting from a correction to a quarterly report)	MSEST	Exclusion from the special scheme ¹	Exclusion shall be effective as of the time when the Union annual threshold was exceeded	One calendar year	Articles 288a (2) and 284e (a) [DIR2020/285]
2	Retroactive exclusion of taxable person from the special scheme - exceeding the Union annual threshold in the year of Prior notification or in the previous year (e.g. if discovered afterwards – update to a Prior notification by the taxable person correcting wrong data previously provided in the Prior notification)	MSEST	Retroactive exclusion from the special scheme ¹	Exclusion shall be effective as of the time when the Union annual threshold was exceeded	One calendar year	Articles 288a (2), 284e (a), and 284(2)(a) [DIR2020/285]
3	It is assumed that the activities of the taxable person have ceased or that the taxable person has changed its MS of establishment	MSEST	Exclusion from the special scheme	Exclusion shall be effective as of the first day of the next calendar quarter when the information became available or, where such information became available during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter ²		Article 284e (d) [DIR2020/285]
4	Exceeding the MS of exemption's annual threshold in the year of notification or	MSEXE	Cessation in MS of exemption	a) Cessation shall apply as of the time when the MS annual	One or two calendar	Articles 284e (b) and 288a (1)

¹ This exclusion will not affect the exemption in the MSEST, only in all the MSEXE. If the domestic threshold in the MSEST is respected, the exemption will continue to apply there.

² This is not derived from Directive 2020/285 as it includes no rule to specify as from when such exclusion should take place. What is set out here, is a common sense.

	exceeding the annual threshold of the MS of exemption in the current year (or in another year if resulting from a correction to a quarterly report): a) Threshold exceeded and no transitional period applicable; b) Threshold exceeded, transitional period applicable, ceiling applicable (10% or 25%) but exceeded; A) c) Threshold exceeded, transitional period applicable, no ceiling applicable or ceiling of 25% not exceeded but turnover in MS of exemption exceeds EUR 100.000 .			threshold was exceeded; b) Where a transitional period is applied, cessation shall apply as from the end of the calendar year; c) c) Exclusion shall be effective as of the time when the Union annual threshold was exceeded.¹	years	[DIR2020/285]
5	Exceeding the MSEXE annual threshold in the year of notification or falling within Article 288a (1) in MSEXE, if discovered afterwards following an update to a prior notification by the taxable person correcting wrong data previously transmitted in the notification (threshold exceeded in the previous year or in the year prior to the previous year, if applicable)	MSEXE	Retroactive cessation in MS of exemption	Cessation shall apply as of the time when the MS annual threshold was exceeded. Where a transitional period is applied, cessation shall apply as from the end of the calendar year.	One or two calendar years	Articles 284e (b), 288a (1), and 284 (4) [DIR2020/285]
6	The taxable person informs the MS of establishment of a change in the activity of the taxable person: The taxable person is no longer fulfilling the criteria set by MS of exemption for the sectoral threshold, or the taxable person is fulfilling the criteria set by MS of exemption for another sectoral	MSEXE	Cessation in MS of exemption	Cessation shall apply as of the time of the change in the taxable person's activity. Where a transitional period is applied, cessation shall apply as from the end of the calendar year.	One or two years, in case of exceeding threshold	Articles 284e (b), 284 (1), 284 (4), and 288a (1) [DIR2020/285]

	threshold but exceeding with its turnover that sectoral threshold					
7	The taxable person informs the MS of establishment of a change in the activity of the taxable person: The supply of the taxable person is now falling within the supplies excluded from the special scheme in that MS of exemption	MSEXE	Cessation in MS of exemption	Cessation shall apply as of the time of the change in the taxable person's activity		Articles 284e (b), 283 (2), and 284 (4) [DIR2020/285]
8	The Member State granting the exemption has notified that the SME scheme has ceased to apply in that Member State	MSEXE	Cessation in MS of exemption	Cessation shall apply as of the time when the special scheme ceased to apply in the MS of exemption		Article 284e (b) [DIR2020/285]
9	MS of exemption changes its legislation: A) change in threshold, or B) in criteria for sectoral threshold, or C) transaction excluded from the threshold. As a result, the taxable person is not eligible anymore	MSEXE	Cessation in MS of exemption	a) and b) Cessation shall apply as of the time when the new MS annual threshold was exceeded. Where a transitional period is applied, cessation shall apply as from the end of the calendar year. c) Exclusion shall be effective as of the time when the Union annual threshold was exceeded.		Article 284e (b) [DIR2020/285]
10	The taxable person has informed of its decision to cease to apply the exemption in a certain MS of exemption	Taxable person	Cessation in a certain MS of exemption	Cessation shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next		Articles 284e (c) and 284 (4) [DIR2020/285]

				calendar quarter		
11	The taxable person has informed of its decision to cease to apply the special scheme	Taxable person	Cessation of the intra-EU special scheme (in all MSs where the taxable person is not established and makes cross-border supplies) ³	Exclusion shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter		Articles 284e (c) and 284 (4) [DIR2020/285]
12	The taxable person has informed that his activities have ceased	Taxable person	Cessation of the special scheme ³	Exclusion shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter		Articles 284e (d) and 284 (4) [DIR2020/285]
13	The taxable person changes his MS of establishment	Taxable person	Exclusion from the special scheme ³	Exclusion shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next		Article 284 (4) [DIR2020/285]

³ In fact, the cessation will not affect the exemption in the MEST, only in all the MEXE. The SME could decide to continue to apply the exemption in the MEST subject to respecting the domestic threshold.

				calendar quarter		
14	The taxable person informs the MS of establishment he has exceeded the Union turnover	Taxable person	Exclusion from the special scheme	Exclusion shall be effective as of the time when the Union annual threshold was exceeded	One calendar year	Articles 284e (a) and 284b (3) [DIR2020/285]

Table 86: Exclusion and cessation reason codes

Relationship	Description
Exclusion from Special Scheme – Notification	Each Exclusion from Special Scheme is associated with exactly one Notification.

Table 87: Logical data model – Relationships – Exclusion from Special Scheme

Rule identifier	Description
NOT-RU-EXCLUSION-EFFECTIVE-DATE	If during a calendar year, the Union annual turnover threshold is exceeded, the exemption granted to a taxable person not established in the MS of exemption must cease to apply as of that time.
NOT-RU-EXCLUSION-REQUESTED-DATE	The exclusion date requested by the taxable person cannot be later than the effective exclusion date, which is the first day of the next calendar quarter following the receipt of the request from the taxable person or, where such information is received during the last month of a calendar quarter, the first day of the second month of the next calendar quarter.

Table 88: Logical data model – Rules – Exclusion from Special Scheme

5.1.12 Cessation from MS of Exemption

The entity defines the cessation of the taxable person from benefiting of the exemption in MS of exemption.

Attribute name	Description	Type	Legal reference
Cessation Reason	Code representing the reason of taxable person's cessation from benefiting of exemption in the MS of exemption.	GEN-DT-CODE	As defined in Table 86
MS Annual Threshold Exceedance Date	The date on which the taxable person exceeded the MS annual threshold.	GEN-DT-DATE	Art. 37b (3) [DIR2020/285]
Cessation Effective Date	The date from which the taxable person's cessation from the special scheme is effective.	GEN-DT-DATE	Art. 284 (4) (2) and Art. 288a (1) [DIR2020/285]
Duration of quarantine MSEXE	The duration of the time for which the taxable person is not allowed to benefit from the exemption in a specific MS of exemption.	GEN-DT-INTEGER	Art. 288a point (1), Art. 284e point (a), Art. 284 point (1) [DIR2020/285]

Table 89: Logical data model – Attributes definitions – Cessation from MS of Exemption

Relationship	Description
Cessation from MS of Exemption – Notification	Each Cessation from MS of Exemption is associated with one or more Notification.
Cessation from MS of Exemption – Active Exemption	Each Cessation from MS of Exemption is associated with exactly one Active Exemption.

Table 90: Logical data model – Relationships – Exclusion from Special Scheme

5.2 QUARTERLY REPORT LOGICAL DATA MODEL ENTITIES

Quarterly report is the information that the taxable must submit to the MS of establishment for each quarter to report the supplies of goods and services performed in the MS of establishment and in each of the Member States other than the Member State of establishment. The logical data model for the Quarterly report shows the data entities and the relationships between them.

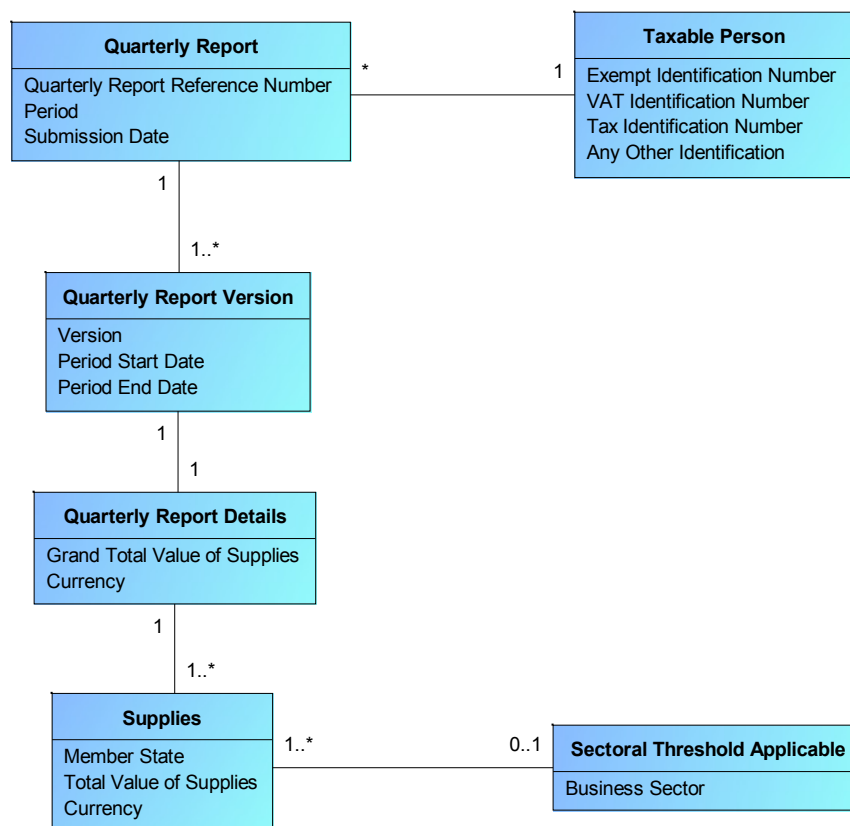


Figure 35: Logical data model – Quarterly report

5.2.1 Taxable Person

Section 5.1.1 fully describes the Taxable Person entity. It is the information that uniquely identifies a taxable person in the system

Relationship	Description
Taxable Person – Quarterly Report	Each Taxable Person is associated with zero

	or more Quarterly Report.

Table 91: Logical data model – Relationships – Taxable person

5.2.2 Quarterly Report

The entity defines the Quarterly Report, to be submitted to the MS of establishment by the taxable person for every quarter.

Attribute name	Description	Type	Legal reference
Quarterly Report Reference Number	The unique reference number of the Quarterly Report	GEN-DT-QUARTERLY-REPORT-REFERENCE	N/A
Period	The period to which the Quarterly Report relates. The period is represented by the four calendar quarters and the related year.	GEN-DT-PERIOD	Art. 284b (1) [DIR2020/285]
Submission Date	The date the MS of establishment received the initial version of the Quarterly Report.	GEN-DT-DATE	Art. 284b (2) [DIR2020/285]

Table 92: Logical data model – Attributes definitions – Quarterly Report

Relationship	Description
Quarterly Report – Taxable Person	Each Quarterly Report is associated with exactly one Taxable Person.
Quarterly Report – Quarterly Report Version	Each Quarterly Report is associated with one or more Quarterly Report Version.

Table 93: Logical data model – Relationships – Quarterly Report

Rule identifier	Description
QR-RU-QUARTERLY-REPORT-REF-FORMAT	The format of the Quarterly Report Reference Number must respect: <MSEST>/<EXEMPTID>/<Quarter>.<Year> Where <MSEST> is the country code of the MS of establishment; <EXEMPTID> is the exempt identification number, assigned to the taxable person by the MS of establishment for identification in the special scheme;

	<Quarter> is the quarter number (Q1, Q2, Q3, Q4); <Year> is the year, using four digits. Example: BE/BE123456789-EX/Q2.2025
QR-RU-QUARTERLY-REPORT-REF-UNIQUE	Each Quarterly Report Reference number must be unique in the Member State of establishment.
QR-RU-SUBMIT-DATE	The Submission Date of the Quarterly Report must be later than the last day of the Period of the Quarterly Report.
QR-RU-QUARTERLY-REPORT-VERSION	The Version attribute must be unique per Quarterly Report entity.

Table 94: Logical data model – Rules – Quarterly Report

5.2.3 Quarterly Report Version

The entity defines the Quarterly Report Version entity.

Attribute name	Description	Type	Legal reference
Version	The version of the Quarterly report, expressed as a timestamp. This must correspond to the date and time that the MS of establishment received the Notification correction from the taxable person.	GEN-DT-TIMESTAMP	N/A
Period Start Date	Start date of the period, to be used only where the taxable person did not supply goods or services from the beginning of the quarter (in case of change the MEST). The scheme Commencement Date is different than the first day of the quarter.	GEN-DT-DATE	N/A
Period End Date	End date of the period, to be used only where the taxable person did not supply goods or services until end of the quarter (in case of change the MEST). The cessation Effective Date is different than the last day of the quarter).	GEN-DT-DATE	N/A

Table 95: Logical data model – Attributes definitions – Quarterly Report Version

Relationship	Description
Quarterly Report Version – Quarterly Report	Each Quarterly Report Version is associated with exactly one Quarterly Report.
Quarterly Report Version - Quarterly Report Details	Each Quarterly Report Version is associated with exactly one Quarterly Report Details.

Table 96: Logical data model – Relationships – Quarterly Report Version

Rule identifier	Description
QR-RU-VRV-VERSION	The Version attribute of the Quarterly Report Version entity must be unique per Quarterly Report entity.
QR-RU-PERIOD-START-DATE	The Period Start Date must be on or after the first day of the Quarterly Report period. The Period Start Date must be equal to or earlier than the Period End Date. The Period Start Date must be provided if the Period End Date is provided.
QR-RU-PERIOD-END-DATE	The Period End Date must be on or earlier than the last day of the Quarterly Report period. The Period End Date must be equal to or later than the Period Start Date. The Period End Date must be provided if the Period Start Date is provided.
QR-RU-PERIOD-START-END	The Period Start Date and Period End Date may only be provided in the following cases: - the taxable person changes MS of establishment; - the taxable person's commencement date or cessation date of the exemption in a MS of exemption is in the middle of a quarter.

Table 97: Logical data model – Rules – Quarterly Report Version

5.2.4 Quarterly Report Details

The entity defines the details of the Quarterly Report in case when the threshold is applicable.

Attribute name	Description	Type	Legal reference
Grand Total Value of Supplies	The total amount of supplies performed by the taxable person in all Member States.	GEN-DT-AMOUNT	Art. 284b (1) [DIR2020/285]
Currency	The currency used for supplies of	GEN-DT-	Art. 284c

	good and services.		[DIR2020/285]

Table 98: Logical data model – Attributes definitions – Quarterly Report Details

Relationship	Description
Quarterly Report Details – Quarterly Report Version	Each Quarterly Report Details is associated with exactly one Quarterly Report Version.
Quarterly Report Details – Supplies	Each Quarterly Report Details is associated with one or more Supplies.

Table 99: Logical data model – Relationships – Quarterly Report Details

Rule identifier	Description
QR-RU-TOTAL-SUPPLIES-CURRENCY	The Currency must be euro. Member States which have not adopted the euro may require the values to be expressed in their national currencies. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on the next day of publication. All amounts communicated by the MS of establishment to the Other MS must be in EUR.
QR-RU-GRAND-TOTAL-SUPPLIES	The Grand Total Supplies is the sum of all Total Value of Supplies for the associated Supplies entity.

Table 100: Logical data model – Rules – Quarterly Report Details

5.2.5 Supplies

The entity defines the supplies of goods and services in MS of establishment and each other MSs, performed by the taxable person.

Attribute name	Description	Type	Legal reference
Member State	Member State is any Member State. The related supplies must be identified in MS of establishment and each other MSs.	GEN-DT-MS-COUNTRY	Art. 284b (1) [DIR2020/285]
Total Value	Total value of supplies	GEN-DT-	Art. 284b (1)

of Supplies	performed by the taxable person in a specific Member State.	AMOUNT	[DIR2020/285]
Currency	The currency used for supplies of good and services.	GEN-DT-CURRENCY	Art. 284c [DIR2020/285]

Table 101: Logical data model – Attributes definitions – Supplies

Relationship	Description
Supplies – Quarterly Report Details	Each Supplies is associated with exactly one Quarterly Report Details.
Supplies – Sectoral Threshold Applicable	Each Supplies is associated with zero or one Sectoral Threshold Applicable

Table 102: Logical data model – Relationships – Supplies

Rule identifier	Description
QR-RU-MSEST-SUPPLY-SERVICES-NI	If the MS of establishment equals to Northern Ireland, the taxable person registered there cannot report supplies of services in any MS of exemption.
QR-RU-MSEST-SUPPLY-SERVICES-MSEXE-NI	Where the supplies take place in Northern Ireland, the taxable person established in a Member State cannot declare supply of services carried out from that Member State to Northern Ireland.
QR-RU-MS-SUPPLIES-CURRENCY	The Currency must be euro. Member States which have not adopted the euro may require the values to be expressed in their national currencies. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on the next day of publication. All amounts communicated by the MS of establishment to the Other MS must be in EUR.

Table 103: Logical data model – Rules – Supplies

5.2.6 Sectoral Threshold Applicable

The entity defines the business sector to which the supplies reported by the taxable person relate in case the MS of exemption applies different sectoral thresholds for goods and services .

Attribute name	Description	Type	Legal reference
Business Sector	Business sector specifying the supplies, if the MS of exemption applies different sectoral thresholds for goods and services.	GEN-DT-TOKEN	Article 284c (1) point (c) [DIR2006/112]

Table 104: Logical data model – Attributes definitions – Sectoral Threshold Applicable

Relationship	Description
Sectoral Threshold Applicable – Supplies	Each Sectoral Threshold Applicable is associated with one of more Supplies.

Table 105: Logical data model – Relationships – Sectoral Threshold Applicable

5.3 COMMON DATA TYPES

The section defines the simple and complex data types used in the logical data model.

5.3.1 Single Data Types

Type Name	Description
GEN-DT-CODE	A code is a whole positive number.
GEN-DT-TOKEN	A token is a sequence of one or more Unicode characters. This sequence does not contain carriage return (#xD), line feed (#xA) nor tab (#x9) characters; it has no leading or trailing spaces (#x20) and has no internal sequences of two or more spaces.
GEN-DT-BOOLEAN	A Boolean has value true or false.
GEN-DT-FREETEXT	A free text is a sequence of one or more Unicode characters as defined in UNI.
GEN-DT-EMAIL	An email address consists of two parts, a local part, and a domain. The general format of an email address is local-part@domain.
GEN-DT-TELEPHONE	A telephone number is composed of digits, which may be grouped by hyphen and space characters. The first character may be "+". The overall length may not exceed twenty characters.
GEN-DT-AMOUNT	An amount is zero or a positive decimal value with a precision of two decimal places.
GEN-DT-COUNTRY	A country code is a sequence of two

	contiguous alphabetic characters (upper case Latin letters) compliant with ISO3166, except for Greece which uses 'EL'.
GEN-DT-MS-COUNTRY	An MS country code is a sequence of two contiguous alphabetic characters (upper case Latin letters) compliant with ISO3166, except for Greece which uses 'EL'. It is restricted to the list of codes representing valid Member States.
GEN-DT-CURRENCY	A currency code is a sequence of three contiguous alphabetic characters (upper case Latin letters) compliant with ISO4127.
GEN-DT-TIMESTAMP	The combination of the date and the time of the day as specified in ISO8601 (i.e.: 'YYYY-MM-DD'T'hh:mm:ss.SSS'). Using fractions of second is not mandatory. However, a Member State receiving a timestamp with a fraction of second must be able to keep this information, to manage it properly and use it in any further communication. If a timestamp does not contain an indication of a time zone, UTC must be assumed. Wherever timestamp is used in a request or within a reference to information received, the Member State must use at least the same level of precision concerning the milliseconds as received from the originating Member State. The Member State must interpret the timestamp as a time indicator whereby the absence of milliseconds is equivalent to "000". For instance, the timestamp "2025-10-10T14:00:05" must be considered as equivalent to "2025-10-10T14:00:05.000".
GEN-DT-DATE	The representation of a calendar date as specified in ISO8601 (i.e.: 'YYYY-MM-DD'). The Date must always be given in the UTC time zone.
GEN-DT-YEAR	The representation of a year as specified by ISO8601 (i.e.: 'YYYY').
GEN-DT-INTEGER	A positive integer.

Table: Single data types

5.3.2 Complex data types

5.3.2.1 Complex Data Type - GEN-DT-VAT-NUMBER

Until the taxable person is assigned by the exempt identification number, he may be identified by his VAT identification number or by any other number for the purpose of its identification in the MEST.

Attribute Name	Description	Type
VAT Number	A VAT Number is a sequence of 1 to 12 contiguous characters (upper case Latin letters, '+', '*' and/or digits without special characters such as blanks, separators, punctuation, etc.).	GEN-DT-TOKEN
Issued By	The code of the country or territory that issued the "VAT Number."	GEN-DT-MS-COUNTRY

Table 106: Logical Data Model – Attributes Definitions – GEN-DT-VAT-NUMBER

Rule Identifier	Description
NOT-RU-VAT-NUMBER-FORMAT	A VAT Number is a sequence of 1 to 12 contiguous characters (upper case Latin letters, '+', '*' and/or digits without special characters such as blanks, separators, punctuation, etc.).

Table 107: Logical Data Model - Rules – GEN-DT-VAT-NUMBER

5.3.2.2 Complex Data Type GEN-DT-EXEMPT-NUMBER

The exempt identification number uniquely identifies the taxable person within the special scheme.

Attribute Name	Description	Type
Exempt Number	An Exempt Number is a concatenation of the following information: - the code of the MS of establishment issuing the exempt identification number (issuedBy attribute); - the existing VAT identification number or the national Tax identification number of the taxable person or any other number for the purpose of the identification⁴; - Hyphen (or minus) character "-"; - suffix 'EX'.	GEN-DT-TOKEN

⁴ Please note that the VAT Identification Number, the National Tax Number, and Any other number for purpose of the identification are alternatives. Each MS has to decide and then publish on the COM website whether for the purpose of the identification referred to in Article 284(3), point (b), of Directive 2006/112/EC, it uses:

- the individual VAT identification number already allocated to the taxable person in respect of that person's obligations under the internal system, or
- the structure of a VAT number, or
- any other number.

Issued By	The code of the MS of establishment that assigned the taxable person with the exempt identification number.	GEN-DT-MS-COUNTRY

Table 108: Logical Data Model – Attributes Definitions – GEN-DT-EXEMPT-NUMBER

Rule identifier	Description
QR-RU-EXEMPT-IDENTIFICATION-NUMBER	The exempt identification number must be unique in Community. The exempt identification number must be constructed from the concatenation of the following fields: • The ISO numeric-2 country code of the MS of establishment (2 digits); • The existing VAT identification number or the national Tax identification number of the taxable person or any other number for the purpose of the identification; • Hyphen (or minus) character “-“; • Suffix “EX”.

Table 109: Logical data model – Rules – GEN-DT-EXEMPT-NUMBER

5.3.2.3 Complex Data Type - GEN-DT-NAME

The GEN-DT-NAME is a representation of a name of a natural person. The structure follows the Standard Transmission Format SFT of the OECD. The Name allows for a free format, but the structured format should be used as far as possible. When the structured format is used, the First Name and Last Name attributes are mandatory.

Attribute Name	Description	Type
Free Format Name	The name in free format.	GEN-DT-TOKEN
Preceding Title	For example, Her Excellency.	GEN-DT-TOKEN
Title	For example, Madame.	List of GEN-DT-TOKEN
First Name	The first name of the person.	GEN-DT-TOKEN
Middle Name	The middle name(s) of the person.	List of GEN-DT-TOKEN
Name Prefix	For example, von.	GEN-DT-TOKEN
Last Name	The family name of the person.	GEN-DT-TOKEN
Generation Identifier	For example, senior.	List of GEN-DT-TOKEN
Suffix	For example, Dipl.-Ing.	List of GEN-DT-TOKEN
General Suffix	For example, Deceased.	GEN-DT-TOKEN
Maiden Name	A previous family name, for example before marriage.	GEN-DT-TOKEN

Table 110: Logical Data Model - Attributes Definitions – Name

5.3.2.4 Complex Data Type - GEN-DT-ADDRESS

The GEN-DT-ADDRESS is a representation of a postal address – the structure follows the Standard Transmission Format of the OECD. The Postal Address allows for a free format, but the structured format should be used as far as possible. Note that the Country must always be provided in a separate field.

Attribute Name	Description	Type
Free Format Address	The address in free format. This attribute must be used if the structured format is unavailable ⁵ .	GEN-DT-FREETEXT
Country	The country of the address.	GEN-DT-COUNTRY
Street	The name of the street.	GEN-DT-TOKEN
Building Identifier	The number of the building on the street.	GEN-DT-TOKEN
Suite Identifier	A location identifier within the building.	GEN-DT-TOKEN
Floor Identifier	An identifier of the floor within the building.	GEN-DT-TOKEN
District Name	The name of the district.	GEN-DT-TOKEN
Post Office Box	A post office box number.	GEN-DT-TOKEN
Post Code	The postal code.	GEN-DT-TOKEN
City	The city or town.	GEN-DT-TOKEN
Country Sub-Entity	A subdivision of a country bigger than a district.	GEN-DT-TOKEN
Other Local Identifier	Some other identifiers.	GEN-DT-TOKEN

Table 111: Logical Data Model - Attributes Definitions – Address

5.3.2.5 Complex Data Type - GEN-DT-PERIOD

A period is a calendar quarter in a year.

Attribute Name	Description	Type
Year	The year expressed as four digits.	GEN-DT-YEAR
Return period	The calendar quarter: Q1, Q2, Q3, or Q4.	GEN-DT-TOKEN

Table 112: Logical Data Model – Attributes Definitions – GEN-DT-PERIOD

5.3.2.6 Complex Data Type - GEN-DT-QUARTERLY-REPORT-REFERENCE

The Quarterly report reference uniquely identifies the version of the Quarterly Report.

Attribute Name	Description	Type
Quarterly Report Reference Number	The unique reference number of the Quarterly Report.	GEN-DT-TOKEN

⁵ The Free Format Address, if present, must contain the address as it should appear on an envelope with each line separated by a carriage return character.

Version	The version timestamp	GEN-DT-TIMESTAMP

Table 113: Logical Data Model – Attributes Definitions – GEN-DT-QUARTERLY-REPORT-REFERENCE

6 FUNCTIONAL MESSAGE SPECIFICATIONS

The section defines the SME special scheme messages definition at the business level.

6.1 NOTIFICATION MESSAGES

The Notification related messages are defined in below subsections.

6.1.1 IE3N01 – Notification Notice

Notification Notice is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform of a taxable person seeking the exemption.

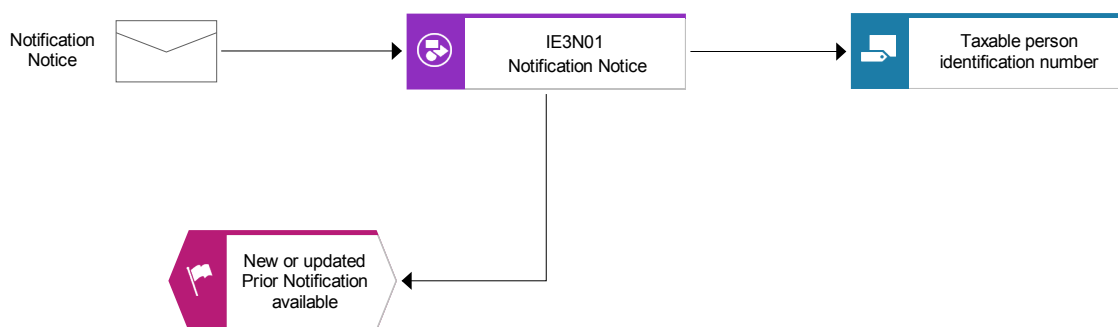


Figure 36: IE3N01 – Notification Notice

6.1.1.1 Model maintained properties

Model Property	Property Value
Name	IE3N01 Notification Notice
Identifier	MCC.2940680
Description/Definition	Definition of the IE3N01 Notification Notice message at the business level.
Type	IE data model

Table 114: Maintained Properties of the model

6.1.1.1.1 Object maintained properties

Name	Remark / Example	Description/Definition	Identifier	Short description
Notification Notice		This entity is a data representation of the Notification Notice electronic message, transmitted by the MS of establishment to the MS of exemption.	MCC.2940700	IE3N01
Taxable person		The Taxable person entity defines the identifiers of the	MCC.2937940	

Name	Remark / Example	Description/Definition	Identifier	Short description
identification number		taxable person used within the special scheme.		
New or updated Prior Notification available		The MS of exemption receives a notification that a new or updated Prior Notification is made available in the MS of establishment. In this occasion the MS of exemption is notified by the MS of establishment with the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 or, if not yet available, any other number for the purpose of the identification.	MCC.2903120	
Notification Notice	IE3N01	Notification Notice is a common electronic message, transmitted by the MS of establishment to the MS of exemption to inform about the received Prior Notification or an update to a Prior Notification. The Notification Notice consist of the following information: * the exempt identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010, or, if not yet available; * any other number for the purpose of the identification of the taxable person, namely a 'VAT Identification Number', a 'Tax Identification Number', or 'Any Other Identification. The Member State of establishment shall transmit the information to the Member	MCC.2904380	

Name	Remark / Example	Description/Definition	Identifier	Short description
		State of exemption, within 15 working days from the date on which the information becomes available (Article 37a(1) letter a) [DIR2020/285] and Article 4(2)(a) [CIR2021/2007]).		

Table 115: Maintained Properties of the objects

6.1.2 IE3N02 – Notification Request

Notification request is a common electronic message, transmitted by any MS to the MS of establishment, requesting the Notification information of a specific taxable person.

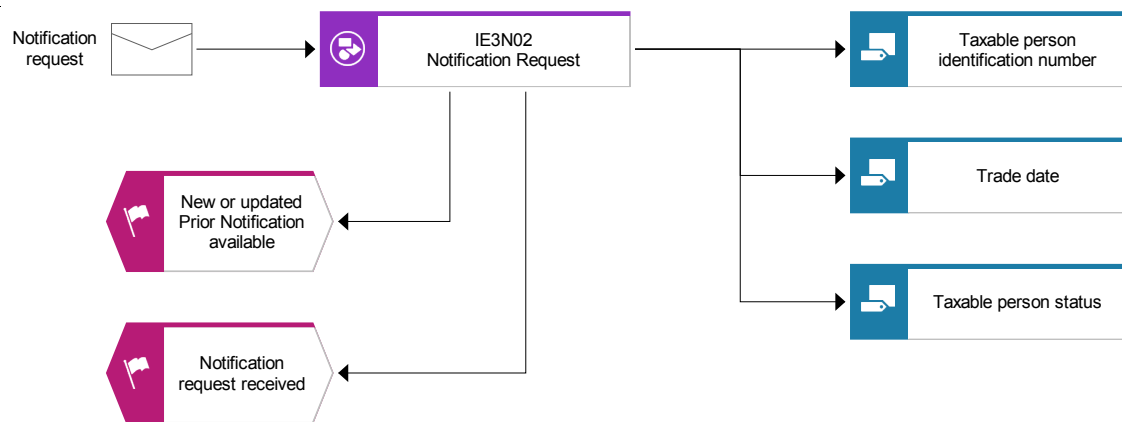


Figure 37: IE3N02 – Notification Request

6.1.2.1 Model maintained properties

Model Property	Property Value
Name	IE3N02 Notification request
Identifier	MCC.2940620
Description/Definition	Definition of the IE3N02 Notification Request message at the business level.
Type	IE data model

Table 116: Maintained Properties of the model

6.1.2.2 Object maintained properties

Name	Remark / Example	Description/Definition	Identifier	Short description
Notification Request		This entity is a data representation of the Notification request electronic message, transmitted by any	MCC.2952720	IE3N02

Name	Remark / Example	Description/Definition	Identifier	Short description
		MS to the MS of establishment.		
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2937940	
Taxable person status		The entity defines if the taxable person is active, excluded, or both.	MCC.3082620	
Trade date		If the element is provided, the requesting MS is only interested in records modified on or after this date and time.	MCC.3081740	
New or updated Prior Notification available		The MS of exemption receives a notification that a new or updated Prior Notification is made available in the MS of establishment. In this occasion the MS of exemption is notified by the MS of establishment with the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 or, if not yet available, any other number for the purpose of the identification.	MCC.2903120	
Notification request received		The automated access to information of the MS of establishment received an information request.	MCC.2903100	
Notification request	IE3N02	Notification request is a common electronic message, transmitted by any MS to the MS of establishment, requesting the Notification information of a specific taxable person.	MCC.2904400	

Table 117: Maintained Properties of the objects

6.1.3 IE3N03 – Notification

The message represents the Notification information as a response on the Notification request. The Notification is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response on the Notification request message.

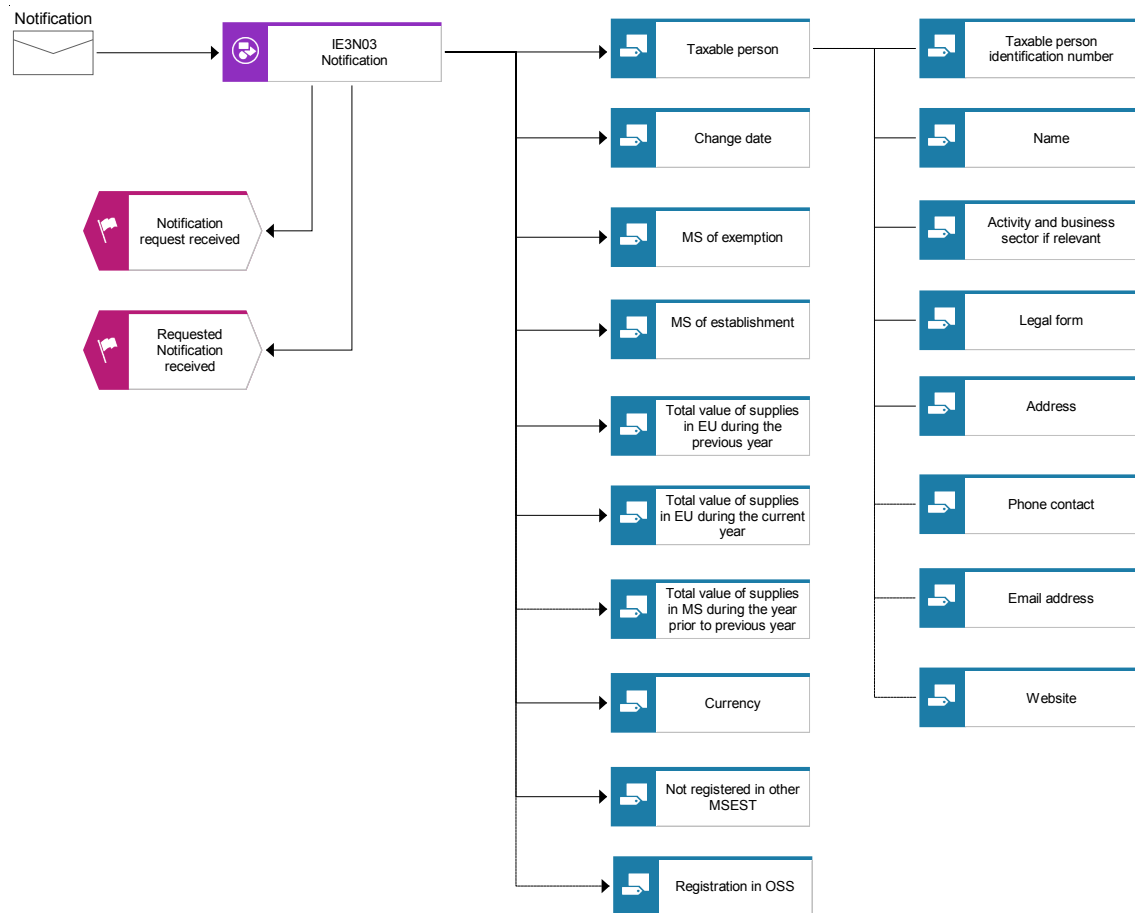


Figure 38: Information exchange IE3N03 – Notification

6.1.3.1 Model maintained properties

Model Property	Property Value
Name	IE3N03 Notification
Identifier	MCC.2937060
Description/Definition	Definition of the IE3N03 Notification message at the business level.
Type	IE data model

Table 118: Maintained Properties of the model

6.1.3.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short descriptio n
Notification		This entity is a data representation	MCC.293712	IE3N03

Name	Remark/ Example	Description/Definition	Identifier	Short description
		of the Notification electronic message, transmitted by the MS of establishment to the requesting MS.	0	
Activity and business sector if relevant		The activity and business sector if relevant of the taxable person.	MCC.2937160	
Address		The address of the taxable person.	MCC.2937722	
Change date		Date and time when information is stored in the database.	MCC.2677821	
Currency		The currency used for supplies of good and services.	MCC.2955160	
Email address		The email address of the taxable person to be used in matters concerning the special scheme.	MCC.3011960	
Legal form		The legal form of the taxable person.	MCC.2937720	
MS of establishment		Member State of establishment (MSEST) means the Member State in which the taxable person availing itself of the special scheme is established.	MCC.3060300	
MS of exemption		The entity defines the MSs of exemption in which the taxable person wants to benefit from the exemption.	MCC.2937122	
Name		The name of the taxable person.	MCC.2937727	
Not registered in other MSEST		Auto declaration of the taxable person not to be already registered for the purposes of the special scheme in another MS of establishment.	MCC.3123800	
Phone contact		The phone contact of the taxable person to be used in matters concerning the special scheme.	MCC.3011940	
Registration in OSS		The element represent the potential registration of the taxable person in the OSS Union special scheme. If	MCC.3011860	

Name	Remark/ Example	Description/Definition	Identifier	Short descriptio n
		registered, the information contains the OSS number of the taxable person.		
Taxable person		The Taxable person is a group data element, containing the taxable person details.	MCC.2937726	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2937940	
Total value of supplies in EU during the current year		Union annual turnover of the taxable person in the current year. The Union annual turnover threshold is set to EUR 100.000.	MCC.2937732	
Total value of supplies in EU during the previous year		Union annual turnover of the taxable person in the previous year. The Union annual turnover threshold is set to EUR 100.000.	MCC.2937730	
Total value of supplies in MS during the year prior to previous year		MS of exemption annual turnover of the taxable person in case when the MS of exemption has opted for the exclusion of the taxable persons for two calendar years after exceeding the MS of exemption threshold.	MCC.2938500	
Website		The website of the taxable person.	MCC.3011900	
Notification request received		The automated access to information of the MS of establishment received an information request.	MCC.2903100	
Requested Notification received		The MS of exemption received the requested Notification as a response on the Notification request message, transmitted by that MS of exemption in the previous step.	MCC.2903220	
Notification	IE3N03	Notification is a common electronic message, transmitted by	MCC.2904420	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		the MS of establishment to the requesting MS as a response on the Notification request message.		

Table 119: IE3N03 – Notification

6.1.4 IE3N04 - Exemption Eligibility

Exemption Eligibility is a common electronic message, transmitted by the MS of exemption to the MS of establishment, to inform the latter about the eligibility of the taxable person to benefit from the exemption in that MS of exemption

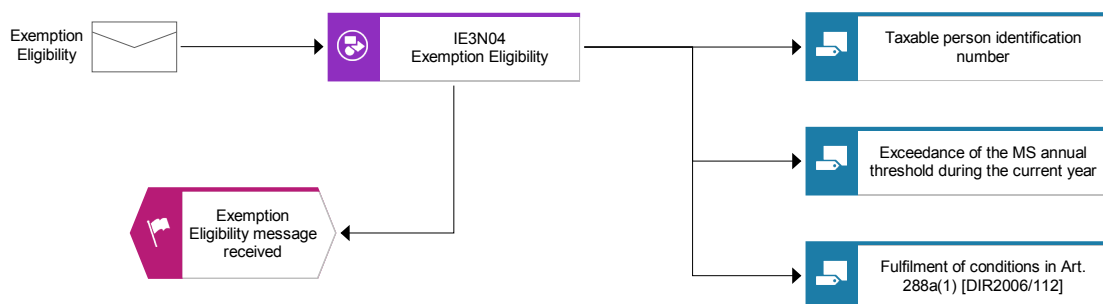


Figure 39: IE3N04 - Exemption Eligibility

6.1.4.1 Model maintained properties

Model Property	Property Value
Name	IE3N04 Exemption Eligibility
Identifier	MCC.2940760
Description/Definition	Definition of the IE3N04 Exemption Eligibility message at the business level.
Type	IE data model

Table 120: Maintained Properties of the model

6.1.4.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Exemption Eligibility		This entity is a data representation of the Exemption Eligibility electronic message, transmitted by the MS of exemption to the MS of establishment.	MCC.2940780	IE3N04
Exceedance of the MS		Information, whether or not the annual turnover threshold referred	MCC.2940820	

Name	Remark /Example	Description/Definition	Identifier	Short description
annual threshold during the current year		to in Article 284(2), point (b), of Directive 2006/112/EC was exceeded during the current calendar year.		
Fulfilment of conditions in Art. 288a(1) [DIR2006/112]		Information whether the conditions referred to in Article 288a(1) of Directive 2006/112/EC are fulfilled.	MCC.2940840	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2937940	
Exemption Eligibility message received		The MS of establishment received the Exemption Eligibility message.	MCC.3014260	
Exemption Eligibility	IE3N04	Exemption Eligibility is a common electronic message, transmitted by the MS of exemption to the MS of establishment, to inform the latter about the eligibility of the taxable person to benefit from the exemption in that MS of exemption. The Exemption Eligibility consist of the following information: * the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 or, if not yet available, any other number received from the Member State of establishment for the purpose of the identification; * information as to whether or not the annual turnover threshold applicable in that Member State for the exemption, referred to in	MCC.2904340	

Name	Remark /Example	Description/Definition	Identifier	Short description
		Article 284(2), point (b) of Directive 2006/112/EC, in the current year is exceeded; * information as to whether the conditions referred to in Article 288a(1) of Directive 2006/112/EC are fulfilled; * any request for additional clarification needed in view of the information to be provided. The Exemption Eligibility message may contain the aforementioned information on multiple taxable persons, which were evaluated on the eligibility to benefit from the exemption in a specific MS of exemption.		

Table 121: Maintained Properties of the objects

6.1.5 IE3N05 - Exemption Acceptance

Exemption Acceptance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about approved request of the taxable person to avail himself of the special scheme.

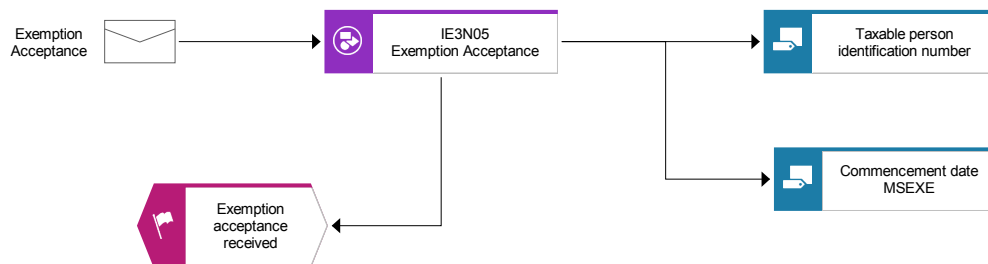


Figure 40: IE3N05 - Exemption Acceptance

6.1.5.1 Model maintained properties

Model Property	Property Value
Name	IE3N05 Exemption Acceptance
Identifier	MCC.2940940
Description/Definition	Definition of the IE3N05 Exemption Acceptance message at the business level.

Model Property	Property Value
Type	IE data model

Table 122: Maintained Properties of the model

6.1.5.2 Object maintained properties

Name	Remark/ Example	Description/ Definition	Identifier	Short descriptio n	Legal Referenc e
Exemption Acceptance		This entity is a data representation of the Exemption Acceptance electronic message, transmitted by the MS of establishment to the MS of exemption.	MCC.294096 0	IE3N05	
Commence ment date MSEXE		The date of commencement of the exemption in each of the MS of exemption concerned.	MCC.294098 0		
Taxable person identificatio n number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.293794 0		
Exemption acceptance received		After the MS of establishment received a confirmation from the MS of exemption that the taxable person is eligible for the exemption and after the MS of establishment has notified the taxable person on its eligibility, the MS of establishment notifies within 15 working days from the date on which the information becomes available the MS of the exemption that the taxable person	MCC.290300 0		Article 37a(1)poi nt(a) [DIR2020 /285]

Name	Remark/ Example	Description/ Definition	Identifier	Short descriptio n	Legal Referenc e
		has started to benefit from the exemption in that MS of exemption. The part of the electronic message is also the taxable person's exempt identification number, issued by the MS of establishment to identify that taxable person within the special scheme and the date of commencement of the exemption.			
Exemption Acceptance	IE3N05	Exemption Acceptance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about approved request of the taxable person to avail himself of the special scheme. The Exemption Acceptance consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the date of commencement of the exemption referred to	MCC.2904320		

Name	Remark/ Example	Description/ Definition	Identifier	Short descriptio n	Legal Referenc e
		in Article 21(2b), point (d), of Regulation (EU) No 904/2010 in respect of the taxable person in the Member State concerned. The electronic message is sent to all MS of exemptions, for which the taxable person was approved to avail himself of the exemption.			

Table 123: Maintained Properties of the objects

6.1.6 IE3N06 - Exemption Eligibility reminder

Exemption Eligibility reminder is a common electronic message, transmitted by the MS of establishment to the MS of exemption to remind the MS of exemption to validate the taxable person's eligibility to benefit of the exemption in that MS of exemption.

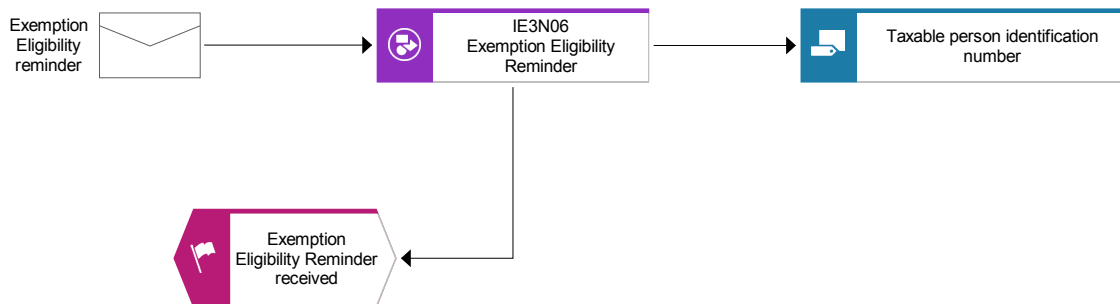


Figure 41: IE3N06 - Exemption Eligibility reminder

6.1.6.1 Model maintained properties

Model Property	Property Value
Name	IE3N06 Exemption Eligibility reminder
Identifier	MCC.2941040
Description/Definition	Definition of the IE3N06 Exemption Eligibility Reminder message at the business level.
Type	IE data model

Table 124: Maintained Properties of the model

6.1.6.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Exemption Eligibility Reminder		This entity is a data representation of the Exemption Eligibility Reminder electronic message, transmitted by the MS of establishment to the MS of exemption.	MCC.294106 0	IE3N06
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.293794 0	
Exemption Eligibility Reminder received		The MS of the exemption received from the MS of establishment a reminder to submit the Exemption Eligibility message. The part of the electronic message is also the taxable person's exempt identification number, issued by the MS of establishment, to identify that taxable person within the SME special scheme, or any other number for the purpose of the identification of the taxable person, if the exempt identification number is yet to be issued (e.g. prior notification).	MCC.293936 2	
Exemption Eligibility reminder	IE3N06	Exemption Eligibility Reminder is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to remind the latter that the MS of establishment still did not receive the Exemption Eligibility message from that MS of exemption. The deadline for this transmission is 15 working days. The Exemption Eligibility Remainder consist of the following information: * the exempt identification	MCC.293934 0	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010 or, if not yet available, any other number for the purpose of the identification of the taxable person. The electronic message is sent to the MS of exemption, from which the MS of establishment requested the Exemption Eligibility information. The MS of establishment has to send to the MS of exemption a reminder giving few days (e.g. 2 working days) to the MS of exemption to reply. Second, in the absence of a reply to the reminder, the silence of the MS of exemption will be taken by the MS of establishment as tacit agreement and the exemption will be granted. Sending of the message is not provided by the legal basis so it can be done on a voluntary basis.		

Table 125: Maintained Properties of the objects

6.1.7 IE3N07 - Additional Clarification Request

Additional clarification request is a common electronic message, transmitted by the MS of exemption to the MS of establishment requesting additional clarification on Notification to be able to verify the taxable person's eligibility to benefit from the exemption in that MS of exemption.

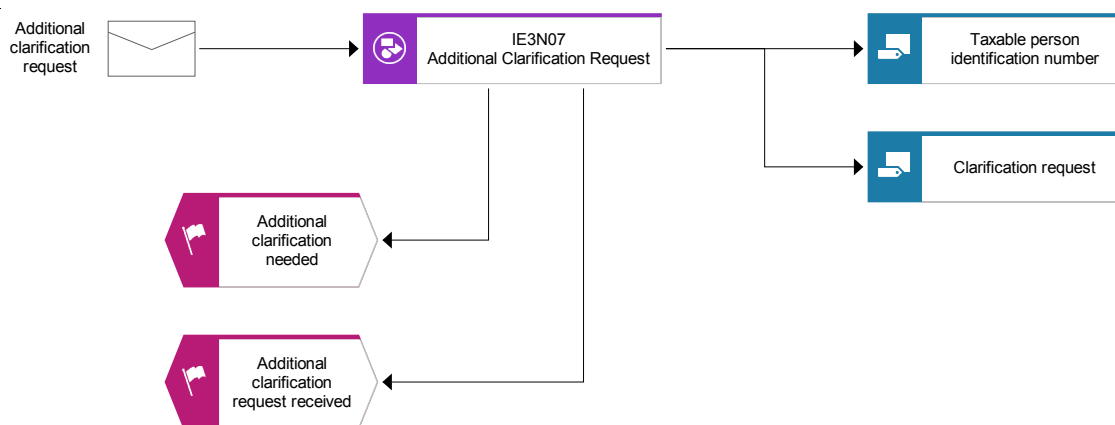


Figure 42: IE3N07 – Additional Clarification Request

6.1.7.1 Model maintained properties

Model Property	Property Value
Name	IE3N07 Additional Clarification request
Identifier	MCC.2952580
Description/Definition	Definition of the IE3N07 Additional clarification request message at the business level.
Type	IE data model

Table 126: Maintained Properties of the model

6.1.7.2 Object maintained properties

Name	Remark / Example	Description/Definition	Identifier	Short description
Additional Clarification Request		This entity is a data representation of the additional clarification request electronic message, transmitted by any MS to the MS of establishment.	MCC.2940640	IE3N07
Clarification request		The data element contains the textual description of the Additional clarification, which is requested by the MS of exemption from the MS of establishment.	MCC.2940645	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2952326	

Name	Remark / Example	Description/Definition	Identifier	Short description
Additional clarification needed		The MS of exemption requests the MS of establishment for additional clarification, needed for evaluation of the taxable person's eligibility to benefit from the exemption in that MS of exemption.	MCC.2950200	
Additional clarification request received		The MS of establishment received the additional clarification request coming from the MS of exemption.	MCC.2950260	
Additional clarification request	IE3N07	Additional clarification request is a common electronic message, transmitted by MS of exemption to the MS of establishment, requesting additional clarification on a specific taxable person.	MCC.2950240	

Table 127: Maintained Properties of the objects

6.1.8 IE3N08 - Additional Clarification

Additional clarification is a common electronic message, transmitted by the MS of establishment to the MS of exemption as a response to clarification request submitted by the MS of exemption.

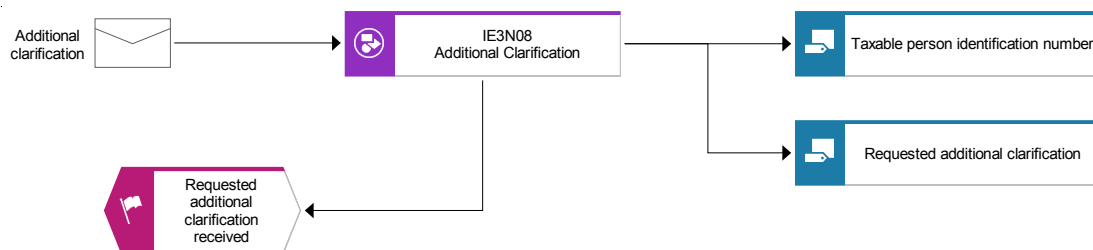


Figure 43: IE3N08 – Additional Clarification

6.1.8.1 Model maintained properties

Model Property	Property Value
Name	IE3N08 Additional Clarification
Identifier	MCC.2952620
Definition	Definition of the IE3N08 Additional clarification message at the business level.
Type	IE data model

Table 128: Maintained Properties of the model**6.1.8.2 Object maintained properties**

Name	Remark/ Example	Description/Definition	Identifier	Short description
Additional Clarification		This entity is a data representation of the Requested additional clarification electronic message, transmitted by MS of establishment to the MS of exemption.	MCC.2952640	IE3N08
Requested additional clarification		The Requested clarification data element contains the additional clarification in textual form, requested by the by the MS of exemption and transmitted by the MS of establishment.	MCC.2952660	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2937940	
Requested additional clarification received		The MS of exemption received the requested additional clarification, as a response on the Additional clarification request message, transmitted by the MS of exemption in the previous step.	MCC.2950400	
Additional clarification	IE3N08	Additional clarification is a common electronic message, transmitted by MS of establishment to the MS of exemption, responding to the additional clarification request.	MCC.2950380	

Table 129: Maintained Properties of the objects**6.2 QUARTERLY REPORT MESSAGES**

The Quarterly reporting related messages are defined in below subsections.

6.2.1 IE3Q01 - Quarterly report request

Quarterly report request is a common electronic message, transmitted by the MS of exemption to the MS of establishment to obtain the Quarterly report information submitted by the taxable person to MS of establishment.

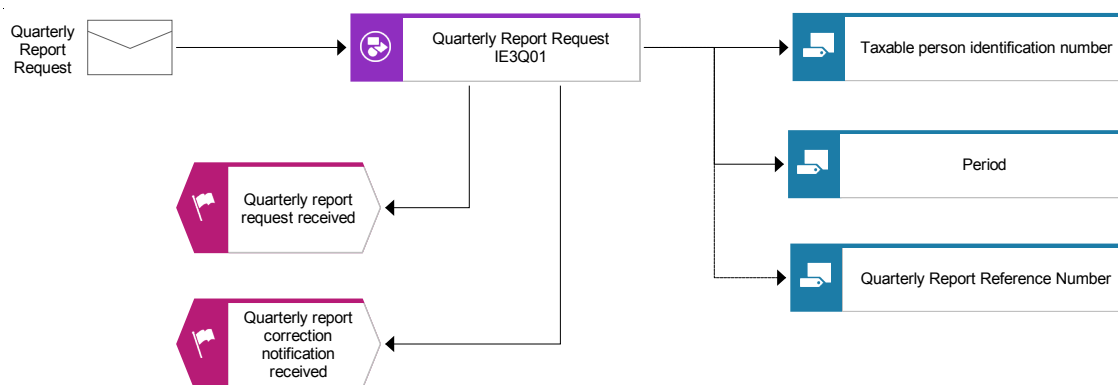


Figure 44: IE3Q01 – Quarterly report request

6.2.1.1 Model maintained properties

Model Property	Property Value
Name	IE3Q01 Quarterly Report Request
Identifier	MCC.2952276
Description/Definition	Definition of the IE3Q01 Quarterly Report Request message at the business level.
Type	IE data model

Table 130: Maintained Properties of the model

6.2.1.2 Object maintained properties

Name	Remark / Example	Description/Definition	Identifier	Short description
Quarterly Report Request		This entity is a data representation of the Quarterly Report Request electronic message, transmitted by any MS to the MS of establishment.	MCC.295226 1	IE3Q01
Period		The period entity represents the calendar quarter and the related year. The possible values of quarters are Q1, Q2, Q3, Q4. The period can also define the Period start or Period end attributes.	MCC.267796 2	

Name	Remark / Example	Description/Definition	Identifier	Short description
Quarterly Report Reference Number		The unique reference number of the Quarterly Report, including the version as a timestamp.	MCC.2941300	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2952264	
Quarterly report correction notification received		The MS of exemption received a notification that a correction to Quarterly report is ready in the MS of establishment data store.	MCC.2905800	
Quarterly report request received		The automated access to information of the MS of establishment received an information request.	MCC.2905844	
Quarterly Report Request	IE3Q01	The Quarterly Report Request is a common electronic message, transmitted by any Member State to MS of establishment, to request the Quarterly Report of a specific taxable person. The message contains the following information: * the exempt identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the calendar quarter and a year to which the request relates.	MCC.2906460	

Table 131: Maintained Properties of the objects

6.2.2 IE3Q02 – Quarterly Report

Quarterly report is a common electronic message, containing the value of the supplies performed in a calendar year by the taxable person in MS of establishment and in each MS other than the MS of exemption. The message is a response on the Quarterly report request message.

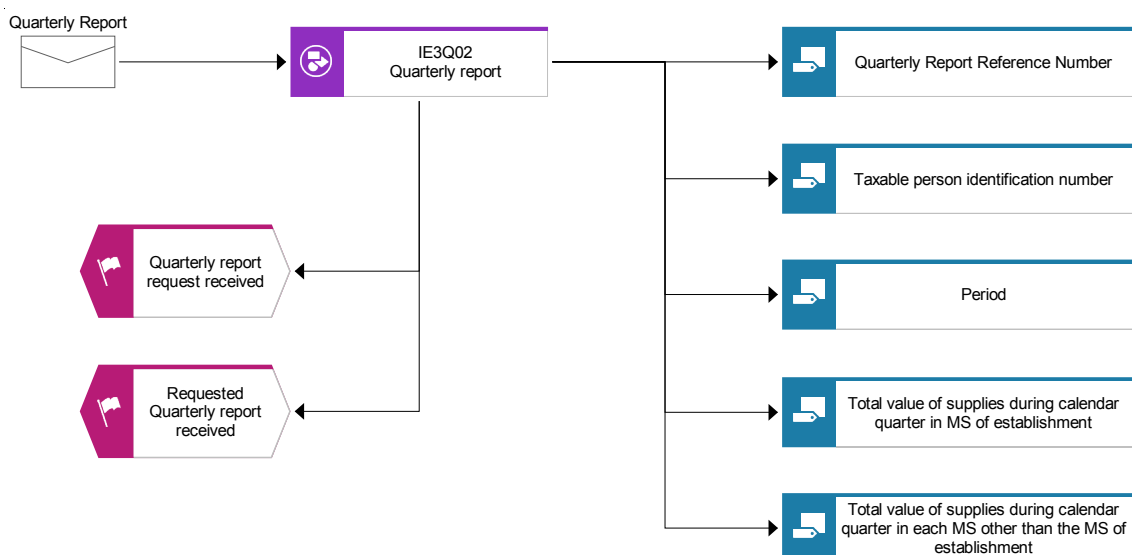


Figure 45: IE3Q02 – Quarterly report

6.2.2.1 Model maintained properties

Model Property	Property Value
Name	IE3Q02 Quarterly Report
Identifier	MCC.2938400
Description/Definition	Definition of the IE3Q02 Quarterly Report message at the business level.
Type	IE data model

Table 132: Maintained Properties of the model

6.2.2.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Quarterly report		This entity is a data representation of the Quarterly Report Request electronic message, transmitted by any MS to the MS of establishment.	MCC.293842 0	IE3Q02
Period		The period entity represents the calendar quarter and the related year. The possible values of quarters are Q1, Q2, Q3, Q4. The period can also define the Period start or Period end attributes.	MCC.267796 2	
Quarterly		The unique reference number of	MCC.294130	

Name	Remark/ Example	Description/Definition	Identifier	Short description
Report Reference Number		the Quarterly Report, including the version as a timestamp.	0	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2937940	
Total value of supplies during calendar quarter in each MS other than the MS of establishment		The entity represents the total value of supplies, specified by business sector if relevant, carried out during the calendar quarter in each of the Member States other than the MS of establishment or "0" if no supplies have been made.	MCC.2938440	
Total value of supplies during calendar quarter in MS of establishment		The entity represents the total value of supplies carried out during the calendar quarter in the Member State of establishment or "0" if no supplies have been made.	MCC.2938464	
Quarterly report request received		The automated access to information of the MS of establishment received an information request.	MCC.2905844	
Requested Quarterly report received		The requesting Member State received the response message as a response to the information request message, transmitted by that MS of exemption in the previous step.	MCC.2905760	
Quarterly Report	IE3Q02	Quarterly Report is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response to the Quarterly report request message, containing the value of supplies of goods and/or services, performed by the taxable person within a specific quarter.	MCC.2906480	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		The message contains the following information: * the exempt individual identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the period and year to which the report relates; * the total value of supplies carried out during the calendar quarter in the Member State of establishment or “0” if no supplies have been made, specified by business sector if relevant pursuant to Article 284c(1), point (c), of Directive 2006/112/EC; * the total value of supplies carried out during the calendar quarter in each of the Member States other than the Member State of establishment or “0” if no supplies have been made, specified by business sector if relevant pursuant to Article 284c(1), point (c), of Directive 2006/112/EC.		

Table 133: Maintained Properties of the objects

6.2.3 IE3Q03 - Quarterly Report non-compliance

Quarterly Report non-compliance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying that the Quarterly report or a correction to an existing Quarterly report is not compliant with the Article 284b of Directive 2020/285 or that MS of establishment did not receive the Quarterly report at all.

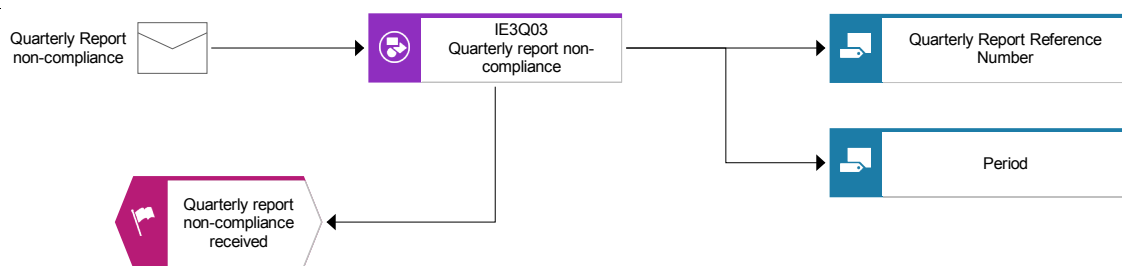


Figure 46: IE3Q03 Quarterly Report non-compliance

6.2.3.1 Model maintained properties

Model Property	Property Value
Name	IE3Q03 Quarterly Report non-compliance
Identifier	MCC.2982000
Description/Definition	Definition of the IE3Q03 Quarterly Report non-compliance message at the business level.
Type	IE data model

Table 134: Maintained Properties of the model

6.2.3.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Quarterly report non-compliance		This entity is a data representation of the Quarterly Report non-compliance message, transmitted by the MS of establishment to the MS of exemption.	MCC.2982020	IE3Q03
Period		The period entity represents the calendar quarter and the related year. The possible values of quarters are Q1, Q2, Q3, Q4. The period can also define the Period start or Period end attributes.	MCC.2677962	
Quarterly Report Reference Number		The unique reference number of the Quarterly Report, including the version as a timestamp.	MCC.2941300	
Quarterly report non-compliance received		The MS of exemption received the information that the Quarterly report or its correction is not compliant with Article	MCC.2980340	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		284b (1) and (2).		
Quarterly Report non-compliance	IE3Q03	Quarterly Report non-compliance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying that the Quarterly report or a correction to an existing Quarterly report is not compliant with the Article 284b of Directive 2020/285 or that MS of establishment did not receive the Quarterly report at all.	MCC.2979240	

Table 135: Maintained Properties of the objects

6.2.4 IE3Q04 - Quarterly Report correction notification

Quarterly Report Correction notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying the latter that there is a correction to an existing Quarterly report.



IE3Q04 Quarterly Report correction notification

Type: IE data model
Creator: sutorti
Last change: Jul 12, 2022 11:11:00 AM

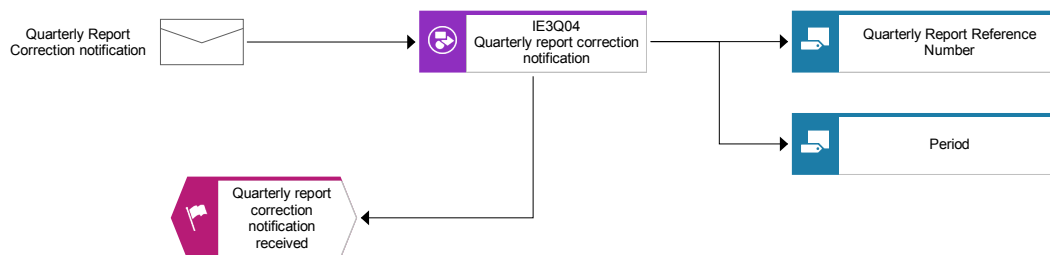


Figure 47: IE3Q04 Quarterly Report correction notification

6.2.4.1 Model maintained properties

Model Property	Property Value
Name	IE3Q04 Quarterly Report correction notification
Identifier	MCC.2982060
Description/Definition	Definition of the IE3Q04 Quarterly Report correction notification message at the business level.
Type	IE data model

Table 136: Maintained Properties of the model

6.2.4.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Quarterly report correction notification		This entity is a data representation of the Quarterly Report Correction notification message, transmitted by the MS of establishment to the MS of exemption.	MCC.2982080	IE3Q04
Period		The period entity represents the calendar quarter and the related year. The possible values of quarters are Q1, Q2, Q3, Q4. The period can also define the Period start or Period end attributes.	MCC.2677962	
Quarterly Report Reference Number		The unique reference number of the Quarterly Report, including the version as a timestamp.	MCC.2941300	
Quarterly report correction notification received		The MS of exemption received a notification that a correction to Quarterly report is ready in the MS of establishment data store.	MCC.2905800	
Quarterly Report Correction notification	IE3Q04	Quarterly Report Correction notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying the latter that there is a correction to an existing Quarterly report, stored in the MSEST automated access. The MS of exemption sends a Quarterly report request message to the MSEST automated access in order to gain the correction information. Sending of the message is not provided by the legal basis so it can be done on a voluntary	MCC.2956443	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		basis.		

Table 137: Maintained Properties of the objects

6.2.5 IE3Q05 - Final Report non-compliance

Final Report non-compliance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying that the taxable person having exceeded the Union annual turnover threshold has not notified the exceedance within 15 working days or not reported the value of the supplies made from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded pursuant to Article 284b(3).

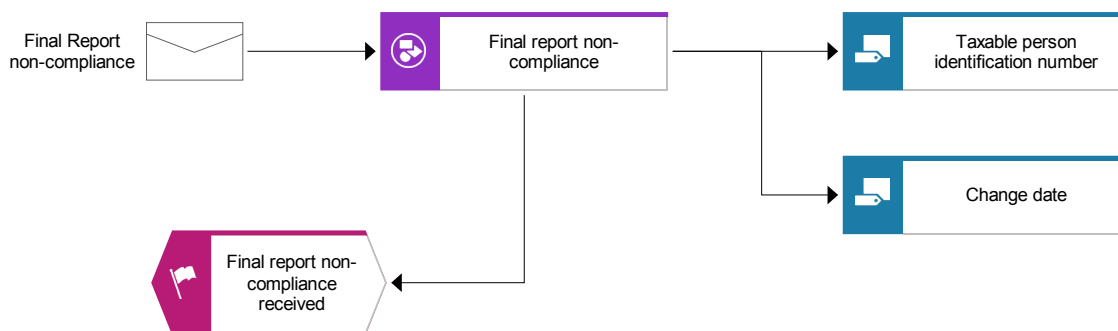


Figure 48: IE3Q05 - Final Report non-compliance

6.2.5.1 Model maintained properties

Model Property	Property Value
Name	IE3Q05 Final Report non-compliance
Identifier	MCC.3117480
Description/Definition	Definition of the IE3Q05 Final Report non-compliance message at the business level.
Type	IE data model

Table 138: Maintained Properties of the model

6.2.5.2 Object maintained properties

Name	Remark /Example	Description/Definition	Identifier	Short description
Final report non-compliance		This entity is a data representation of the Final Report non-compliance message, transmitted by the MS of establishment to the MS of exemption.	MCC.3117500	IE3Q05

Name	Remark /Example	Description/Definition	Identifier	Short description
Change date		Date and time when information is stored in the database.	MCC.2677821	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2937940	
Final report non-compliance received		The MS of exemption received the information that the Final report or its correction is not compliant with the Article 284b, or the Union annual threshold has been exceeded and that the communication of the exceedance (together with the turnover made up until exceedance) has not been done by the taxable person within the required 15 working days.	MCC.3031793	
Final Report non-compliance	IE3Q05	Final Report non-compliance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying that the taxable person having exceeded the Union annual turnover threshold has not notified the exceedance within 15 working days or not reported the value of the supplies made from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded pursuant to Article 284b(3).	MCC.3117440	

Table 139: Maintained Properties of the objects

6.2.6 IE3Q06 - Final Report request

The Final Report Request is a common electronic message, transmitted by any Member State to MS of establishment, to request the Final Report of a specific taxable person.

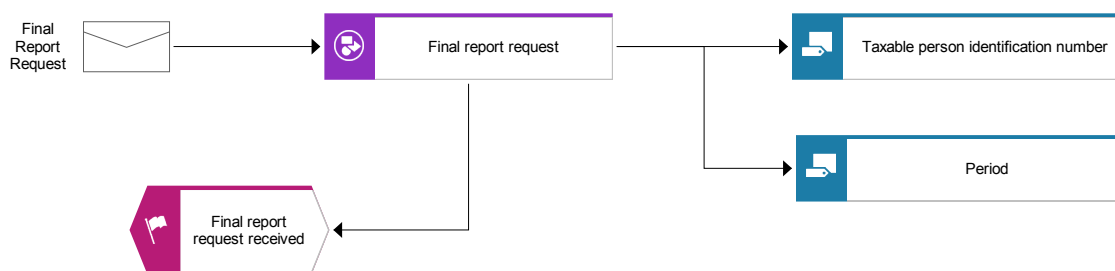


Figure 49: IE3Q06 - Final Report request

6.2.6.1 Model maintained properties

Model Property	Property Value
Name	IE3Q06 Final Report Request
Identifier	MCC.3117840
Description/Definition	Definition of the IE3E06 Final report request message at the business level.
Type	IE data model

Table 140: Maintained Properties of the model

6.2.6.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Final report request		This entity is a data representation of the Final Report request message, transmitted by any Member State to the MS of establishment.	MCC.3118240	IE3E06
Period		The period entity represents the calendar quarter and the related year. The possible values of quarters are Q1, Q2, Q3, Q4. The period can also define the Period start or Period end attributes.	MCC.2677962	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2937940	
Final report request received		The automated access to information of the MS of establishment received an information request.	MCC.3117660	
Final Report	IE3Q06	The Final Report Request is a	MCC.311762	

Name	Remark/ Example	Description/Definition	Identifier	Short description
Request		common electronic message, transmitted by any Member State to MS of establishment, to request the Final Report of a specific taxable person. The message contains the following information: * the exempt identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the calendar quarter to which the Final report relates.	0	

Table 141: IE3Q06 - Final Report request

6.2.7 IE3Q07 - Final Report

Final Report is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response to the Final report request message, containing the value of supplies that have been made by the taxable person from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded.

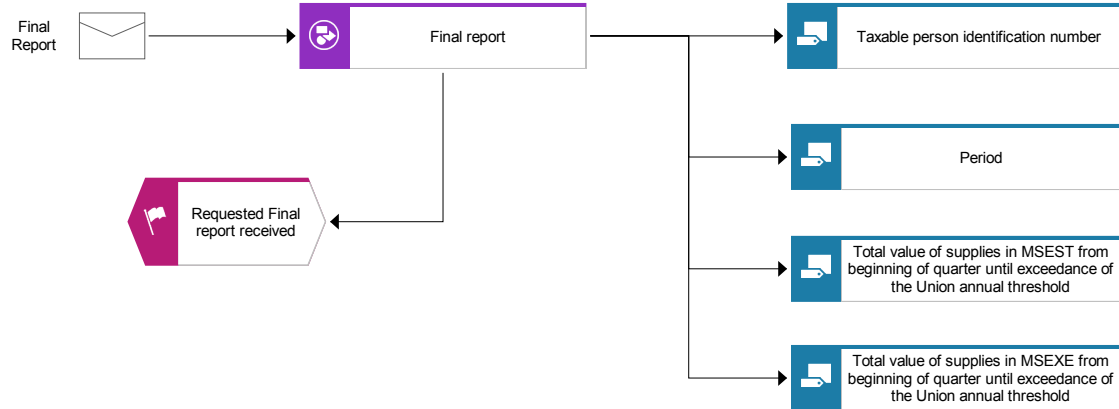


Figure 50: IE3Q07 - Final Report

6.2.7.1 Model maintained properties

Model Property	Property Value
Name	IE3Q07 Final Report
Identifier	MCC.3117640
Description/Definition	Definition of the IE3Q07 Final report message at the business level.
Type	IE data model

Table 142: Maintained Properties of the model

6.2.7.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Final report		This entity is a data representation of the Final Report message, transmitted by the MS of establishment to the MS of exemption.	MCC.3117700	IE3E07
Period		The period entity represents the calendar quarter and the related year. The possible values of quarters are Q1, Q2, Q3, Q4. The period can also define the Period start or Period end attributes.	MCC.2677962	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2937940	
Total value of supplies in MEST from beginning of quarter until exceedance of the Union annual threshold		The entity represents the total value of the supplies that have been made in MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded.	MCC.2938467	
Total value of supplies in MEXE from beginning of quarter until exceedance of the Union annual threshold		The entity represents the total value of the supplies that have been made in each Member State other than the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded.	MCC.3002640	
Requested Final report received		The requesting Member State received the response message as a response to the information request message, transmitted	MCC.3117600	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		by that MS in the previous step.		
Final Report	IE3Q07	Final Report is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response to the Final report request message, containing the value of supplies that have been made by the taxable person from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded. The message contains the following information: * the exempt individual identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the period to which the report relates; * the total value of supplies carried out in the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, or "0" if no supplies have been made; * the total value of supplies carried out in each of Member State other than the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded, specified by business sector if	MCC.3117684	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		relevant, of "0" if no supplies have been made.		

Table 143: Maintained Properties of the objects

6.3 EXEMPTION AND CESSATION MESSAGES

6.3.1 IE3E01 - Exemption Cessation

Exemption Cessation is a common electronic message, transmitted without delay by the MS of exemption to the MS of establishment, to inform the latter about the taxable persons' cessation from benefiting of the exemption in that MS of exemption.

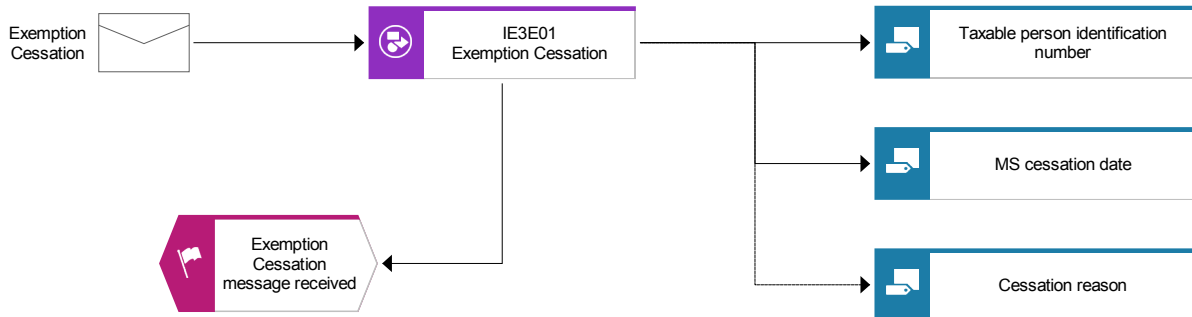


Figure 51: IE3E01 - Exemption Cessation

6.3.1.1 Model maintained properties

Model Property	Property Value
Name	IE3E01 Exemption Cessation
Identifier	MCC.2952342
Description/Definition	Definition of the IE3E01 Exemption Cessation message at the business level.
Type	IE data model

Table 144: Maintained Properties of the model

6.3.1.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Exemption Cessation		This entity is a data representation of the Exemption Cessation electronic message, transmitted by the MS of exemption to the MS of establishment.	MCC.2952327	IE3E01
Cessation reason		The reason of taxable person's cessation from benefiting from exemption in MS of exemption. The reason is accompanied with reason code.	MCC.2952325	

Name	Remark/ Example	Description/Definition	Identifier	Short description
MS cessation date		The date from which the taxable person is ceased from benefiting of exemption in MS of exemption.	MCC.2952322	
Taxable person identificatio n number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2952326	
Exemption Cessation message received		The MS of establishment received the Exemption Cessation message.	MCC.2952323	
Exemption Cessation	IE3E01	Exemption Cessation is a common electronic message, transmitted without delay by the MS of exemption to the MS of establishment, to inform the latter about the taxable persons' cessation of benefiting from the exemption in that MS of exemption. The Exemption Cessation message contains the list of the taxable persons that ceased to be eligible for the SME exemption in the MS of exemption and consists of the following information: * the exempt individual identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * according to Article 37b (3), the date on which the taxable person ceased to be eligible for the exemption under Article 288a(1) of Directive 2006/112/EC. The message should also contain the reason of the cessation from MS of exemption, but this is not mandatory as it is not provided for by the legal text.	MCC.2906440	

Table 145: Maintained Properties of the objects

6.3.2 IE3E02 – Special Scheme Cessation

Special Scheme Cessation is a common electronic message, transmitted by the MS of exemption to the MS of establishment, to inform the latter about the cessation to apply the special scheme in that MS of exemption.

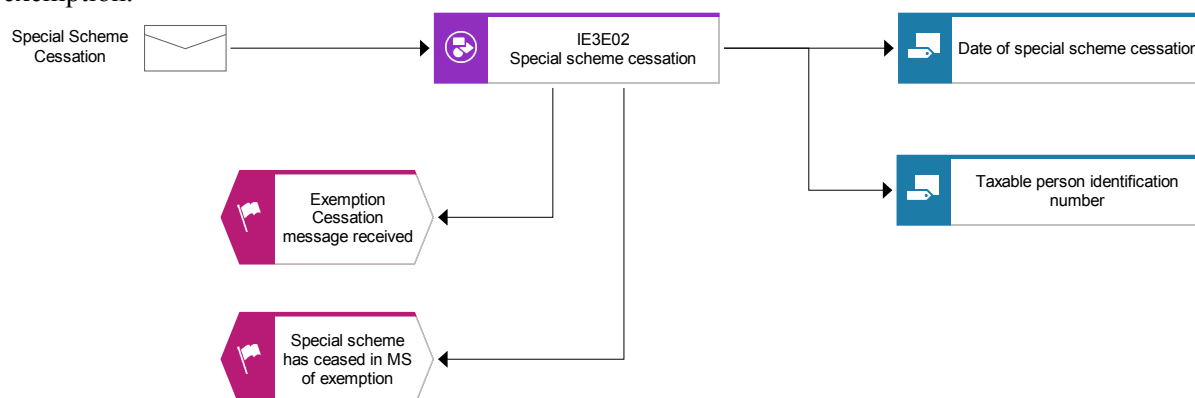


Table 146: IE3E02 - Special scheme cessation

6.3.2.1 Object maintained properties

Model Property	Property Value
Name	IE3E02 Special Scheme Cessation
Identifier	MCC.2954460
Description/Definition	Definition of the IE3E02 Special Scheme Cessation message at the business level.
Type	IE data model

Table 147: Maintained Properties of the model

6.3.2.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Special scheme cessation		This entity is a data representation of the Special scheme cessation electronic message, transmitted by the MS of exemption to the MS of establishment.	MCC.2954480	IE3E02
Date of special scheme cessation		The date on which the special scheme for small enterprises has ceased to apply in that Member State.	MCC.3018480	
Taxable person identification		The Taxable person entity defines the identifiers of the taxable person used within the	MCC.2937940	

Name	Remark/ Example	Description/Definition	Identifier	Short description
number		special scheme.		
Exemption Cessation message received		The MS of establishment received the Exemption Cessation message.	MCC.2903060	
Special scheme has ceased in MS of exemption		The MS of exemption has decided to cease applying the special scheme.	MCC.2951520	
Special Scheme Cessation	IE3E02	Special Scheme Cessation is a common electronic message, transmitted by the MS of exemption to the MS of establishment, to inform the latter without delay about the cessation to apply the special scheme in that MS of exemption. The message contains the date on which the special scheme for small enterprises has ceased to apply in that Member State. Even not provided by the legal basis, the message may contain the exempt identification numbers of the taxable persons, which were benefiting from the exemption in that MS of exemption.	MCC.2951600	

Table 148: Maintained Properties of the objects

6.3.3 IE3E03 - Exclusion or cessation notification

Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption.

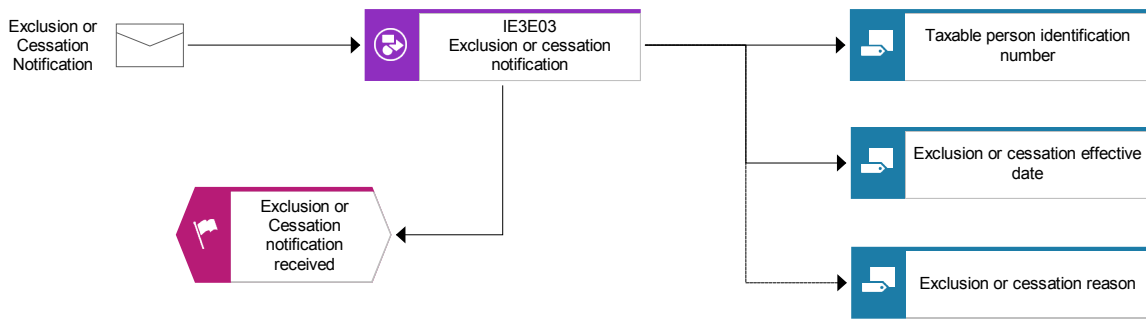


Table 149: IE3N03 - Exclusion or cessation notification

6.3.3.1 Object maintained properties

Model Property	Property Value
Name	IE3E03 Exclusion or cessation notification
Identifier	MCC.2952880
Description/Definition	Definition of the IE3N03 Exclusion or cessation notification message at the business level.
Type	IE data model

Table 150: Maintained Properties of the model

6.3.3.2 Object maintained properties

Name	Description/Definition	Identifier	Short description
Exclusion or cessation notification	This entity is a data representation of the Exclusion or cessation notification electronic message, transmitted by the MS of establishment to the MS of exemption. The legal basis does not foresee these notifications but just the notification from MEST to MEXE when the Union threshold is exceeded.	MCC.2952900	IE3E03
Exclusion or cessation effective date	The date, from which the taxable person is either excluded from the special scheme or ceased from benefiting of exemption in the MS of exemption.	MCC.2952920	

Name	Description/Definition	Identifier	Short description
Exclusion or cessation reason	The reason of the exclusion of the taxable person from the special scheme or reason of the cessation of the taxable person from the MS(s) of exemption.	MCC.2963340	
Taxable person identification number	The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2941340	
Exclusion or Cessation notification received	The MS of the exemption received from the MS of establishment the information that the taxable person was either excluded from the special scheme or ceased from the MS of exemption. The notification from MS of establishment to MS of exemption is not foreseen by the legal basis. It can be done on a voluntary basis only.	MCC.2938886	
Exclusion or Cessation Notification	Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption. These notifications are not foreseen by the legal basis except the case, when the MS of establishment notifies the MS of exemption when the Union annual threshold is exceeded (Article 37a (b)). In other cases, sending of the notification can be done on a voluntary basis. The Exclusion or cessation notification should consist of the following information: * the exempt identification number of the taxable person, issued by the MS of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; * the exclusion or cessation reason	MCC.2935400	IE3E03

Name	Description/Definition	Identifier	Short description
	(optional); * the Exclusion effective date or the Cessation effective date. The Exemption or cessation notification message may contain a list of multiple taxable persons, which were excluded from the special scheme or ceased from the MS of exemption.		

Table 151: Maintained Properties of the objects

6.3.4 IE3E04 - Exceedance of Union annual threshold notification

Exceedance of Union Annual Threshold Notification is a common electronic message, transmitted by the MS of establishment to the related MS of exemption, to inform the latter about exceedance of the Union annual threshold.

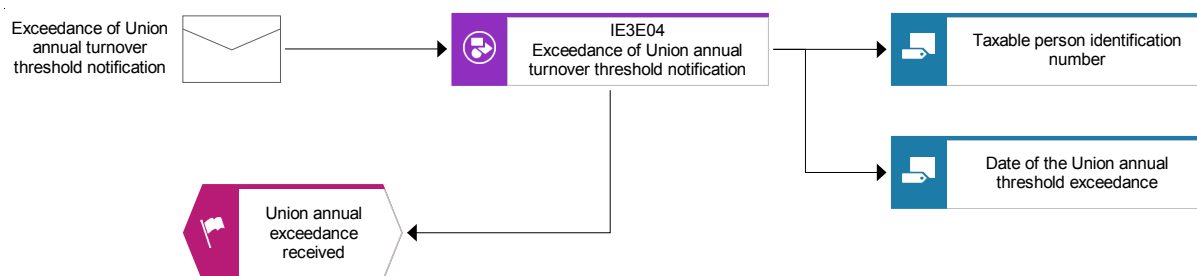


Figure 52: IE3E04 - Exceedance of Union annual threshold notification

6.3.4.1 Object maintained properties

Model Property	Property Value
Name	IE3E04 Exceedance of Union annual threshold notification
Identifier	MCC.2982120
Description/Definition	Definition of the IE3E04 Exceedance of Union annual threshold notification message at the business level.
Type	IE data model

Table 152: Maintained Properties of the model

6.3.4.2 Object maintained properties

Name	Description/Definition	Identifier	Short description
Exceedance of	This entity is a data representation of	MCC.2982140	IE3E04

Name	Description/Definition	Identifier	Short description
Union annual turnover threshold notification	the Exceedance of Union annual turnover threshold notification message, transmitted by the MS of establishment to the MS of exemption.		
Date of the Union annual threshold exceedance	The Date of the Union annual threshold exceedance entity represents the date when the taxable person exceeded the Union annual threshold.	MCC.2967220	
Taxable person identification number	The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2937940	
Union annual exceedance received	The MS of exemption received the information that the taxable person exceeded the Union annual turnover threshold.	MCC.2981020	
Exceedance of Union annual turnover threshold notification	Exceedance of Union Annual Turnover Threshold Notification is a common electronic message, transmitted by the MS of establishment to the related MS of exemption, to inform the latter about exceedance of the Union annual turnover threshold. The Exceedance of Union Annual Turnover Threshold Notification consists of the following information: * Exempt identification numbers of the taxable persons issued by the Member State providing the information; * The date on which the Union annual turnover of the taxable person exceeded the amount referred to in Article 284(2)(a) of Directive 2006/112/EC. If the exact date of the Union annual threshold exceedance is not known, the last day of the calendar quarter in which the Union annual threshold turnover has been exceeded will be assumed as a day of Union annual threshold exceedance.	MCC.2983900	IE3E04

Table 153: Maintained Properties of the objects

6.4 SPECIFIC MESSAGES

This section describes specific messages not included in the previous message groups.

6.4.1 IE3A01 - Details of provisions

Details of Provisions is a common electronic message, transmitted by the Member State to the European Commission, requesting publication of the special schemes (SME scheme and cash accounting scheme) national provision details on the Commission web site.

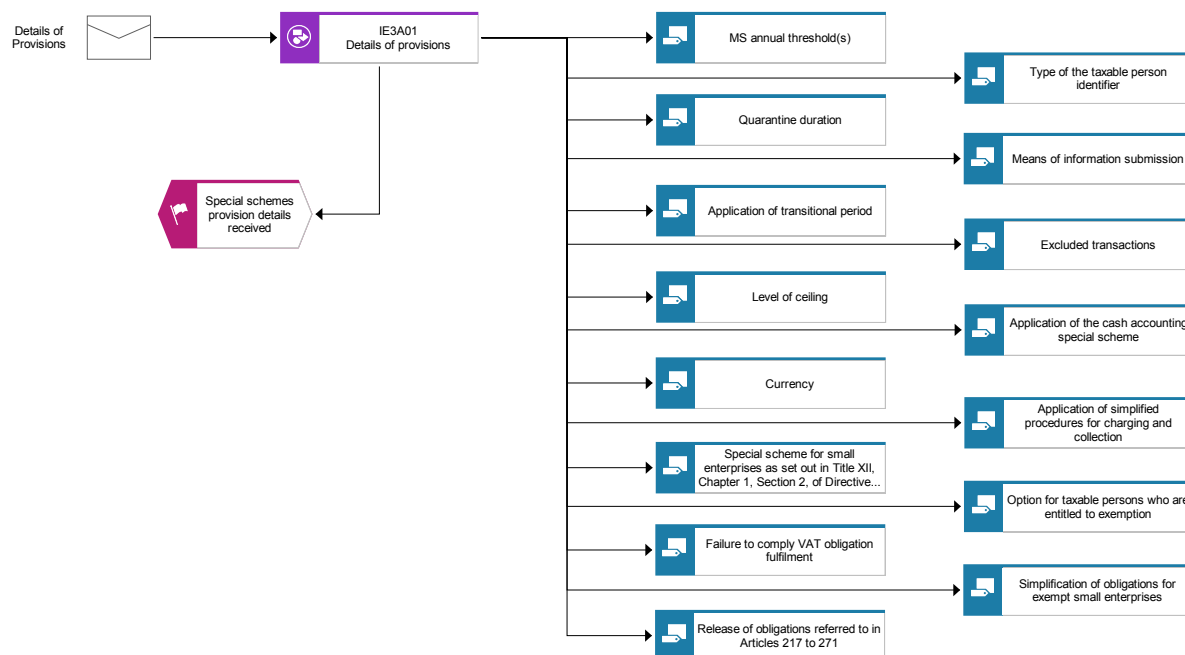


Figure 53: IE3A01 - Details of provisions

6.4.1.1 Model maintained properties

Model Property	Property Value
Name	IE3A01 Details of Provisions
Identifier	MCC.2953840
Description/Definition	Definition of the IE3A01 Details of Provision message at the business level. The way the information will have to be provided by Member States for the publication will be the same as for the OSS portal. In particular, the EWPP Editorial Teams will be used to provide Member States with editing rights in the SME portal.
Type	IE data model

Table 154: Maintained Properties of the model

6.4.1.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Details of provisions		Details of Provisions represents the national provisions details, related to SME scheme and cash accounting scheme, to be published by the Member State on the Commission's web site (content of Annex I of [CIR2021/2007]).	MCC.2953860	IE3A01
Application of simplified procedures for charging and collection		The entity defines if the Member State applies simplified procedures, such as flat-rate schemes, for charging and collecting VAT to small enterprises. The information shall contain the following: * If the Member State applies simplified procedures for charging and collecting VAT to small enterprises; * Which simplified procedure the Member State applies to small enterprises; * Under which conditions or limits the Member State applies the simplified procedure.	MCC.3024660	
Application of the cash accounting special scheme		The entity defines if the Member State allows the taxable person to opt for the cash accounting special scheme. If the Member State applies this special scheme, the information also contains the threshold in force. The maximum value is EUR 2 000 000 or the equivalent in national currency.	MCC.3024640	
Application of transitional period		The entity defines whether the exemption provided for in Article 284(1) of Directive 2006/112/EC cease to apply as of the time when the threshold laid down in accordance with that	MCC.2954020	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		paragraph is exceeded, pursuant to Article 288a(1) fourth paragraph.		
Currency		The entity defines whether the values for the purpose of Article 284c(1), first subparagraph, point (b), of Directive 2006/112/EC have to be expressed in national currency of that Member State.	MCC.3024760	
Excluded transactions		The entity defines the transactions, which are excluded from the exemption under the special scheme for small enterprises in the Member State.	MCC.3024680	
Failure to comply VAT obligation fulfilment		Where a taxable person fails to comply with the obligations provided for in Article 284b of Directive 2006/112/EC, the Member State may require such a taxable person to fulfil VAT obligations in respect of exempt transactions carried out in that Member State. The possible values for the element are YES and NO. If yes, the element will contain the obligations like the following: * To be registered for VAT purposes pursuant to Articles 213 and 214 [DIR112/2006]; * To submit a VAT return pursuant to Article 250 [DIR112/2006]; * Others.	MCC.3024800	
Level of ceiling		In case the answer to "Application of transitional period" is negative (meaning that a transitional period applies in that Member State), the entity defines whether a ceiling is applicable and, if yes, the level of ceiling. he MS of exemption is free to decide whether a ceiling of 10% or 25% or no ceiling will be applicable in that MS of	MCC.2954000	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		exemption.		
Means of information submission		The entity defines whether the Member State requires the taxable person to submit the information referred to in Article 284(3) and (4) and in Article 284b(1) and (3) of Directive 2006/112/EC by electronic means. If the Member State uses for this purpose an electronic interface, the information contains the conditions of applicability.	MCC.3024780	
MS annual threshold(s)		The entity defines the level(s) of the annual turnover threshold(s) in force to benefit from the exemption in the Member State (in EUR and in national currency) and the date from which the current level of exemption threshold(s) is/are in force. The maximum amount is EUR 85 000 and the equivalent in national currency for each threshold, using the exchange rate published by the ECB on 18 January 2018. If the Member State applies more than one threshold, they indicate the criteria for qualifying for the respective categories of supplies to which the different thresholds apply and indicate the date from which those criteria apply.	MCC.2953960	
Option for taxable persons who are entitled to exemption		The entity defines if the Member State has any detailed rules or conditions in place for applying the option provided for in Article 290 [DIR122/2006]. If yes, the element lists the rules and conditions applicable in that Member State.	MCC.3024740	
Quarantine duration		The entity defines the duration of the taxable person's exclusion from	MCC.2953980	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		the special scheme in the Member State of exemption after he exceeded the MS annual threshold. The possible values are one or two calendar years after the year of exceedance.		
Release of obligations referred to in Articles 217 to 271		The entity defines if the Member State releases exempt small enterprises from any of the obligations referred to in Articles 217 to 271 [DIR112/2006], pursuant to Article 292d [DIR112/2006]. If yes, the element contains those obligations.	MCC.3025000	
Simplification of obligations for exempt small enterprises		The entity defines if the Member State releases the small enterprises, established within the territory of the Member State, which avail themselves of the exemption only in that Member State, from any obligations. If yes, the element also contains from which obligations: * To state the beginning of the activity, pursuant to Article 213 [DIR112/2006]; * Identification by means of an individual number, pursuant to Article 214 [DIR112/2006], except enterprises carrying out transactions covered by point (b), (d) or (e) of Article 214 [DIR112/2006]; * Submission of a VAT return pursuant to Article 250 [DIR112/2006].	MCC.3024980	
Special scheme for small enterprises as set out in Title XII, Chapter 1,		The entity defines: * Whether the Member State applies the Special scheme for small enterprises as set out in Title XII, Chapter 1, Section 2, of Directive 2006/112/EC; * If the special scheme for	MCC.3024700	

Name	Remark/ Example	Description/Definition	Identifier	Short description
Section 2, of Directive 2006/112/EC applicability and dates		exemption is applicable in the Member State, the date from which the special scheme applies; * If the special scheme for exemption is not applicable in the Member State but was applicable in the past, the date until which the Member State applied the special scheme.		
Type of the taxable person identifier		The entity defines the type of the taxable person's identifier used in the Member State for the purpose of the identification referred to in Article 284(3), point (b), of Directive 2006/112/EC. The potential types are the following: * Individual VAT identification number allocated to the taxable person in respect of that person's obligation under the internal system; * Structure of a VAT number; * Or any other number.	MCC.3024720	
Special schemes provision details received		The European Commission received the request to publish the special schemes (SME scheme and cash accounting scheme) provisions details of the Member State.	MCC.2953440	
Details of Provisions	IE3A01	Details of Provisions represents the national provisions details, related to SME scheme and cash accounting scheme, to be published by the Member State on the Commission's web site (content of Annex I of [CIR2021/2007]).	MCC.2953420	

Table 155: Maintained Properties of the objects

6.5 COMMON MESSAGES

This section describes the common information exchanges, which do not relate to any specific category.

6.5.1 IE3C01 - Error message

Error message is a common electronic message, notifying the Sending MS of a business message of technical or business errors detected by the Receiving MS.

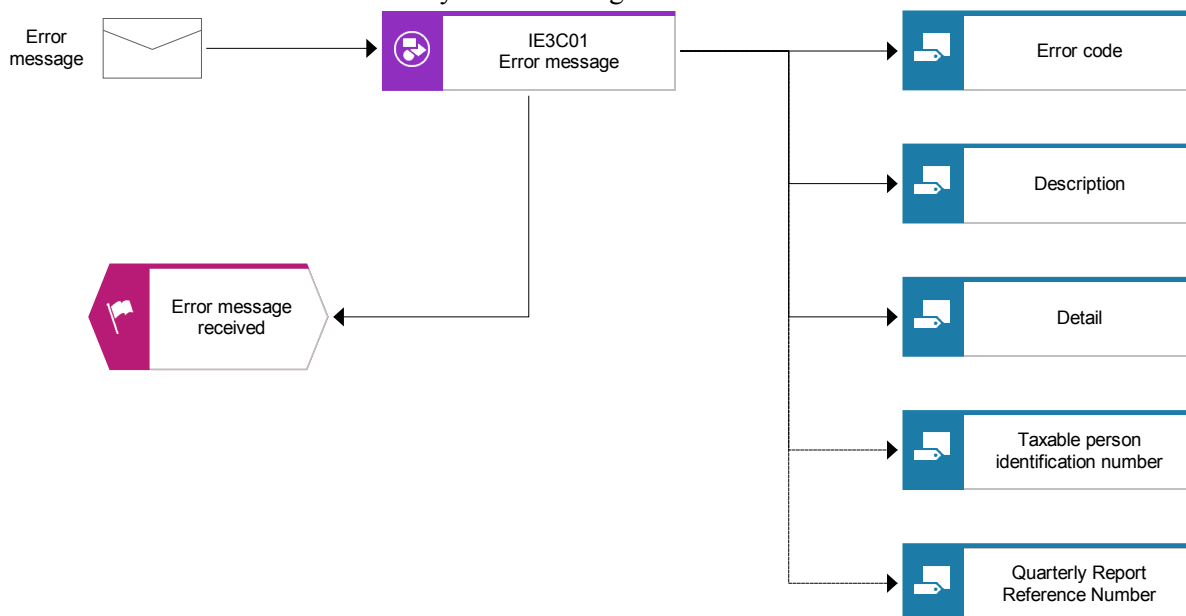


Figure 54: IE3C01 - Error message

6.5.1.1 Model maintained properties

Model Property	Property Value
Name	IE3C01 Error message
Identifier	MCC.2941160
Description/Definition	Definition of the IE3C01 Error message at the business level.
Type	IE data model

Table 156: Maintained Properties of the model

6.5.1.2 Object maintained properties

Name	Remark/ Example	Description/Definition	Identifier	Short description
Error message		This entity is a data representation of the Error message electronic message, notifying the Sending MS of a business message of some technical or business error detected by the Receiving MS.	MCC.2941200	IE3C01
Description		Description of the error discovered in the business message.	MCC.2941240	
Detail		Detail of the error discovered in	MCC.2941260	

Name	Remark/ Example	Description/Definition	Identifier	Short description
		the business message.		
Error code		The code of the error discovered in the received business message.	MCC.2941220	
Quarterly Report Reference Number		The unique reference number of the Quarterly Report, including the version as a timestamp.	MCC.2941300	
Taxable person identification number		The Taxable person entity defines the identifiers of the taxable person used within the special scheme.	MCC.2941340	
Error message received		The MS received an error message.	MCC.2902320	
Error message	IE3C01	Error message is a common electronic message, notifying the Sending MS of a business message of technical or business errors detected by the Receiving MS. The Error message consist of the following information: * Error code; * Description, describing the error discovered in the received business message; * Detail, describing the details and the reason of the discovered error; * Other optional information for better identification of the error presence: * Taxable person identification number; * Quarterly report reference number.	MCC.2941180	

Table 157: Maintained Properties of the objects

6.5.1.3 Technical error codes

The bellow table lists the technical error codes enabling Member States to notify the sender of a message that a technical error has been detected and to identify it.

Error Code	Description	Details	Usage	Responsible	Covered by VM
10000	The XML message is not well formed.	During the message validation, some errors occurred, which prevent parsing of the message. Rule: Technical rule defined in [DOC/SME_TS]	The code must be used by any MS that receives a message that is not well-formed. Rule applicable on all messages, except the IE3C01 - Error message .	Sender of the error message: - MS of establishment - MS of exemption Receiver of the error message: - MS of establishment - MS of exemption	Yes
10010	The XML message is not valid according to the XML schema definition.	During the validation, some errors occurred according to the XSD schema. Either the structure of the XML message is not correct, or the content does not correspond to the XSD schema definition. Rule: Technical rule defined in [DOC/SME_TS]	The code must be used by any MS that receives a well-formed message that does not conform to the XML schema definition. Rule applicable on all messages, except the IE3C01 - Error message .	Sender of the error message: - MS of establishment - MS of exemption Receiver of the error message: - MS of establishment - MS of exemption	Yes
10020	The taxable person identification is not known.	The message contains an exempt identification number, or VAT identification number, or Tax identification number, or any other identification number, which is not known to the receiving MS. Rule: N/A	The code can be used by any MS that receives a message that contains an exempt identification number, or VAT identification number, of Tax identification number, or any other identification number, that does not exist in the MS of	Sender of the error message: - MS of establishment - MS of exemption Receiver of the error message: - MS of establishment - MS of exemption	No

Error Code	Description	Details	Usage	Responsible	Covered by VM
			establishment database.		
10030	The Quarterly report reference number is not known.	The message contains a Quarterly report reference number, which is not known to the receiving MS. Rule: N/A	The code can be used by any MS that receives a message that contains a Quarterly report reference number that does not exist in the MS of establishment database.	Sender of the error message: - MS of establishment - MS of exemption Receiver of the error message: - MS of establishment - MS of exemption	No
10040	Duplicate message ID.	The MessageID of the received message is not unique, it refers to a message ID, which belongs to a previously received message. Rule: Technical rule defined in [DOC/SME_TS]	The code must be used by any MS that receives a message containing a message ID that has already been used and is therefore not unique. Rule applicable on all messages, except the IE3C01 - Error message .	Sender of the error message: - MS of establishment - MS of exemption Receiver of the error message: - MS of establishment - MS of exemption	No
10050	The MessageID is not well-formed.	The MessageID of the received message is not well-formed. Rule: Technical rule defined in [DOC/SME_TS]	The code must be used by any MS that receives a message containing a MessageID that is not formed as described in [DOC/SME_TS]. Rule applicable on all messages, except the IE3C01 - Error message .	Sender of the error message: - MS of establishment - MS of exemption Receiver of the error message: - MS of establishment - MS of exemption	Yes

Error Code	Description	Details	Usage	Responsible	Covered by VM
10060	The CorrelationID is not well-formed or refers to an unknown MessageID.	The CorrelationID, used to correlate a response message with the initial message, containing in the response message is not well-formed or refers to an unknown MessageID.	The code must be used by any MS that receives a response message to an initial message containing a CorrelationID, which is not well-formed or refers to an unknown MessageID. Rule applicable on: IE3N03 – Notification; IE3C01 - Error message.	Sender of the error message: - MS of establishment - MS of exemption Receiver of the error message: - MS of establishment - MS of exemption	Partially

Table 158: Technical error codes

6.5.1.4 Notification business error codes

The below table lists the Notification business error codes enabling Member States to notify the sender of a message that a Notification business error has been detected and to identify it.

Error Code	Description	Details	Usage	Responsible	Covered by VM
20000	The VAT identification number is used in communication where it is not allowed.	The VAT identification number of the taxable person can be only used in the following information exchanges AND under the condition that the exempt identification number was not yet assigned to the taxable person: IE3N01 – Notification Notice	The code must be used by any MS that receives a message, where for identification of the taxable person the VAT identification number is used, while the exempt identification number of the taxable person must be used.	Sender of the error message: - MS of establishment - MS of exemption Receiver of the error message: - MS of establishment - MS of exemption	Partially

Error Code	Description	Details	Usage	Responsible	Covered by VM
		; • IE3N02 – Notification Request; • IE3N03 – Notification; • IE3N04 - Exemption Eligibility; • IE3N05 - Exemption Acceptance; • IE3N06 - Exemption Eligibility reminder; • IE3N07 - Additional Clarification Request; • IE3N08 - Additional Clarification. In each other communication, the exempt identification number of the taxable person must be used. Rule: NOT-RU-VATID	Rules applicable on: • IE3N01 – Notification Notice; • IE3N02 – Notification Request; • IE3N03 – Notification; • IE3N04 - Exemption Eligibility; • IE3N05 - Exemption Acceptance; • IE3N06 - Exemption Eligibility reminder; • IE3N07 - Additional Clarification Request; • IE3N08 - Additional Clarification.		
20010	The national TAX identification number is used in communication where it is not allowed.	The national TAX identification number of the taxable person can be only used in the following information exchanges AND under the condition that the exempt identification number was not yet assigned to the taxable person: • IE3N01 – Notification Notice ;	The code must be used by any MS that receives a message, where for identification of the taxable person the national TAX identification number is used, while the exempt identification number of the taxable person must be used. Rules applicable on: • IE3N01 – Notification	Sender of the error message: • MS of establishment • MS of exemption Receiver of the error message: • MS of establishment • MS of exemption	Partially

Error Code	Description	Details	Usage	Responsible	Covered by VM
		• IE3N02 – Notification Request; • IE3N03 – Notification; • IE3N04 - Exemption Eligibility; • IE3N05 - Exemption Acceptance; • IE3N06 - Exemption Eligibility reminder; • IE3N07 - Additional Clarification Request; • IE3N08 - Additional Clarification. In each other communication, the exempt identification number of the taxable person must be used. Rule: NOT-RU-TIN	Notice; • IE3N02 – Notification Request; • IE3N03 – Notification; • IE3N04 - Exemption Eligibility; • IE3N05 - Exemption Acceptance; • IE3N06 - Exemption Eligibility reminder; • IE3N07 - Additional Clarification Request; • IE3N08 - Additional Clarification.		
20020	The any other identification number is used in communication where it is not allowed.	The any other identification number of the taxable person can be only used in the following information exchanges AND under the condition that the exempt identification number was not yet assigned to the taxable person: • IE3N01 – Notification Notice • IE3N02 – Notification	The code must be used by any MS that receives a message, where for identification of the taxable person the any other identification number is used, while the exempt identification number of the taxable person must be used. Rules applicable on: • IE3N01 – Notification Notice;	Sender of the error message: • MS of establishment • MS of exemption Receiver of the error message: • MS of establishment • MS of exemption	Partially

Error Code	Description	Details	Usage	Responsible	Covered by VM
		Request; • IE3N03 – Notification; • IE3N04 - Exemption Eligibility; • IE3N05 - Exemption Acceptance; • IE3N06 - Exemption Eligibility reminder; • IE3N07 - Additional Clarification Request; • IE3N08 - Additional Clarification. In each other communication, the exempt identification number of the taxable person must be used. Rule: NOT-RU-OTHERID	• IE3N02 – Notification Request; • IE3N03 – Notification; • IE3N04 - Exemption Eligibility; • IE3N05 - Exemption Acceptance; • IE3N06 - Exemption Eligibility reminder; • IE3N07 - Additional Clarification Request; • IE3N08 - Additional Clarification.		
20030	Change datetimes for a given taxable person are not unique.	For a given taxable person, all change datetimes included in his registration records must be unique. Rule: NOT-RU-CHANGE-DATETIME	The code must be used by any MS that receives a message containing several registration records for a given taxable person with the exact same “Change Datetime” value. Rule applicable on: • IE3N03 – Notification.	Sender of the error message: • MS of exemption Receiver of the error message: • MS of establishment	Partially
20040	The combination of the Member State and the year for one single	There can be only one combination of the Member State and year for one single taxable	The code must be used by any MS that receives a message where the combination of the	Sender of the error message: • MS of exemption Receiver of the error message:	Partially

Error Code	Description	Details	Usage	Responsible	Covered by VM
	taxable person is not unique.	person. Rule: NOT-RU-YEAR	Member State and the year for one single taxable person is not unique. Rule applicable on: IE3N03 – Notification.	MS of establishment	

Table 159: Notification business error codes

6.5.1.5 Quarterly report business error codes

The bellow table lists the Quarterly report business error codes enabling Member States to notify the sender of a message that a Quarterly report business error has been detected and to identify it.

Error Code	Description	Details	Usage	Responsible	Covered by VM
30000	The submission date is earlier than the first date of the month following the period of the Quarterly report.	The Submission Date of the Quarterly Report must be later than the last day of the Period of the Quarterly Report. Rule: QR-RU-SUBMIT-DATE	The code must be used by MS of exemption that receives a Quarterly report where the Submission Date of the Quarterly Report is earlier than the first date of the month following the period of the Quarterly Report. Rule applicable on: Rule applicable on: IE3Q02 – Quarterly Report	Sender of the error message: - MS of exemption Receiver of the error message: - MS of establishment	Yes

Error Code	Description	Details	Usage	Responsible	Covered by VM
30010	The Quarterly report period Start date is wrong.	Start date must be within the declared VAT Return period; The Start date of the Quarterly report period must comply with the following rules: - Start date must be within the declared Quarterly report period; - Start date must be earlier than the last day of the Quarterly report period; - If Start date is defined, also an End date must be defined; - Start date must be lower or equal to End date. Rule: QR-RU-PERIOD-START-DATE	The code must be used by MS of exemption that receives a Quarterly report, where the Quarterly report Start date does not comply with the rules listed in the “Details” column. Rule applicable on: IE3Q02 – Quarterly Report	Sender of the error message: - MS of exemption Receiver of the error message: - MS of establishment	Yes
30020	The Quarterly report period End date is wrong.	The End date of the Quarterly report period must comply with the following rules: - End date must be within the declared Quarterly report period; - End date must be later than the first day of the	The code must be used by MS of exemption that receives a Quarterly report, where the Quarterly report End date does not comply with the rules listed in the “Details” column. Rule applicable on:	Sender of the error message: - MS of exemption Receiver of the error message: - MS of establishment	Yes

Error Code	Description	Details	Usage	Responsible	Covered by VM
		Quarterly report period; c) If End date is defined, also a Start date must be defined. Rule: QR-RU-PERIOD-END-DATE	IE3Q02 – Quarterly Report		
30030	Taxable person registered in Northern Ireland reported supplies of services.	If the MS of establishment equals to Northern Ireland, the taxable person registered there cannot report supplies of services in any MS of exemption. Rule: QR-RU-MSEST-SUPPLY-SERVICES-NI	The code must be used by MS of exemption that receives a Quarterly report, which contains supplies of services originating from Northern Ireland. Rule applicable on: IE3Q02 – Quarterly Report	Sender of the error message: - MS of exemption Receiver of the error message: - MS of establishment	No
30040	Taxable person registered in MS of establishment other than Northern Ireland reported supplies of services in Northern Ireland.	Where the supplies take place in Northern Ireland, the taxable person established in a Member State cannot declare supply of services carried out from that Member State to Northern Ireland. Rule: QR-RU-MSEST-SUPPLY-SERVICES-MSEX-NI	The code must be used by Northern Ireland that receives a Quarterly report, which contains supplies of services from Member State. Rule applicable on: IE3Q02 – Quarterly Report	Sender of the error message: - MS of exemption Receiver of the error message: - MS of establishment	No

Table 160: Quarterly report error codes

6.5.1.6 Common business error codes

The bellow table lists the common business error codes enabling Member States to notify the sender of a message that a common business error has been detected and to identify it.

Error Code	Description	Details	Usage	Responsible	Covered by VM
40000	The format of the exempt identification number assigned to a taxable person does not comply with the defined format.	The format of the exempt identification number results from the concatenation of the following fields: • The ISO numeric-2 country code of the MS of establishment; • The existing VAT identification number or the national Tax identification number of the taxable person or any other number for the purpose of the identification; • Hyphen (or minus) character “-“; • Suffix “EX”. Rule: QR-RU-EXEMPT-IDENTIFICATION-NUMBER	The code must be used by any MS receiving a message containing an exempt identification number which does not comply with the defined format. Rule applicable on: • Each message, which may contain the exempt identification number of the taxable person.	Sender of the error message: • MS of establishment • MS of exemption Receiver of the error message: • MS of establishment • MS of exemption	Partially
40010	The format of the Quarterly report reference number does not comply with the	The format of the Quarterly report reference number results from the concatenation of the	The code must be used by MS of exemption that receives a message containing a Quarterly report reference number which	Sender of the error message: • MS of exemption Receiver of the error message:	Yes

Error Code	Description	Details	Usage	Responsible	Covered by VM
	defined format.	following fields: • Two upper case letters between A and Z, representing the ISO-3166 two letter country code; • Exempt identification number or the taxable person; • Period of the Quarterly report; • Year of the Quarterly report. Rule: QR-RU-QUARTERLY-REPORT-REF-FORMAT	does not comply with the defined format. Rule applicable on: • IE3Q01 - Quarterly report request • IE3Q02 – Quarterly Report • IE3Q03 - Quarterly Report non-compliance • IE3Q04 - Quarterly Report correction notification • IE3C01 - Error message	• MS of establishment	

Table 161: Common business error codes

7 FUNCTIONAL REQUIREMENTS

The section defines the functional requirements for the SME processes.

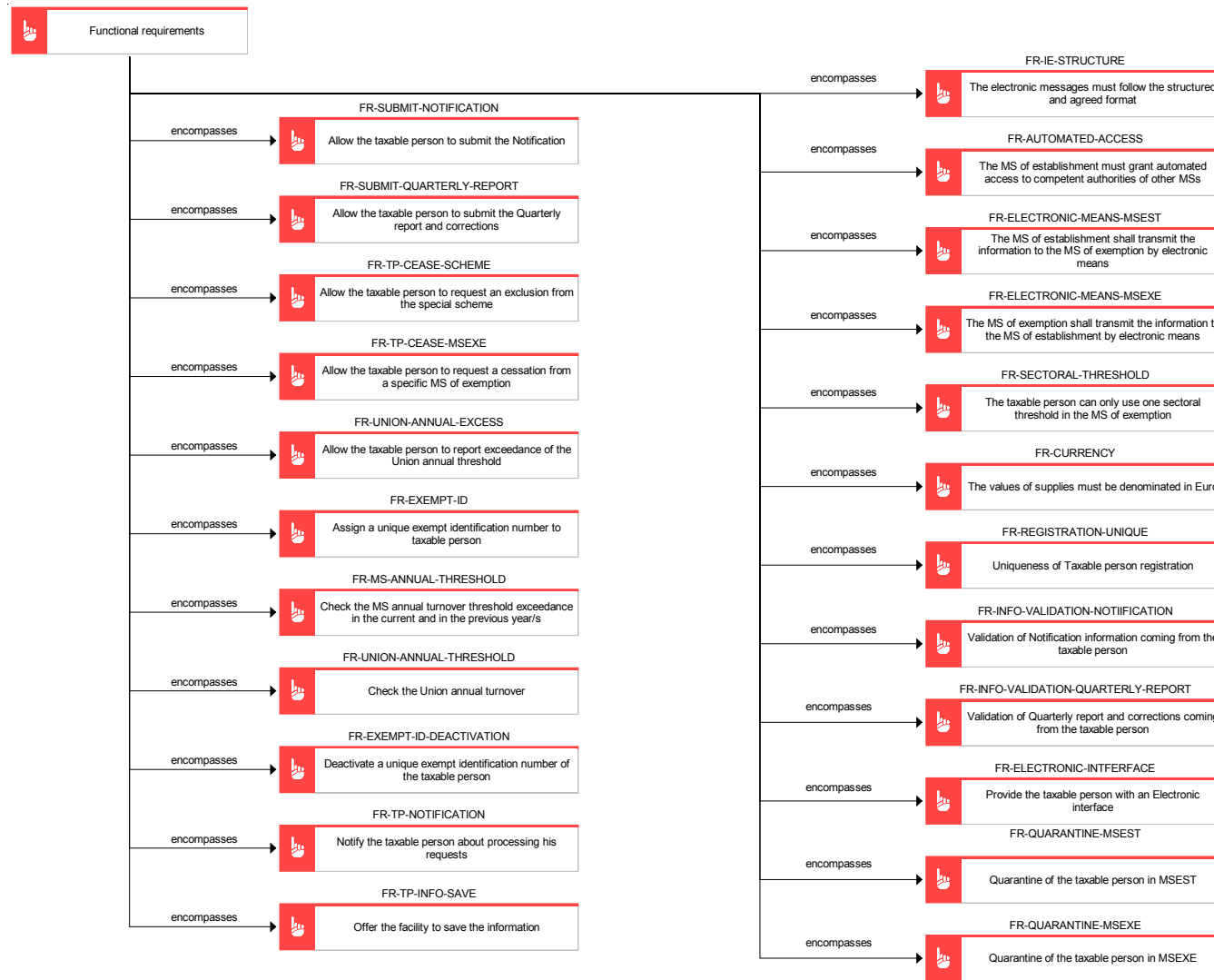


Figure 55: Functional requirements of the SME special scheme

7.1 MODEL MAINTAINED PROPERTIES

Model Property	Property Value
Name	Functional requirements
Identifier	MCC.2910500
Description/Definition	The diagram lists the functional requirements of the special scheme for small enterprises.
Type	Requirements tree

Table 162: Maintained Properties of the model

7.2 OBJECT MAINTAINED PROPERTIES

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
Allow the taxable person to report exceedance of the Union annual threshold	The MS of establishment must allow the taxable person to report the exceedance of the Union annual threshold. The taxable person shall inform the MS of establishment within 15 working days of that fact.	MCC.2955400	[F]	FR-UNION-ANNUAL-EXCESS	Article 284b (3) [DIR 2020/285]	Must
Allow the taxable person to request a cessation from a specific MS of exemption	The MS of establishment must allow the taxable person to cease applying the exemption scheme in a MS in which that taxable person is not established. The cessation shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person	MCC.2955240	[F]	FR-TP-CEASE-MSEXE	Article 284 (4) [DIR 2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter.					
Allow the taxable person to request an exclusion from the special scheme	The MS of establishment must allow the taxable person to cease to apply the exemption and voluntarily leave the special scheme. The cessation shall be effective as of the first day of the next calendar quarter following the receipt of the information from the taxable person or, where such information is received during the last month of a calendar quarter, as of the first day of the second month of the next calendar quarter.	MCC.2910520	[F]	FR-TP-CEASE-SCHEME	Article 284 (4) [DIR 2020/285]	Must
Allow the taxable person to submit the Notification	The MS of establishment must allow the taxable person to submit the Prior Notification or an update of the Prior Notification to the MS of establishment.	MCC.2955300	[F]	FR-SUBMIT-NOTIFICATION	Article 284 (3) (4) [DIR 2020/285]	Must
Allow the taxable person to submit the Quarterly report	The MS of establishment must allow the taxable person to submit the Quarterly report and corrections.	MCC.2955320	[F]	FR-SUBMIT-QUARTERLY-REPORT	Article 284b (1) (2) [DIR 2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
and corrections	The taxable person shall communicate this information within one month from the end of the calendar quarter.					
Assign a unique exempt identification number to taxable person	MS of establishment must be able to assign unique exempt identification number to taxable person. The MS of establishment may use the individual VAT identification number already allocated to the taxable person in respect of that person's obligations under the internal system or apply the structure of a VAT number or any other number for the purpose of the identification. The unique exempt identification number will be a combination of the following information: * The code of the MS of establishment issuing the exempt identification number (issuedBy attribute); * The existing VAT identification number or the national Tax identification number of the taxable	MCC.2910560	[F]	FR-EXEMPT-ID	Article 284 3(b) [DIR 2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	person or any other number for the purpose of the identification; * Dash character "-"; * Suffix 'EX'.					
Check the MS annual turnover threshold exceedance in the current and in the previous year/s	The MS of exemption shall within 15 working days, after receiving the information on the availability of the Prior Notification or an update from the MS of establishment, calculate on the basis of the total values of supplies reported by the taxable person, that the MS annual turnover threshold was not exceeded during the current and preceding calendar years and that the conditions referred to in Article 288a(1) of that Directive are fulfilled.	MCC.2910580	[F]	FR-MS-ANNUAL-THRESHOLD	Article 37b (2) [DIR 2020/285]	Must
Check the Union annual turnover	The MS of establishment, to which a taxable person has given a Prior Notification or a subsequent updates shall, before identifying the taxable person or confirming the exempt individual identification number to the taxable person, calculate on the basis of the total values of supplies reported by the taxable person, that	MCC.2910600	[F]	FR-UNION-ANNUAL-THRESHOLD	Article 37b (1) [DIR 2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	the Union annual turnover threshold was not exceeded during the current and the preceding calendar year. If the taxable person exceeded the Union annual threshold, his request will be rejected.					
Deactivate a unique exempt identification number of the taxable person	MS of establishment must be able to deactivate the unique exempt identification number of the taxable person. The deactivation of the exempt identification number shall be performed in the following cases: 1. The Union annual turnover of the taxable person has exceeded the Union turnover threshold; 2. The taxable person is not eligible to benefit from the exemption in any of the MS of exemption; 3. The taxable person has informed of its decision to cease to apply the exemption; 4. The taxable person has informed, or it may otherwise be assumed, that his activities have ceased, or it has changed its MEST.	MCC.2910640	[F]	FR-EXEMPT-ID-DEACTIVATION	Article 284e [DIR 2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
Functional requirements	List of the functional requirements of the special scheme for small enterprises.	MCC.2910660				
Notify the taxable person about processing his requests	The MS of establishment should inform the taxable person about the status of processing the Prior Notification or update of the Prior Notification. This may lead to informing the taxable person about his exclusion from the special scheme or cessation from benefiting from the exemption in a MS of exemption. The MS of establishment does not directly notify the taxable person about the status of the Quarterly report, but as a result of the Quarterly report validation, the MS of establishment may inform the taxable person about his exclusion from the special scheme or cessation from benefiting from the exemption in a MS of exemption. The notification to taxable person is a national matter, not foreseen in the legal basis but highly recommended for the correct application of the	MCC.2910680	[F]	FR-TP-NOTIFICATION		Should

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	SME scheme.					
Offer the facility to save the information	If the taxable person is required to submit: * Prior Notification; * update of the Prior notification; * report the value of supplies for use of the special scheme; * report exceeding of Union annual threshold; via an electronic interface in the Member State of establishment, the MS of establishment must offer the taxable person with ability to save the information and any change to that information to be provided pursuant to Article 284(3) and (4) and Articles 284a and 284b of Directive 2006/112/EC. The taxable person must be able to reuse and update that information any time.	MCC.2910700	[F]	FR-TP-INFO-SAVE	Article 2 [CIR 2021/2007]	Must
Provide the taxable person with an Electronic interface	The MS of establishment may provide the taxable person with an electronic interface, by which the taxable person is able to submit the following information:	MCC.2910720	[F]	FR-ELECTRONIC-INTERFACE	Article 2 [CIR 2021/2007] and Article 284c(2) of Directive 2006/112/EC	Should

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	* Prior Notification; * update of the Prior notification; * report the value of supplies for use of the special scheme; * report exceeding of Union annual threshold. The MS of establishment is free to provide additional functionalities to further reduce administrative burdens.					
Quarantine of the taxable person in MEST	A taxable person shall not be able to benefit from the exemption during a period of one calendar year where the Union annual threshold was exceeded in the preceding calendar year. Where, during a calendar year, the Union annual turnover threshold referred to in point (a) of Article 284(2) is exceeded, the exemption provided for in Article 284(1) granted to a taxable person not established in the Member State granting that exemption shall cease to apply as of that time.	MCC.2910740	[F]	FR- QUARANTINE- MEST	Article 288a (1) [DIR 2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
Quarantine of the taxable person in MSEX	A taxable person shall not be able to benefit from the exemption during a period of one calendar year where the MS annual threshold was exceeded in the preceding calendar year. The MS of exemption may extend this period to two calendar years. Where, during a calendar year, the MS annual threshold is exceeded by: * not more than 10 %, a taxable person shall be able to continue to benefit from the exemption during that calendar year; * more than 10 %, the exemption shall cease to apply as of that time. Notwithstanding with the above-mentioned points, MS of exemption may set a ceiling of 25 % or allow the taxable person to continue to benefit from the exemption without any ceiling during the calendar year when the threshold is exceeded. However, the application of this ceiling or option may not result in exempting a taxable person whose	MCC.3145900	[F]	FR- QUARANTINE- MSEX	Article 288a (1) [DIR 2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	turnover within the MS of the exemption exceeds EUR 100.000.					
The electronic messages must follow the structured and agreed format	The information exchanges, using the electronic messages, must be exchanged in uniform manner. The electronic messages must follow the agreed structure and format.	MCC.2910760	[F]	FR-IE-STRUCTURE	Article 37a (2) and Article 37b (4) [DIR2020/285]	Must
The MS of establishment must grant automated access to competent authorities of other MSs	The MS of establishment shall grant the competent authorities of other Member States automated access to the information collected and stored in accordance with Article 17(1g) of Regulation 904/2010, via the CCN/CSI network or via an equivalent secure network or system at least the details set in Article 21(2b) of Regulation 904/2010 shall be accessible.	MCC.2910780	[F]	FR-AUTOMATED-ACCESS	Article 3[CIR 2021/2007]	Must
The MS of establishment shall transmit the information to the MS of exemption by electronic means	The MS of establishment shall transmit the following information by electronic means to the competent authorities of the MS of exemption within 15 working days from the date on which the information becomes available: * as regards prior notification or update to a prior notification, as	MCC.2910800	[F]	FR-ELECTRONIC-MEANS-MSEST	Article 4 (2) [CIR 2021/2007]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	referred to in Article 284(3) or (4) of Directive 2006/112/EC, in order to inform the Member State concerned of a taxable person seeking the exemption: (i) the exempt individual identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010, or, if not yet available; (ii) any other number for the purpose of the identification of the taxable person; * as regards the prior notification or the update to a prior notification referred to in Article 284(3) or (4) of Directive 2006/112/EC, subsequent to having informed the taxable person of its exempt individual identification number or having confirmed the number to the taxable person as referred to in Article 284(5) of Directive 2006/112/EC: (i) the exempt individual identification number assigned to that taxable person referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; and 17.11.2021 EN					

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	Official Journal of the European Union L 407/29 (ii) the date of commencement of the exemption referred to in Article 21(2b), point (d), of Regulation (EU) No 904/2010 in respect of the taxable person in the Member State concerned; * as regards any taxable person whose Union annual turnover has exceeded the amount referred to in Article 284(2), point (a), of Directive 2006/112/EC: (i) the exempt individual identification number of that taxable person, referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; and (ii) the date on which the Union annual turnover of that taxable person exceeded the amount referred to in Article 284(2), point (a), of Directive 2006/112/EC; * as regards any taxable person who has failed to comply with the reporting obligations laid down in Article 284b of Directive 2006/112/EC: (i) the exempt individual identification number of					

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	that taxable person referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; and (ii) the fact of failure to comply with those obligations.					
The MS of exemption shall transmit the information to the MS of establishment by electronic means	The MS of exemption shall transmit the following information by electronic means to the MS of establishment within 15 working days after receiving the notification on the Prior Notification or update to Prior Notification from the MS of establishment: * as regards taxable person's eligibility to the exemption in that MS of exemption, the exempt individual identification number of the taxable person, whether or not the annual turnover threshold was exceeded during the current calendar year; whether the conditions referred to in Article 288 a(1) [DIR 2006/112] are fulfilled, and potentially a request for additional information. The MS of exemption shall transmit the following information by	MCC.2910820	[F]	FR-ELECTRONIC-MEANS-MSEXE	Article 4 (3) [CIR 2021/2007]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	electronic means to the MS of establishment without delay: * as regards the taxable person cessation to be eligible for exemption, without delay, the exempt individual identification number of the taxable person and the date on which the taxable person ceased to be eligible for the exemption; * as regards the cessation of the application of the special scheme for small enterprises in the Member State of exemption, the date on which the special scheme for small enterprises has ceased to apply in that MS of exemption.					
The taxable person can only use one sectoral threshold in the MS of exemption	Where MS of exemption applies varying thresholds for different business sectors, this would need to be based on objective criteria. Where a taxable person is eligible to benefit from more than one sectoral threshold, MS of exemption must ensure that the taxable person can only use one of those thresholds.	MCC.2910840	[F]	FR-SECTORAL-THRESHOLD	Article 284 (1) [DIR 2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
The values of supplies must be denominated in Euro	All the values of supplies of goods and services declared either in the Notification or in Quarterly report must be denominated in Euro. MS of exemption, which has not adopted the euro may require the values to be expressed in its national currency. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on the next day of publication.	MCC.2910860	[F]	FR-CURRENCY	Art. 284c(1)(1) (b) and 284c(1) (2) [DIR 2020/285]	Must
Uniqueness of Taxable person registration	The taxable person can be registered for the purposes of the special scheme in one MS of establishment only. Multiple registrations are not allowed.	MCC.2910880	[F]	FR-REGISTRATIO N-UNIQUE	Article 284(3)(b) [DIR 2020/285]	Must
Validation of Notification information coming from the taxable person	Both MS of establishment and MS of exemption must be able to validate the Notification information coming from the taxable person. The MS of establishment is responsible	MCC.2910900	[F]	FR-INFO- VALIDATION- NOTIIFICATIO N	Article 284 (1), Article 284a (1), Article 288a (1) [DIR2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	for validation of information at Union level, the MS of exemption is responsible for validation of eligibility to benefit of the exemption in that MS of exemption. If the validation of the taxable person's request to avail of the special scheme fails at the MS of establishment side, the taxable person will not be able to use the special scheme at all. If the validation of eligibility fails at the MS of exemption side, the taxable person still can try to avail himself of exemption in other MS of exemption.					
Validation of Quarterly report and corrections coming from the taxable person	Both MS of establishment and MS of exemption must be able to validate the Quarterly report and corrections coming from the taxable person. The MS of establishment is responsible for validation of information at Union level, the MS of exemption is responsible for validation of eligibility to benefit of the exemption in that MS of	MCC.2954380	[F]	FR-INFO-VALIDATION-QUARTERLY-REPORT	Article 284 (1), Article 288a (1), Article 284b [DIR2020/285]	Must

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	exemption. If the Union annual threshold is exceeded by the taxable person, the taxable person will not be able to use the special scheme at all and will be excluded (the exempt identification number of the taxable person will be deactivated). Where a taxable person fails to comply with the rules provided for in Article 284b, Member States may require such a taxable person to fulfil VAT obligations.					

Table 163: Maintained Properties of the objects

8 NON-FUNCTIONAL REQUIREMENTS

The section defines the non-functional requirements for the SME processes

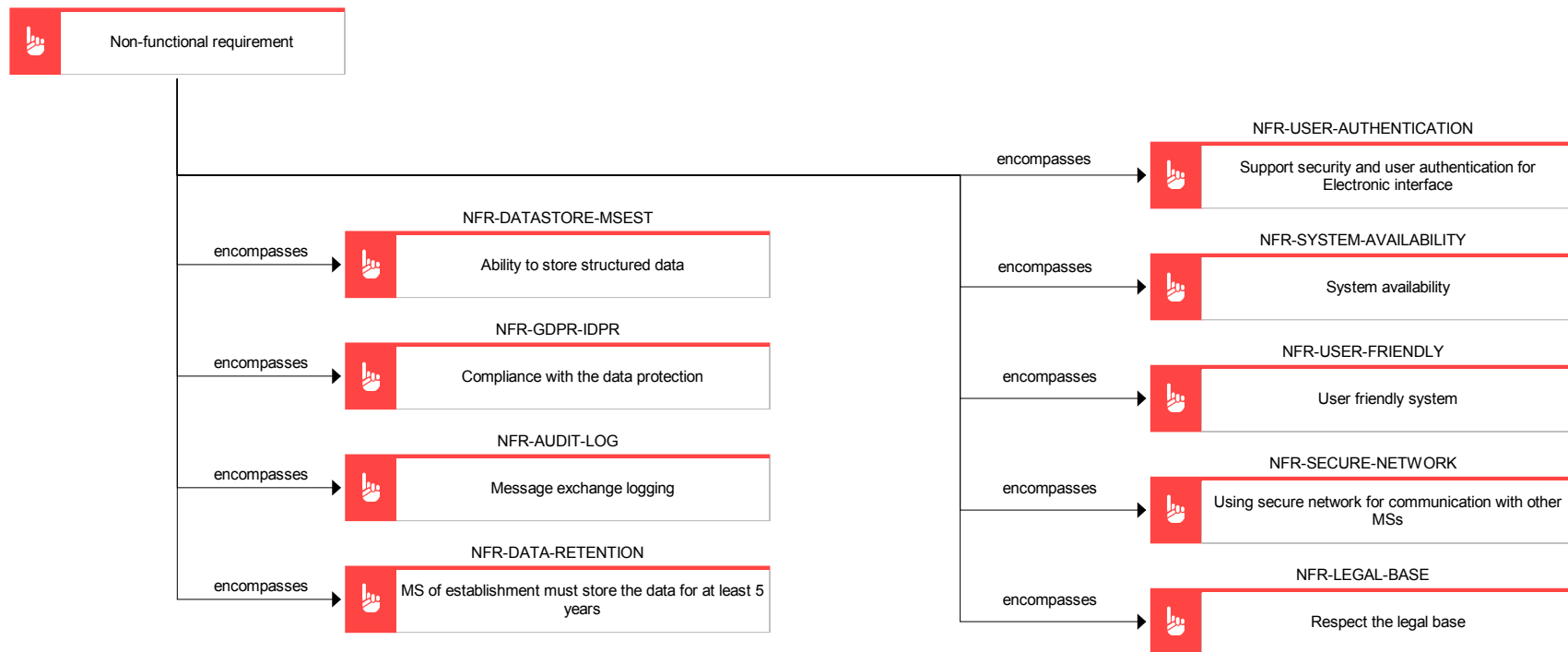


Figure 56: Non-functional requirements of the SME special scheme

8.1 MODEL MAINTAINED PROPERTIES

Model Property	Property Value
Name	Non-functional requirements
Identifier	MCC.2910960
Description/Definition	The diagram lists the non-functional requirements of the special scheme for small enterprises.
Type	Requirements tree

Table: Maintained Properties of the model

8.2 OBJECT MAINTAINED PROPERTIES

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
Ability to store structured data	The data store of the MS of establishment must be able to store the data in structured format, compliant with the defined data model.	MCC.2910980	[N]	NFR-DATASTORE-MSEST	Article 17 (1)(g) [REG2010/904]	Must
Compliance with the data protection	Both MS of establishment and MS of exemption must use the data in the system in compliance with the legal base and GDPR/IDPR rules.	MCC.2911000	[N]	NFR-GDPR-IDPR		Must
Message exchange logging	The MSEST system must provide unified and detailed auditing related to information exchanges between the MSs. The log must at least contain the datetime of information exchange, the sending MS, and the message type.	MCC.2911020	[N]	NFR-AUDIT-LOG		Must
MS of establishment must store the data for at least 5 years	The MS of establishment must store the data related to Special scheme for Small Enterprises for at least five years from the end of the first calendar year in which access to the information is to be granted.	MCC.2911040	[N]	NFR-DATA-RETENTION	Article 18 [REG 2010/904]	Must
Non-functional requirement	List of the non-functional requirements of the special scheme for small enterprises.	MCC.2911060				

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
Respect the legal base	The MEST system must respect the legal base, mainly the Directive 2020/285, Commission Implementing Regulation 2021/2007, Directive 2006/112, Regulation 2010/904, and Directive (EU) 2022/542.	MCC.2911080	[N]	NFR-LEGAL-BASE	DIRECTIVE (EU) 2022/542	Must
Support security and user authentication for Electronic interface	If the MS of the establishment provides the taxable person with an electronic interface allowing the taxable person to submit a Prior Notification, any update to that Prior Notification, and to report the value of supplies for use of the special scheme, this interface will be accessible only to authenticated users. The transmission is proposed to be performed in a secure manner.	MCC.2911120	[N]	NFR-USER-AUTHENTICATION		Should
System availability	The system must respect availability targets as defined in the Service Level Agreement.	MCC.2911140	[N]	NFR-SYSTEM-AVAILABILITY		Must
User friendly system	The end user (taxable person) is able to use the system and its functions easily (user friendly environment). The taxable person may be allowed to submit a Prior Notification, an update to that Prior Notification, or	MCC.2911160	[N]	NFR-USER-FRIENDLY		Should

Name	Description/Definition	Identifier	Requirement type	Reference ID	Legal Reference	Requirement Category
	Quarterly report via an electronic interface, if provided by the MS of establishment. Note: this is a national matter related to the MS of establishment.					
Using secure network for communication with other MSs	The MS of establishment and MS of exemption must communicate by electronic means, via the CCN/CSI network or via an equivalent secure network or system.	MCC.2911180	[N]	NFR-SECURE-NETWORK	Article 3 and 4 [CIR 2021/2007]	Must

Table 164: Maintained Properties of the objects

9 NATIONAL APPLICATION GUIDELINES

The following subsections depicts some guidelines for the development of the national application. The guidelines in this section are applicable for those MSs of establishment, which require the taxable person to submit the special scheme related information via an electronic interface as defined in Art. 2 [CIR2021/2007].

However, design of the electronic interface is a national matter. The guidelines described in the sections below represent some recommendations only and the MSs of establishment are free to design the electronic interface on their own.

9.1 NATIONAL WEBSITE GUIDELINES

The below table depicts some guidelines related to development of the user interface, used by the taxable person.

ID	Description
NAG-UI-01	<u>On-screen validation</u> Mandatory elements should be clearly indicated and checked on their presence. The electronic interface should also validate those business rules, which can be validated without direct access to MEST data store.
NAG-UI-02	<u>Prefiling of elements</u> For submission of information coming from the taxable person to MS of establishment, the electronic interface should prefill those data elements, which have already been previously entered by the taxable person. In addition, pursuant to Article 284a(2), Where the taxable person informs the Member State of establishment in accordance with Article 284(4) that it intends to avail itself of the exemption in a Member State or Member States other than the ones indicated in the prior notification, that person is not obliged to give the information that has already been included in previous quarterly reports submitted under Article 284b.
NAG-UI-03	<u>Communication with the taxable person</u> The MS of establishment should communicate with the taxable person by means of email or a notification, performed via the electronic interface. The communication mostly relates to the following (but not limited to that): • Approval or rejection of the Prior Notification or of an update to Prior Notification; • Exclusion of the taxable person from the special scheme; • Cessation of the taxable person from MS of exemption.
NAG-UI-04	<u>Taxable person account activation</u> When the taxable person first time registers into the SME system of the MS of

	establishment, the system should request the taxable person to confirm his email address by sending an email to the taxable person. The taxable person's account will be only activated after the taxable person confirmed his email address.
NAG-UI-05	<u>Re-registration of the taxable person</u> If the taxable person was excluded from the special scheme (either on voluntary request or on decision of the MS of establishment), the system should allow the taxable person to re-register for the special scheme by supplying the previous credentials.
NAG-UI-06	<u>Data Entry Advice</u> The MS of establishment should provide advice for filling in the Notification information and Quarterly report (for example as text next to the data entry fields).
NAG-UI-07	<u>Steps number limitation</u> The required steps to complete data entry for a process should be limited to the strictly needed steps and screens.
NAG-UI-08	<u>Graphical User Interface</u> The national website should use a user-friendly graphical user interface to guide the user through the data entry processes.

Table 165: National Application Guidelines – User Interface

9.2 COMMUNICATION WITH THE TAXABLE PERSON

This section contains some templates, which could be used by the MS of establishment for communication with the taxable person. The examples are for guidance only, the MSs of establishment are free to adopt their own text.

9.2.1 Exempt acceptance

The following template contains an example of a notification, which informs the taxable person about acceptance of the Prior Notification or of an update to the Prior Notification. The exemption shall apply as regards the Member State in which the taxable person is not established and where that taxable person intends to avail itself of the exemption according to:

- (a) a prior notification, from the date of informing the taxable person of the exempt individual identification number by the Member State of establishment; or
- (b) an update to a prior notification, from the date of confirming the number to the taxable person in consequence of his update by the Member State of establishment.

As regards the update of the Prior Notification, this template covers only change in portfolio of the MSs of exemption, where the taxable person benefits of the exemption (addition or cessation). For an update of the taxable person's identity information please refer to section 9.2.3.

<Salutation>

We have accepted your request to avail yourself of the SME special scheme.

You have been successfully approved to benefit from the exemption in the following Member States of exemption:

<List of Member States of exemption>

The approval is valid as from <Commencement date>.

For all communication with the Member State where you are established, please use the following unique identifier assigned to you:

BE123456789-EX

Sincerely,

<Signature>

9.2.2 Exempt denial

The following template contains an example of a notification, which informs the taxable person about denial of the Prior Notification or of an update to the Prior Notification. As regards the update of the Prior Notification, this template covers only change in portfolio of the MSs of exemption, where the taxable person benefits of the exemption (addition or cessation). For an update of the taxable person's identity information please refer to section 9.2.4.

<Salutation>

Please be informed that we have denied your request to avail yourself of the SME special scheme. The reason of denial is <Exclusion reason>.

You are not allowed to benefit from the exemption in any Member States of exemption.

The decision is valid as from <Exclusion effective date>.

You are <prevented OR not prevented> to register for the SME Special Scheme <before [date] due to quarantine OR on condition that you fulfil all the conditions required to use the SME special scheme>.

Please be informed that if the exclusion has been made by mistake, the exclusion can be reversed until <date>, allowing you to use the SME Special Scheme. After that date, the exclusion will be definitive, and you will have to fill-in and submit a Prior Notification to avail yourself in the SME special scheme.

Sincerely,

<Signature>

9.2.3 Acceptance of the identity information update

The following template contains an example of a notification, which informs the taxable person about acceptance of his request to update the Notification as regards his identity information.

<Salutation>

We have accepted your request to update your identity information within the scope of the SME special scheme.

You are entitled to continue benefiting from the exemption in the following Member States of exemption:

<List of Member States of exemption>

Your unique identifier remains the same:

BE123456789-EX

Sincerely,

<Signature>

9.2.4 Refusal of the identity information update

The following template contains an example of a notification, which informs the taxable person about refusal of his request to update the Notification as regards his identity information.

<Salutation>

We have refused your request to update your identity information within the scope of the SME special scheme. The reason of refusal is <Exclusion reason>.

You are still entitled to continue benefiting from the exemption in the following Member States of exemption:

<List of Member States of exemption>

Your unique identifier remains the same:

BE123456789-EX

Sincerely,

<Signature>

9.2.5 Exclusion information

The following template contains an example of a notification, which informs the taxable person that he was excluded from the SME special scheme.

<Salutation>

Please be informed that you have been excluded from the SME Special Scheme for <Exclusion reason>. The exclusion is valid as from <Exclusion effective date>.

You are <prevented OR not prevented> to register for the Special Scheme <before [date] due to quarantine OR on condition that you fulfil all the pre-conditions required to use the SME special scheme>.

Please be informed that if the exclusion has been made by mistake, the exclusion can be reversed until <date>, allowing you to use the SME special scheme as before. After that date, the exclusion will be definitive, and you will have to fill-in and submit a Prior Notification to avail yourself in the SME special scheme.

<Signature>

9.2.6 Cessation information

The following template contains an example of a notification, which informs the taxable person that he was ceased from benefiting from the exemption in one or more MS(s) of exemption.

<Salutation>

Please be informed that you have been ceased from benefiting of the exemption in the following Member States of exemption:

<List of Member States of exemption>

The reason of the cessation is <Cessation reason>. The cessation is valid as from <Cessation effective date>.

Please be informed that if the cessation has been made by mistake, the cessation can be reversed until <date>, allowing you to benefit of the exemption as before. After that date, the cessation will be definitive, and you will have to fill-in and submit an update to the Prior Notification to be eligible to benefit from the exemption again.

Please note that if the reason of cessation is that the Member State of exemption has ceased to grant the exemption, you cannot request reversing your cessation in that Member State of exemption.

<Signature>

9.2.7 Denial of the Notification update – exceedance of the Union annual threshold

The following template contains an example of a notification, which informs the taxable person that his information related the exceedance of the Union annual threshold was denied. The reason is that either the exceedance information leads to an ambiguity, or the Union annual threshold was not exceeded according to MS of establishment calculations.

<Salutation>

Please be informed that your information related the exceedance of the Union annual threshold was denied. The reason of denial is <Denial reason>.

Sincerely,

<Signature>

9.3 ELECTRONIC INTERFACE SIMULATION

The section describes the electronic interface, by which the taxable person may be required to submit a Prior Notification, any update to that notification and to report the value of supplies for the use of the special scheme in another Member State. The electronic interface shall offer the facility to save the information and any change to that information.

Please note that this section is for presentation purposes only and does not bind the Member States to follow it.

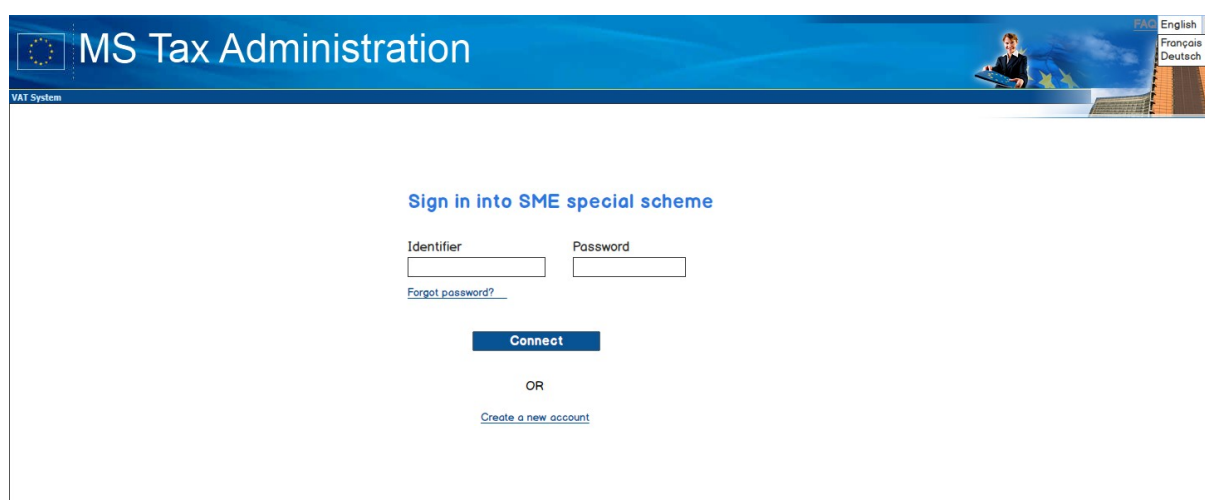
General approach of the electronic interface is the following:

- Fields marked with a star are mandatory;
- Fields, for which the MS of establishment already possesses the information, are pre-filled;
- Fields, which cannot be changed by the taxable person, are non-editable and pre-filled by the MS of establishment (like the exempt identification number, for example);
- All other fields are initially empty and editable;
- The “Save and submit” button is disabled until the taxable person enters all the mandatory information;
- The “Save without submission” button allows the taxable person to save the notification information or the Quarterly report before submitting it to the MS of establishment.

9.3.1 Prior Notification

The section presents the electronic interface to fill-in and submit the Prior Notification or an update to the Prior Notification.

The below presented figure depicts the entry point into the SME portal. The interface proposes the taxable person either to log into the SME portal or to create a new account. It is proposed to perform the email address verification in case of creating a new account.



The screenshot shows the 'MS Tax Administration' portal. At the top, there is a blue header with the European Union flag on the left and language selection options (English, Français, Deutsch) on the right. Below the header, the main content area is white. It features a blue link 'Sign in into SME special scheme'. Under this link, there are two input fields: 'Identifier' and 'Password'. Below the 'Identifier' field is a blue link 'Forgot password?'. Below the 'Password' field is a blue button labeled 'Connect'. Below the 'Connect' button is the text 'OR' and a blue link 'Create a new account'.

Figure 57: Electronic interface – Log in

The below depicted electronic interface allows the taxable person to select one of the following:

- To elaborate or update an existing Prior notification;
- To elaborate the Quarterly report or a correction of an existing Quarterly report.

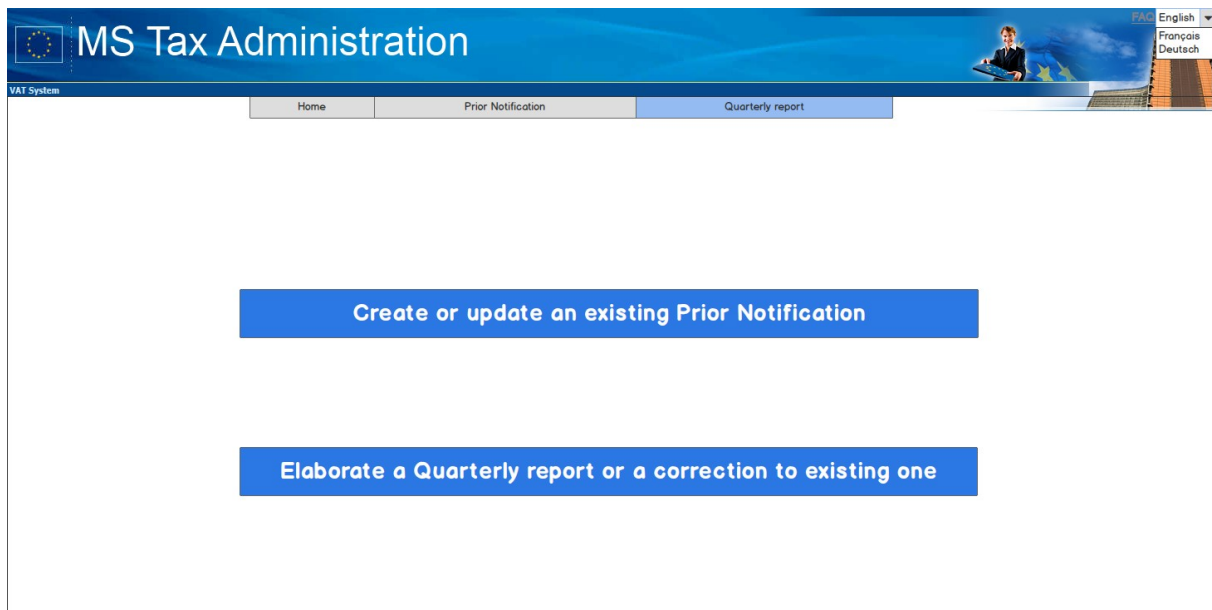


Figure 58: Electronic interface – Activity selection

The purpose of the following electronic interface is elaboration and submission of the Prior Notification. The interface does not cover update of an existing Prior Notification. That is covered by separate electronic interfaces.

The Prior Notification electronic interface collects the information needed for evaluation, whether the taxable person:

- Can be registered in the SME special scheme;
- Is eligible to benefit from the exemption in a specific MS(s) of exemption.



MS Tax Administration

[FAQ](#)
[English](#)
[Français](#)
[Deutsch](#)

VAT System

- Related activities
- Prior Notification**
- Change MS(S) of exemption
- Change Identity information
- Exclusion request
- Union annual threshold exceeded

[Home](#)
[Prior Notification](#)
[Quarterly Report](#)

Prior Notification

Identification

VAT Identification Number
BE 0123456789

If no VAT Identification Number available:

National Tax Reference Number
BE 9876543210

OR:

Any other number for purpose of the identification
987654321012

Taxable person name *
My name

Activity type *

Business sector

Legal form *

Select one

Select one

Select one

☐ Are you registered in OSS Union special scheme?

If yes, what is your identifier in OSS Union scheme?
OSS Union scheme identifier

Contact

Address:

Street *

Number *

Post Code *

City *

Member State *

Rue de Neuve

12b

1020

Bruxelles

Belgium

Telephone number
+32 2 12345678

Email address
contact@mycompany.com

Website
http://myweb.com

Member State(s) in which you intend to avail yourself of exemption

At least one Member State is mandatory

Member State

France

Add another Member State

Total value of supplies carried out by the taxable person

The information is mandatory for Member State where you are established and for each other Member State. Enter "0" if no supplies have been made.

Note:

- the values shall consist only in the amounts listed in Article 288 of Directive 2006/112/EC
- the values shall be denominated in euro. Member States which have not adopted the euro may require the values to be expressed in their national currencies. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day or, if there is no publication on that day, on the next day of publication
- where the Member State granting the exemption applies varying thresholds for different business sectors, the taxable person shall be obliged in respect of that Member State to report separately the total value of supplies of goods and/or services as regards each threshold that may be applicable

Please check whether the supplies you want to report for exemption do not fall between the transactions excluded from the SME special scheme. In addition, the Member State of exemption may also exclude some transactions from SME special scheme. You can find more information on the Commission web site [Provisions of the SME special scheme](#)

Total value of supplies carried out during the current calendar year

Member State *

France

Total value of supplies (€) *

78 000,00

Add the next Member State

Total value of supplies carried out during the previous calendar year

Member State *

France

Total value of supplies (€) *

22 000,00

Add the next Member State

Total value of supplies carried out during the calendar year prior to previous calendar year

To be filled in only if the MS of exemption has opted for the exclusion from the SME special scheme for two calendar years.

Member State *

France

Total value of supplies (€) *

56 000,00

Add the next Member State

☐ By ticking this box, I declare that I am not already identified by an individual number in another Member State of establishment for the application of the exemption pursuant to Article 284 (3)(b) of Directive 2006/112/EC.

Save without submission

Save and submit

Cancel

Figure 59: Electronic interface – Prior Notification

The below sections describe the electronic interface elements that are specific to the Prior Notification.

9.3.1.1 Identification

The identification section provides the identity information of the taxable person.

Element	Description
VAT Identification Number	The VAT identification number of the taxable person, assigned to him by the national tax authority for VAT purposes ⁶ .
National Tax Reference	The national Tax reference number, assigned by the national tax authority for taxation purposes ⁶ .
Any other number for purpose of the identification	Any other number for purpose of the identification of the taxable person ⁶ .
Taxable person name	The name of the taxable person.
Activity type	The type of activity that classifies the activity performed by the taxable person.
Business sector	Business sector if relevant pursuant to Article 284(1), second subparagraph of Directive 2006/112/EC.
Legal form	The legal form of the taxable person.

Table 166: Electronic interface – Prior Notification - Identification

9.3.1.2 Contact

The contact section provides the contact information of the taxable person.

Element	Description
Address	The structured address of the taxable person. The address must be in one of the Member States.
Member State	The MS of establishment collects the country of the taxable person's address.
Telephone number	The telephone number of the taxable person.
Email address	The email address of the taxable person. The form should validate that the email address has the structure expected of an email address.

⁶ Please note that the VAT Identification Number, the National Tax Number, and Any other number for purpose of the identification are alternatives. Each MS has to decide and then publish on the COM website whether for the purpose of the identification referred to in Article 284(3), point (b), of Directive 2006/112/EC, it uses:

- the individual VAT identification number already allocated to the taxable person in respect of that person's obligations under the internal system, or
- the structure of a VAT number, or
- any other number.

Website	The website of the taxable person. The form should validate that the website has the structure expected of a website URL.

Table 167: Electronic interface – Prior Notification - Contact

9.3.1.3 Member State(s) in which you intend to avail yourself of exemption

The section lists all the Member States where the taxable person wants to avail himself to benefit from the exemption. At least one Member State is mandatory, otherwise the taxable person cannot be registered in the SME special scheme.

Element	Description
Member State	The Member State(s) where the taxable person wants to avail himself to benefit from the exemption.
Add another Member State	The button allows the taxable person to add another MS of exemption, where he wants to avail himself of the exemption.

Table 168: Electronic interface – Prior Notification - Member State(s) in which you intend to avail yourself of exemption

9.3.1.4 Total value of supplies carried out by the taxable person

The section represents the total annual value of supplies performed by the taxable person during the current calendar year, previous calendar year, and the year prior to the previous calendar year. The latter is applicable only in case when the MS of exemption has opted for the cessation of two calendar years (quarantine).

Element	Description
Member State	The Member State(s) where the taxable person performed the supplies of goods and/or services. The information relates to MS of establishment and each of the other MS (all MS must be included since the values will also serve to calculate the Union annual turnover). If no supplies have been made in a specific Member State, the taxable person is expected to enter “0”.
Total value of supplies (€)	The total value of supplies of goods and services specified by business sector if relevant pursuant to Article 284c(1), point (c), of Directive 2006/112/EC, performed by the taxable person in each Member State during the relevant calendar year. If no supplies have been made in a specific Member State, the taxable person is expected to enter “0”.
Add the next Member State	The button allows the taxable person to add the next Member State to report the supplies of goods and services performed in that Member State. Each Member State must be listed here – both MS of establishment and ALL the other Member States.

Table 169: Electronic interface – Prior Notification – Total value of supplies carried out by the taxable person

9.3.1.5 Buttons

The section describes the buttons used in the form.

Element	Description
Save without submission	The button allows the taxable person the save the Prior Notification on the SME portal, without formal submission to MS of establishment.
Save and submit	The button allows the taxable person to submit the Prior Notification to the MS of establishment. At the same time, the Prior Notification is automatically saved on the SME portal.
Cancel	Using the Cancel button will lead to discarding the already filled-in information and returning to the 'Activity selection' page.

Table 170: Electronic interface – Prior Notification – Buttons

9.3.1.6 Prior Notification submission confirmation

The below presented figure depicts the confirmation provided by the MS of establishment that the taxable person submitted the Prior Notification or an update to Prior Notification.

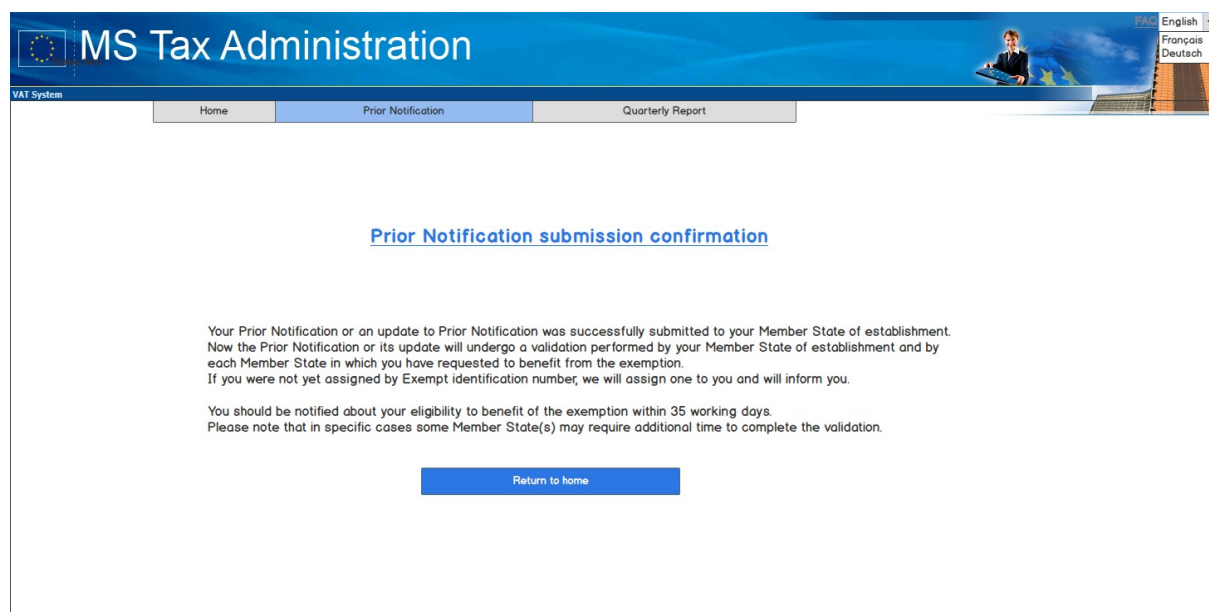


Figure 60: Electronic interface – Prior Notification – Prior Notification submission confirmation

9.3.2 Update to Prior Notification – Adding or ceasing Member State(s) of exemption

This section describes the update to a Prior Notification as regards the addition or cessation of MS(s) of exemption.

Please note, that the values of supplies of the previous quarters which are already available do not have to be submitted again (Article 284a(2)). Where the taxable person informs the Member State of establishment in accordance with Article 284(4) that it intends to avail itself of the exemption in a Member State or Member States other than the ones indicated in the prior notification, that person is not obliged to give the information referred to in paragraph 1 of this Article in so far as that information has already been included in reports previously submitted under Article 284b.

The below sections describe the elements of the electronic interface that are specific to the update of the Prior Notification as regards the addition or cessation of MS(s) of exemption.

9.3.2.1 Identification

The identification section provides the identity information of the taxable person.

Element	Description
Exempt identification number	The exempt identification number of the taxable person, assigned to him by the MS of establishment. The element is pre-filled and non-editable, the taxable person is not allowed to change it.
Taxable person name	The name of the taxable person.
Activity type	The type of activity that classifies the activity performed by the taxable person.
Business sector	Business sector if relevant pursuant to Article 284(1), second subparagraph of Directive 2006/112/EC.
Legal form	The legal form of the taxable person.

Table 171: Electronic interface – Update to Prior Notification - Adding or ceasing Member State(s) of exemption – Identification

9.3.2.2 Member State(s) in which you intend to avail of or cease from the exemption

The section lists all the Member States where the taxable person wants to avail himself to benefit from the exemption. The taxable person may also request his cessation from a specific MS of exemption. At least, the taxable person must be availed in one Member State, otherwise the taxable person will be excluded from the SME special scheme.

Element	Description
Member State	The Member State(s) where the taxable person avails himself to benefit from the exemption or from which the taxable person wants to be ceased.
Add another Member State	The button allows the taxable person to add another MS of exemption, where he wants to avail himself of the exemption.
Cease from the	The button allows the taxable person to request his cessation from the MS of

Member State	exemption.

Table 172: Electronic interface – Update to Prior Notification - Adding or ceasing Member State(s) of exemption - Member State(s) in which you intend to avail yourself of exemption

9.3.2.3 Total value of supplies carried out by the taxable person

The section represents the total annual supplies performed by the taxable person during the current calendar year, previous calendar year, and the year prior to the previous calendar year. The latter is applicable only in the case, when the MS of exemption has opted for the cessation of two calendar years (quarantine).

Element	Description
Member State	The Member State(s) where the taxable person performed the supplies of goods and/or services. The information relates to MS of establishment and each of the other MSs. If no supplies have been made in a specific Member State, the taxable person is expected to enter “0”.
Total value of supplies (€)	The total value of supplies of goods and services, performed by the taxable person during the relevant calendar year. If no supplies have been made in a specific Member State, the taxable person is expected to enter “0”.
Add the next Member State	The button allows the taxable person to add the next Member State to report the supplies of goods and services performed there. Each Member State must be listed here – both MS of establishment and all the other MSs.

Table 173: Electronic interface – Update to Prior Notification – Adding or ceasing Member State(s) of exemption - Total value of supplies carried out by the taxable person

9.3.2.4 Buttons

The section describes the buttons used in the form.

Element	Description
Save without submission	The button allows the taxable person the save the Prior Notification on the SME portal, without formal submission to MS of establishment.
Save and submit	The button allows the taxable person to submit the Prior Notification to the MS of establishment. At the same time, the Prior Notification is saved on the SME portal.
Cancel	Using the Cancel button will lead to discarding the information already filled-in and returning to the ‘Activity selection’ page.

Table 174: Electronic interface – Update to Prior Notification - Adding or ceasing Member State(s) of exemption – Buttons

9.3.2.5 Update to Prior Notification submission confirmation

The below presented figure depicts the confirmation provided by the MS of establishment that the taxable person submitted the Prior Notification or an update to Prior Notification.

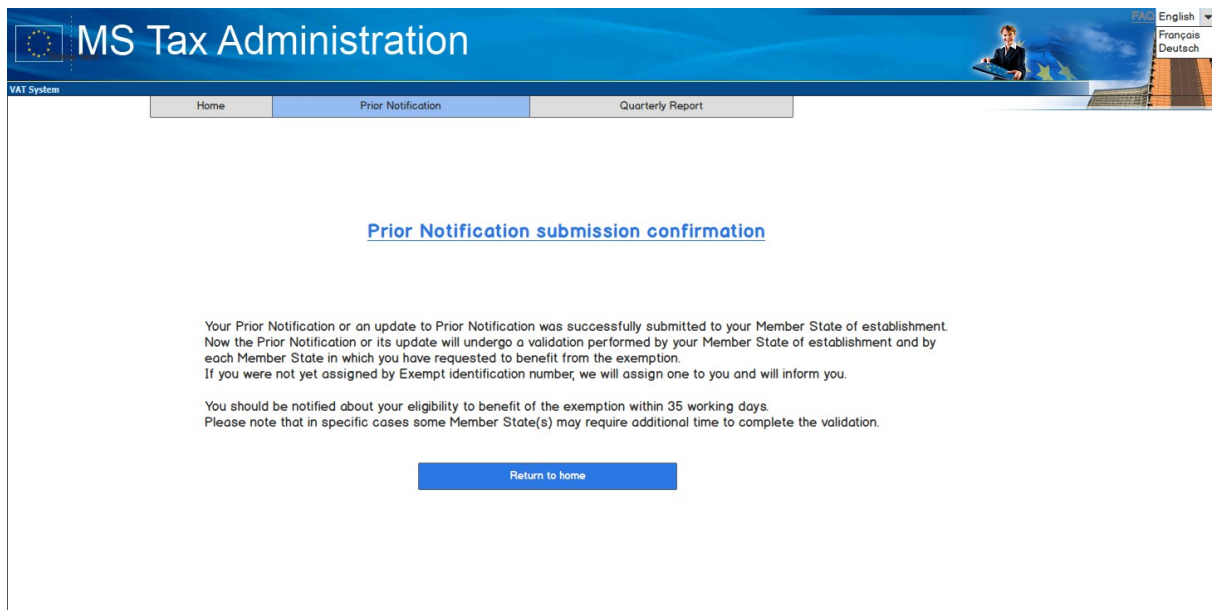


Figure 62: Electronic interface – Update to Prior Notification – Adding or ceasing Member State(s) of exemption – Update to Prior Notification submission confirmation

9.3.3 Update to Prior Notification – Identity information change

This section describes the update of the Prior Notification as regards the identity information of the taxable person.

MS Tax Administration

Related activities: Home, Prior Notification, Quarterly Report

Prior Notification - Identity information change

Identification

Exempt Identification Number: BE 0123456789 EX

Taxable person name *: My name

Activity type *: Select one

Business sector: Select one

Legal form *: Select one

☐ Are you registered in OSS Union special scheme? If yes, what is your identifier in OSS Union scheme? OSS Union scheme identifier

Contact

Address:

Street *: Rue de Neuve

Number *: 12b

Post Code *: 1020

City *: Bruxelles

Member State *: Belgium

Telephone Number: +32 2 12345678

Email address: contact@mycompany.com

Website: http://mycompany.com

☐ By ticking this box, I declare that I am not already identified by an individual number in another Member State of establishment for the application of the exemption pursuant to Article 284 (3)(b) of Directive 2006/112/EC.

Save without submission Save and submit Cancel

Figure 63 Electronic interface – Update to Prior Notification – Identity information change

The below sections describe the electronic interface elements that are specific to the update of the Prior Notification as regards the taxable person identity information.

9.3.3.1 Identification

The identification section provides the identity information of the taxable person.

Element	Description
Exempt identification number	The exempt identification number of the taxable person, assigned to him by the MS of establishment. The element is pre-filled and non-editable, the taxable person is not allowed to change it.
Taxable person name	The name of the taxable person.
Activity type	The type of activity that classifies the activity performed by the taxable person.
Business sector	Business sector if relevant pursuant to Article 284(1), second

	subparagraph of Directive 2006/112/EC.
Legal form	The legal form of the taxable person.

Table 175: Electronic interface – Update to Prior Notification - Identity information change - Identification

9.3.3.2 Contact

The contact section provides the contact information of the taxable person.

Element	Description
Address	The structured address of the taxable person. The address must be in one of the Member States.
Member State	The MS of establishment collects the country of the taxable person's address.
Telephone number	The telephone number of the taxable person.
Email address	The email address of the taxable person. The form should validate that the email address has the structure expected of an email address.
Website	The website of the taxable person. The form should validate that the website has the structure expected of a website URL.

Table 176: Electronic interface – Update to Prior Notification – Identity information change - Contact

9.3.3.3 Buttons

The section describes the buttons used in the form.

Element	Description
Save without submission	The button allows the taxable person the save the Prior Notification on the SME portal, without formal submission to MS of establishment.
Save and submit	The button allows the taxable person to submit the Prior Notification to the MS of establishment. At the same time, the Prior Notification is saved on the SME portal.
Cancel	Using the Cancel button will lead to discarding the information already filled-in and returning to the 'Activity selection' page.

Table 177: Electronic interface – Update to Prior Notification – Identity information change - Buttons

9.3.3.4 Update to Prior Notification - submission confirmation

The below presented figure depicts the confirmation provided by the MS of establishment that the taxable person submitted the Prior Notification or an update to Prior Notification.

MS Tax Administration

VAT System

Home Prior Notification Quarterly Report

[Prior Notification submission confirmation](#)

Your Prior Notification or an update to Prior Notification was successfully submitted to your Member State of establishment. Now the Prior Notification or its update will undergo a validation performed by your Member State of establishment and by each Member State in which you have requested to benefit from the exemption. If you were not yet assigned by Exempt identification number, we will assign one to you and will inform you.

You should be notified about your eligibility to benefit of the exemption within 35 working days. Please note that in specific cases some Member State(s) may require additional time to complete the validation.

[Return to home](#)

Figure 64: Electronic interface – Update to Prior Notification – Identity information change - Prior Notification submission confirmation

9.3.4 Update to prior notification - Request exclusion

The electronic interface allows the taxable person to request his exclusion from the SME special scheme. The taxable person can select from three different reasons to be excluded:

- I have decided to cease to apply the SME special scheme;
- I have ceased my activities;
- I am moving my place of establishment from your country to another Member State.

MS Tax Administration

VAT System

Home Prior Notification Quarterly Report

[Request Exclusion](#)

I request exclusion from the SME special scheme for the following reason:

☐ I have decided to cease to apply the SME special scheme as from:

☐ I have ceased my activities as from:

☐ I am moving my place of establishment from your country to another Member State.

I will move my place of establishment from your country as from:

I will move my place of establishment into this Member State:

The cessation will be effective as of the first day of the next calendar quarter following the receipt of this information by the MS of establishment or where such information is received during the last month of a calendar quarter as of the first day of the second month of the next calendar quarter.

[Request Exclusion](#) [Cancel](#)

Figure 65: Electronic interface – Update to Prior Notification - Request exclusion

This section describes the elements used in Request exclusion electronic interface.

9.3.4.1 I request exclusion from the special scheme for the following reasons

The section describes the elements used in this section.

Element	Description
Date	The date on which the taxable person changes his business structure
Member State	The Member State where the taxable person moves his place of establishment.

Table 178: Electronic interface – Update to Prior Notification - Request exclusion – I request exclusion from the SME special scheme for the following reason

9.3.4.2 Buttons

The section describes the buttons used in the form.

Element	Description
Request exclusion	The button moves the exclusion request to next step.
Cancel	Using the Cancel button will lead to discarding the information already filled-in and returning to the ‘Activity selection’ page.

Table 179: Electronic interface – Update to Prior Notification - Request exclusion – Buttons

9.3.5 Update to a prior notification -Exclusion from the SME special scheme – confirmation

The electronic interface is used for confirmation by the taxable person that he wants to be excluded from the special scheme.

MS Tax Administration

VAT System

Home | **Prior Notification** | Quarterly Report

Exclusion from the SME special scheme - confirmation

Your request to be excluded from the SME special scheme was successfully submitted to your Member State of establishment.
We will process your exclusion request and inform you about the result.

Are you sure you want to be excluded from the SME special scheme?

Yes, exclude me from the special scheme | **Cancel**

Figure 66: Electronic interface – Update to Prior Notification - Exclusion from the SME special scheme – confirmation

9.3.5.1 Buttons

The section describes the buttons used in the form.

Element	Description
Yes, exclude me from the special scheme	The button is used for confirmation that the taxable person wants to be excluded from the special scheme.
Cancel	Using the Cancel button will lead to discarding the information already filled-in and returning to the 'Prior Notification' page.

Table 180: Electronic interface – Update to a Prior Notification - Exclusion from the SME special scheme – buttons

9.3.6 Update to a prior notification - Exclusion request submission confirmation

The electronic interface is used for confirmation that the taxable person's request to be excluded from the SME special scheme was submitted to the MS of establishment.

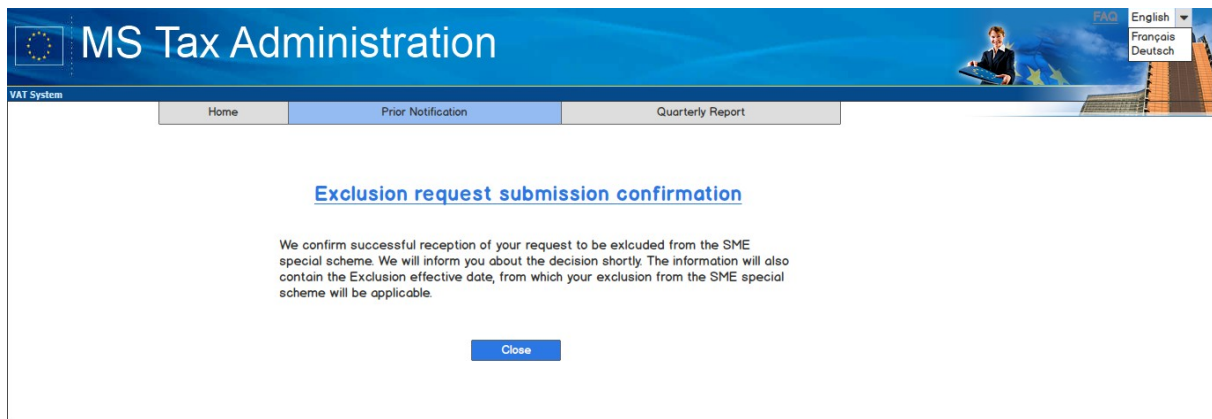


Figure 67: Electronic interface – Update to a Prior Notification - Exclusion request submission confirmation

9.3.7 Union annual threshold exceedance

The section describes the case when the taxable person informs the MS of establishment that he exceeded the Union annual threshold.



MS Tax Administration

[FAQ](#)
[English](#)
[Français](#)
[Deutsch](#)

VAT System

[Home](#)
[Prior Notification](#)
[Quarterly Report](#)

[Change MS\(S\) of exemption](#)
[Change Identity information](#)
[Exclusion request](#)
[Union annual threshold exceeded](#)

Union annual threshold exceedance

Exempt Identification Number

BE
0123456789
EX

Taxable person name *

Your name

I am informing that I have exceeded the Union annual threshold.

The date when I have exceeded the Union annual threshold is:

/ /

Total value of supplies carried out from the beginning of the current calendar quarter until the date the Union annual threshold was exceeded

The information is mandatory for Member State where you are established and for each other Member State. Enter "0" if no supplies have been made.

Please note that:

- the values shall consist only in the amounts listed in Article 288 of Directive 2006/112/EC.
- the values shall be denominated in euro. Member States which have not adopted the euro may require the values to be expressed in their national currencies. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day, or, if there is no publication on that day, on the next day of publication
- where the Member State granting the exemption applies varying thresholds for different business sectors, the taxable person shall be obliged in respect of that Member State to report separately the total value of supplies of goods and/or services as regards each threshold that may be applicable.

Sectoral threshold applicable in MS?	Member State *	Business sector *	Total value of supplies (€) *
☐	Austria	N/A	32 000,00
☐	Belgium	N/A	46 000,00
☒	Bulgaria	C13.3.0 - Finishing of textiles	15 500,00
☒	Bulgaria	C20.5.3 - Manufacture of essential oils	10 500,00
☐	Croatia	N/A	0,00
☐	Cyprus	N/A	0,00

[Add the next Member State](#)

Final report grand total

Grand total value of supplies of services and goods in all Member States (€): *

104 000,00

[Submit the information](#)
[Cancel](#)

Figure 68: Electronic interface – Union annual threshold exceedance

Element	Description
Exempt identification number	The exempt identification number of the taxable person, assigned to him by the MS of establishment. The element is pre-filled and non-editable, the taxable person is not allowed to change it.
Taxable person name	The name of the taxable person.
Date	The date when the taxable person exceeded the Union annual threshold.
Sectoral threshold applicable in MS?	Checkbox, if the MS of exemption applies for varying thresholds for different business sectors.
Member State	Each Member State (both MS of establishment and MSs of exemption).

Business sector	Business sector if relevant pursuant to Article 284(1), second subparagraph of Directive 2006/112/EC.
Total value of supplies (€)	The total value of supplies of goods and services in each Member State, performed by the taxable person during the current calendar quarter until the Union annual threshold was exceeded, reported separately for business sector if the MSEXE applies sectoral thresholds. If no supplies have been made in a specific Member State, the taxable person is expected to enter “0”.
Add the next Member State	The button allows the taxable person to add the next Member State to report the supplies of goods and services. Each Member State must be listed here – both MS of establishment and each other Member State.

Table 181: Electronic interface – Union annual threshold exceedance

9.3.7.1 Final report grand total

Element	Description
Final report grand total	Grand total value of supplies of services and goods in all Member States.

Table 182: Electronic interface – Union annual threshold exceedance – Final report grand total

9.3.7.2 Buttons

Element	Description
Submit the information	The button transmits the Union annual threshold exceedance information to the MS of establishment.
Cancel	Using the Cancel button will lead to discarding the information already filled-in and returning to the ‘Activity selection’ page.

Table 183: Electronic interface – Union annual threshold exceedance – buttons

9.3.8 Union annual threshold exceedance information submitted

The below depicted electronic interface informs the taxable person that the Union annual threshold exceedance information was submitted to the MS of establishment.

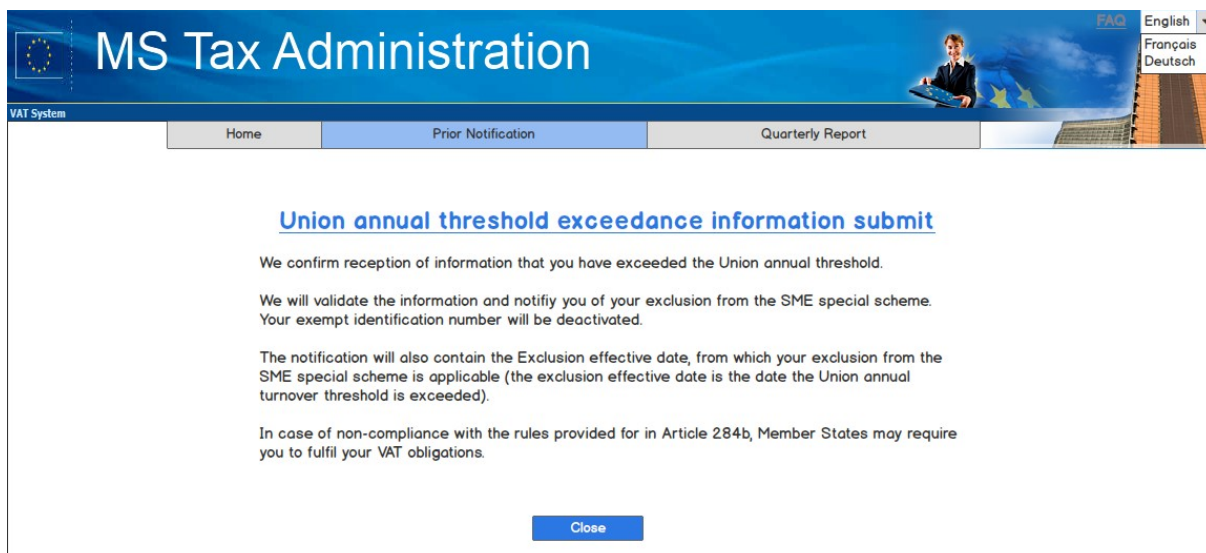


Figure 69: Electronic interface – Union annual threshold exceedance information submitted

9.3.9 Quarterly report

The section presents the electronic interface to fill-in and submit the Quarterly report or a correction to the Quarterly report.



MS Tax Administration

[FAQ](#)
[English](#)
[Français](#)
[Deutsch](#)

VAT System
Home
Prior Notification
Quarterly Report

Quarterly report

Identification

Exempt Identification Number

BE

0123456789

EX

Taxable person name *

Your name

Quarterly report period / year *

Jan-Mar 2026

- The values shall consist only in the amounts listed in Article 288 of Directive 2006/112/EC.
- The values shall be denominated in euro. Member States which have not adopted the euro may require the values to be expressed in their national currencies. If the supplies have been made in other currencies, the taxable person shall use the exchange rate applying on the first day of the calendar year. The conversion shall be made by applying the exchange rate published by the European Central Bank for that day or, if there is no publication on that day, on the next day of publication.
- Where the Member State granting the exemption applies varying thresholds for different business sectors, the taxable person shall be obliged in respect of that Member State to report separately the total value of supplies of goods and/or services as regards each threshold that may be applicable.

If you have started or ceased the application of the special scheme during a calendar quarter, please indicate the start date and end date of the period concerned by this Quarterly report.

Start date

01/01/2026

End date

31/03/2026

Add the next Member State

Grand total value of supplies of services and goods in all Member States (€): *

11 000,00

Save without submission

Save and submit

Cancel

Figure 70: Electronic interface – Quarterly report

9.3.9.1 Identification

The identification section provides the identity information of the taxable person.

Element	Description
Exempt identification number	The exempt identification number of the taxable person, assigned to him by the MS of establishment. The element is pre-filled and non-editable, the taxable person is not allowed to change it.
Taxable person name	The name of the taxable person.
Quarterly report period / year	The calendar quarter to which the supplies reported by the taxable person relate.
Start date	The start date to which the supplies reported by the taxable person relate. Only to be used in case when the taxable person starts or ends the application of the special scheme during the calendar quarter.
End date	The end date to which the supplies reported by the taxable person relate. Only to be used in case when the taxable person starts or ends the application of the special scheme during the calendar quarter.

Table 184: Electronic interface – Quarterly report - Identification

9.3.9.2 Total value of supplies of goods and services carried out during the calendar quarter

The section provides information on the supplies performed by the taxable person during a calendar quarter. The supplies must be entered for each Member State – both MS of establishment and each of the other Member States.

In case, when the MS of exemption applies varying thresholds, the supplies corresponding to the different business sectors to which sectoral thresholds apply must be reported separately. Although reported separately for different business sector, the value of ALL the supplies made must be reported.

Element	Description
Sectoral threshold applicable in MS?	Checkbox, if the MS of exemption applies for varying thresholds for different business sectors.
Member State	Each Member State (both MS of establishment and each of the other Member States).
Business sector	Business sector if relevant pursuant to Article 284(1), second subparagraph of Directive 2006/112/EC.
Total value of supplies (€)	The total value of supplies of goods and services, performed by the taxable person during the relevant calendar quarter. If no supplies have been made in a specific Member State, the taxable person is expected to enter “0”.
Add another Member State	The button allows the taxable person to add another MS, for which he reports the supplies.

Table 185: Electronic interface – Quarterly report - Total value of supplies of goods and services carried out during the calendar quarter

9.3.9.3 Quarterly report grand total

The section defines the total amount of supplies of goods and services reported in the Quarterly report.

Element	Description
Total amount of supplies of services and goods (€)	Total amount of supplies of goods and services reported by the taxable person in the Quarterly report. The amount represents summarisation for supplies performed in each Member State.

Table 186: Electronic interface – Quarterly report – Quarterly report grand total

9.3.9.4 Buttons

The section describes the buttons used in the form.

Element	Description
Save without submission	The button allows the taxable person the save the Quarterly report on the SME portal, without formal submission to MS of establishment.
Save and submit	The button allows the taxable person to submit the Quarterly report to the MS of establishment. At the same time, the Quarterly report is saved on the SME portal.
Cancel	Using the Cancel button will lead to discarding the information already filled-in and returning to the 'Activity selection' page.

Table 187: Electronic interface – Quarterly report – Buttons

9.3.10 Quarterly report summary confirmation

The electronic interface summarises the Quarterly report and allows the taxable person to confirm that he wants to submit the Quarterly report to the MS of establishment.

MS Tax Administration

VAT System

Home Prior Notification **Quarterly Report**

Quarterly report summary

Exempt Identification Number: BE 0123456789 EX Taxable person name: Your name

Quarterly report period / year: * Jan-Mar 2026 Start date: 01/01/2026 End date: 31/03/2026

You have selected submission of the Quarterly report. The total value of supplies is (€): 11 000,00

Please note that in case of exceedance of the Union annual turnover threshold, the special scheme shall cease to apply as of the time of exceedance. In case of exceedance of the annual turnover threshold applied by a Member State where you avail yourself of the exemption, the exemption in that Member State shall cease to apply as of the time of exceedance, unless that Member State applies a transitional period and depending on any ceiling that may be applicable. In case of non-compliance with the rules on the quarterly report (provided for in Article 284b of Directive 2006/112/EC), Member States may require you to fulfil VAT obligations in their territory. Please consult the SME web portal for more information.

Are you sure you want to submit the Quarterly report?

Yes, submit the Quarterly report Cancel

Figure 71: Electronic interface – Quarterly report summary

9.3.10.1 Quarterly report summary

The section contains the summarising information on the Quarterly report submission.

Element	Description
Exempt identification number	The exempt identification number of the taxable person, assigned to him by the MS of establishment. The element is pre-filled and non-editable, the taxable person is not allowed to change it.
Taxable person name	The name of the taxable person. The element is pre-filled and non-editable, the taxable person is not allowed to change it.
Quarterly report period / year	The calendar quarter to which the supplies reported by the taxable person relate.
Start date	The start date to which the supplies reported by the taxable person relate. Only to be used in case when the taxable person starts or ends to avail itself of the exemption during the calendar quarter.
End date	The end date to which the supplies reported by the taxable person relate. Only to be used in case when the taxable person starts or ends to avail itself of the exemption during the calendar quarter.

The total value of supplies is (€)	The total value of supplies of goods and services, performed by the taxable person in all Member States during, for the relevant calendar quarter.

Table 188: Electronic interface – Quarterly report summary confirmation – Quarterly report summary

9.3.10.2 Buttons

The section describes the buttons used in the form.

Element	Description
Yes, submit the Quarterly report	The button allows the taxable person to submit the Quarterly report to MS of establishment.
Cancel	Using the Cancel button will lead to discarding the information already filled-in and returning to the ‘Quarterly report’ page.

Table 189: Electronic interface – Quarterly report summary confirmation – Buttons

9.3.11 Quarterly report submission confirmation

The electronic interface confirms the submission of the Quarterly report.

The screenshot shows the 'MS Tax Administration' interface. The header includes the European Union flag, the text 'MS Tax Administration', and a navigation bar with 'VAT System', 'Home', 'Prior Notification', and 'Quarterly Report'. The main content area is titled 'Quarterly report submission confirmation'. It displays the following information:

- The Quarterly report was submitted with reference number: **BE/BE0123456789-EX/Q1.2026**
- Version: **2026-04-28T08:27:33.000**
- The total amount of performed and reported supplies of goods and services is (€): **11 000,00**

Below this information, there is a paragraph of text: "Please note that in case of exceedance of the Union annual turnover threshold, the special scheme shall cease to apply as of the time of exceedance. In case of exceedance of the annual turnover threshold applied by a Member State where you avail yourself of the exemption, the exemption in that Member State shall cease to apply as of the time of exceedance, unless that Member State applies a transitional period and depending on any ceiling that may be applicable. In case of non-compliance with the rules on the quarterly report (provided for in Article 284b of Directive 2006/112/EC), Member States may require you to fulfil VAT obligations in their territory. Please consult the SME web portal for more information". At the bottom of the page, there is a blue 'Close' button.

Figure 72: Electronic interface – Quarterly report submission confirmation

10 APPENDICES

10.1 FUNCTIONAL REQUIREMENTS MATRIX

The below matrix depicts the association between the functional requirements and core business functions.

10.1.1 Model maintained properties

Model Property	Property Value
Name	Functional requirements matrix
Identifier	MCC.2954180
Type	Matrix model

Table 190: Maintained Properties of the model

10.1.2 Object maintained properties

Function Name	Associated Requirement Name
Assign, deactivate, or confirm the exempt identification number	Assign a unique exempt identification number to taxable person Deactivate a unique exempt identification number of the taxable person Uniqueness of Taxable person registration
Check the eligibility to benefit from the exemption	Check the MS annual turnover threshold exceedance in the current and in the previous year/s The taxable person can only use one sectoral threshold in the MS of exemption Validation of Notification information coming from the taxable person
Create and submit a Prior Notification	Allow the taxable person to submit the Notification Offer the facility to save the information Provide the taxable person with an Electronic interface
Inform of cessation of the special scheme for small enterprises	The MS of exemption shall transmit the information to the MS of establishment by electronic means The electronic messages must follow the structured and agreed format
Permit automated access to information	The MS of establishment must grant automated access to competent authorities of other MSs The MS of establishment shall transmit the information to the MS of exemption by electronic means

Function Name	Associated Requirement Name
	The MS of exemption shall transmit the information to the MS of establishment by electronic means
Process the exceeding MS annual turnover (quarantine and transitional period)	Check the MS annual turnover threshold exceedance in the current and in the previous year/s Quarantine of the taxable person in MEST Quarantine of the taxable person in MEXE
Process the exceeding of the Union annual threshold	Check the Union annual turnover Quarantine of the taxable person in MEST Quarantine of the taxable person in MEXE
Publish MS conditions for the special scheme for small enterprises and the cash accounting scheme	The electronic messages must follow the structured and agreed format
Report exceeding of Union threshold	Allow the taxable person to report exceedance of the Union annual threshold Offer the facility to save the information Provide the taxable person with an Electronic interface
Report on eligibility of taxable person	The MS of exemption shall transmit the information to the MS of establishment by electronic means The electronic messages must follow the structured and agreed format
Request cessation of using the special scheme	Allow the taxable person to request an exclusion from the special scheme Offer the facility to save the information Provide the taxable person with an Electronic interface
Request further clarifications	The MS of establishment shall transmit the information to the MS of exemption by electronic means The MS of exemption shall transmit the information to the MS of establishment by electronic means The electronic messages must follow the structured and agreed format Validation of Notification information coming from the taxable person

Function Name	Associated Requirement Name
Request on cessation for a specific MSEX	Allow the taxable person to request a cessation from a specific MS of exemption Offer the facility to save the information Provide the taxable person with an Electronic interface
Request taxable person's cessation	The MS of exemption shall transmit the information to the MS of establishment by electronic means The electronic messages must follow the structured and agreed format
Submit Quarterly report	Allow the taxable person to submit the Quarterly report and corrections Offer the facility to save the information Provide the taxable person with an Electronic interface The values of supplies must be denominated in Euro
Transmit the exempt identification number	Assign a unique exempt identification number to taxable person The MS of establishment shall transmit the information to the MS of exemption by electronic means The electronic messages must follow the structured and agreed format
Update Prior Notification, including availing in other MS of exemption	Allow the taxable person to submit the Notification Offer the facility to save the information Provide the taxable person with an Electronic interface
Validate Notification	Check the MS annual turnover threshold exceedance in the current and in the previous year/s Check the Union annual turnover Notify the taxable person about processing his requests Validation of Notification information coming from the taxable person
Validate Quarterly report [MSEST]	Check the Union annual turnover Notify the taxable person about processing his requests The values of supplies must be denominated in Euro Validation of Quarterly report and corrections coming from the taxable person

Function Name	Associated Requirement Name
Validate Quarterly report [MSEXEX]	The MS of exemption shall transmit the information to the MS of establishment by electronic means The values of supplies must be denominated in Euro Validation of Quarterly report and corrections coming from the taxable person

Table 191: Matrix – relation between the functional requirements and core business functions

10.2 TERRITORIAL SCOPE

This section summarises features of the SME special scheme relevant to Member States' associated countries or territories.

Member State	Associated Country or Territory	Country/Territory Code	Notes
Austria	Communes of Jungholz and Mittelberg		
France	Monaco	MC	(c)
Portugal	Azores		
	Madeira		
Cyprus ⁷	Sovereign Base Areas of Akrotiri and Dhekelia (Cyprus)		(b)

Table 192: Territorial scope

Notes:

- (a) Only goods can be supplied and reported in the special scheme;
- (b) Taxable persons established in the sovereign base areas should be treated as established in CY. The issuing country of the VAT Identification Number and the country code of the address is CY;
- (c) Monaco is in the EU VAT area. The issuing country of the VAT Identification Number is FR. In the Quarterly report, supplies to MC must use FR as MS of exemption. The Quarterly report from MC companies must show FR as MS of establishment;
- (d) The ISO does not assign the country/territory code.

10.3 SME-SS VALIDATION MODULE

This section presents the information related to the SME-SS Validation Module. Further functional information is documented in the Validation Core documentation [R02].

10.3.1 Functional and non-Functional Requirements

This section presents the Functional and non-Functional Requirements applicable to the SME-SS Validation Module.

10.3.1.1 Functional Requirements

Table 193 presents the Functional Requirements applicable to the SME-SS Validation Module. Functional requirements applicable to all Validation Modules are documented in the Validation Module Core documentation [R02].

⁷ Following the Article 7 Directive 2006/112/EC, the transactions originating in or intended for the United Kingdom Sovereign Base Areas of Akrotiri and Dhekelia are treated as transactions originating in or intended for Cyprus.

Requirement ID	Description	Priority
SMEVM-01	<u>Validation of Notification messages</u> The SME-SS VM must be able to validate all the Notification messages defined in section 6.1.	Must Do
SMEVM-02	<u>Validation of Quarterly Report messages</u> The SME-SS VM must be able to validate all the Quarterly Report messages defined in section 6.2.	Must Do
SMEVM-03	<u>Validation of Exemption and cessation message</u> The SME-SS VM must be able to validate the Exemption and cessation messages defined in section 6.3.	Must Do
SMEVM-04	<u>Validation of Error message</u> The SME-SS VM must be able to validate the Error message defined in section 6.5.1.	Must Do
SMEVM-05	<u>Output: Error Message</u> The SME-SS VM produces a Status message for the Notification, Quarterly Report and Exemption and cessation messages used as input to the SME-SS Validation Module. The Error message must comply with the structure defined in section 6.5.1.	Must Do

Table 193: SME-SS VM - Functional Requirements

10.3.1.2 Non-Functional Requirements

Non-Functional requirements applicable to all Validation Modules are documented in the Validation Module Core documentation [R02].

10.3.2 Business and Technical Rules covered by SME-SS Validation Module

Business and Technical rules covered by the SME-SS Validation Module are listed in section 6.5.1.

Only rules with value “Yes” in column “Covered by VM” are implemented in the SME-SS Validation Module. The implementation of other rules remains at the discretion of the Member States since these rules require ad-hoc information (e.g. database access).

	EUROPEAN COMMISSION DIRECTORATE-GENERAL TAXATION AND CUSTOMS UNION Digital Delivery of Customs and Taxation Policies Taxation Systems & Digital Governance

SME-SS

Technical Specifications

Date:	08/12/2022
Status:	Submitted for acceptance (SfA)
Version:	1.00
Author:	SOFT-DEV
Approved by:	DG TAXUD
Reference number:	DLV-022-6.8-105-2-2
Public:	DG TAXUD external
Confidentiality:	Commission use (CU)

Document control information

Property	Value
Title	SME-SS
Subtitle	Technical Specifications
Author	SOFT-DEV
Project owner	Head of Unit of DG TAXUD Unit C1 Value added tax
Solution provider	DG TAXUD Unit B4 Taxation Systems & Digital Governance
DG TAXUD Project Manager	DG TAXUD Unit B4 Taxation Systems & Digital Governance
Version	1.00
Confidentiality	Commission use (CU)
Date	08/12/2022

Contract information

Property	Value
Framework Contract	TAXUD/2021/CC/162
Specific Contract	TAXUD/2021/DE/1018

Document history

The document author is authorised to make the following types of changes to the document without requiring that the document be re-approved:

- Editorial, formatting, and spelling;
- Clarification.

To request a change to this document, contact the document author or project owner.

Changes to this document are summarised in the table in reverse chronological order (latest version first).

Version	Date	Description	Action	Section
1.00	08/12/2022	Implementation of review comments in the scope of RfA 04-022. Version Submitted for Acceptance (SfA).	R	All
0.10	14/11/2022	Initial version created in the scope of RfA 04-022. Version Submitted for Review (SfR).	I	All

Action: I=Insert R=Replace

Configuration management: document location

Not applicable.

Table of contents

1	INTRODUCTION.....	5
1.1	Document purpose.....	5
1.2	Target audience.....	5
1.3	Scope.....	5
1.4	Structure.....	5
1.5	Reference documents.....	5
1.6	Applicable documents.....	6
1.7	Abbreviations & acronyms.....	6
1.8	Definitions.....	7
2	SME ARCHITECTURE.....	8
2.1	Technical system architecture.....	8
2.1.1	Model maintained properties.....	8
2.1.2	Object maintained properties.....	8
2.2	Message format.....	13
2.3	CCN2.....	13
3	TECHNICAL MESSAGE SPECIFICATIONS.....	14
3.1	XML Schema Definition.....	14
3.1.1	Notification Group.....	14
3.1.2	Quarterly Report Group.....	22
3.1.3	Cessation And Exclusion Group.....	31
3.1.4	Common Group.....	40
3.1.5	Other Elements.....	42
4	COMMON TECHNICAL PROCEDURES.....	61
4.1	Correlation between exchanged messages.....	61
4.1.1	Correlating the request and response messages used in automated access to MEST data store.....	61
4.1.2	Correlation of any SME message with the related error message.....	61
4.2	Functional split mechanism of SME messages.....	62
4.3	Correction mechanism.....	62
4.3.1	Prior notification.....	62
4.3.2	Quarterly report.....	62
5	ANNEXES.....	63
5.1	XML notation Catalogue.....	63
5.2	Requirement Matrix.....	64
5.3	Diagrams.....	65
5.3.1	Notification Group.....	65
5.3.2	Quarterly report group.....	67
5.3.3	Cessation and Exclusion group.....	70
5.3.4	Common Errors.....	72
5.3.5	Other elements.....	73

List of tables

Table 1: Reference documents.....	6
Table 2: Applicable documents.....	6
Table 3: Abbreviations and acronyms.....	7
Table 4: Definitions.....	7
Table 5: Maintained Properties of the model.....	8
Table 6: Maintained Properties of the objects.....	12
Table 7: Notation Catalogue - XSD Symbols.....	64

List of figures

Figure 1: SME architecture overview.....	8

1 INTRODUCTION

1.1 DOCUMENT PURPOSE

This document is the technical specifications for the Special Scheme for Small Enterprises (SME) defined in [R3]. From a business perspective the amended VAT scheme for small enterprises:

- Opens the VAT exemption to eligible SMEs not established in the MS where VAT is due;
- Provides exempt SMEs with simplifications in terms of registration and reporting;
- Enables MS to set their annual turnover threshold to exempt supplies by SMEs using the scheme at a maximum of EUR 85.000;
- Sets a Union annual turnover threshold at EUR 100.000 as a safeguard for the cross-border application of the special scheme (that is in MS where the SME is not established).

1.2 TARGET AUDIENCE

The target audience for this document includes:

- DG TAXUD/B4 (Taxation system & digital governance);
- DG TAXUD/C1 (Value added tax);
- Member States' Administrations (MSAs);
- SOFT-DEV;
- QA4.

1.3 SCOPE

The scope of this document is to define the architecture of the SME special scheme and the definition of the technical messages, exchange among the Member States (MS of establishment and MSs of exemption).

1.4 STRUCTURE

This document is organised as follows:

- **Chapter 1 – Introduction:** describes the scope and the objectives of the document;
- **Chapter 2 – SME architecture:** describes the architecture to be used for SME special scheme and the communication channel used for information exchanges;
- **Chapter 3 - Technical message specifications:** describes the Extensible Mark-up Language (XML) schema that defines the messages exchanged in the system;
- **Chapter 4 - Common Technical Procedures:** describes common technical procedures regarding the correlation, splitting, and correction of messages;
- **Chapter 5 - Annexes:** the section lists the annexes related to this document.

1.5 REFERENCE DOCUMENTS

The table below lists the documents that are referred to in the current document.

Ref.	Title	Originator	Version	Date
R1	Project Charter – Special Scheme for Small Enterprises	SOFT-DEV	1.0	19/11/2021
R2	Project Work Plan – Special Scheme for Small Enterprises	SOFT-DEV	1.0	05/05/2-22
R3	SME-SS - Functional Specifications	SOFT-DEV	1.11	17/11/2022
R04	COUNCIL DIRECTIVE 2006/112/EC https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32006L0112	Council of the European Union	N/A	28/11/2006
R05	COUNCIL REGULATION (EU) No 904/2010 https://eur-lex.europa.eu/eli/reg/2010/904/oj	Council of the European Union	N/A	07/10/2010
R06	COUNCIL DIRECTIVE (EU) 2020/285 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020L0285	Council of the European Union	N/A	18/02/2020
R07	COMMISSION IMPLEMENTING REGULATION (EU) 2021/2007 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32021R2007	Council of the European Union	N/A	16/11/2021
R08	CCN2 Platform Integration Manual	DG TAXUD	16.00	22/02/2022

Table 1: Reference documents

1.6 APPLICABLE DOCUMENTS

The table below lists the documents to which the current document must be compliant (e.g. FWC, SC, RfA).

Ref.	Title	Originator	Version	Date
A1	Framework Contract	TAXUD/2021/CC/162	N/A	24/06/2021
A2	Specific Contract	TAXUD/2021/DE/1018	N/A	

Table 2: Applicable documents

1.7 ABBREVIATIONS & ACRONYMS

For a better understanding of the present document, the following table provides a list of the principal abbreviations and acronyms used.

See also the ‘list of acronyms’ on TEMPO.

Abbreviation/Acronym	Definition
ASCII	American Standard Code for Information Interchange
BOM	Byte-Order Mark
CCN2	Common Communication Network v2
DDNA	Design Document for National Application
DG TAXUD	Directorate-General Taxation and Customs Union
MS	Member State
MSEST	Member State of establishment
MSEXE	Member State of exemption
OSS	One Stop Shop

Abbreviation/Acronym	Definition
RfA	Request for Action
SfA	Submitted for Acceptance
SfR	Submitted for Review
SME	Small Enterprise
SME-SS	Small Enterprise-Special Scheme
SOFT-DEV	Software Development
URL	Uniform Resource Locators
VAT	Value Added Tax
XML	Extensible Markup Language
XSD	XML Schema Definition

Table 3: Abbreviations and acronyms

1.8 DEFINITIONS

For a better understanding of the present document, the following table provides a list of the principal terms used.

See also the ‘glossary’ on TEMPO.

Term	Definition
Special Scheme	Special scheme means the special scheme of exemptions for small enterprises provided for in Title XII, Chapter 1, Section 2, of Directive 2006/112/EC.
Member State of exemption	Member State of exemption means the Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.
Member State of establishment	Member State of establishment means the Member State in which the taxable person availing itself of the special scheme is established. For the domestic application of the SME special scheme (Article 284(1) VAT Directive), the Member State of establishment can be both the Member State where the business is established and the Member State where the fixed establishment is located. For the cross-border application of the SME special scheme (Article 284(2) VAT Directive), the Member State of establishment can only be one, namely the Member State where the business is established (not where the fixed establishment is located).
Member State annual turnover	Member State annual turnover means the total annual value of supplies of goods and services, exclusive of VAT, made by a taxable person within that Member State during a calendar year.
Union annual turnover	Union annual turnover means the total annual value of supplies of goods and services, exclusive of VAT, made by a taxable person within the territory of the Community during a calendar year.

Table 4: Definitions

2 SME ARCHITECTURE

2.1 TECHNICAL SYSTEM ARCHITECTURE

This section presents a system architecture for the SME system. This overall architecture is provided for information to the Member States. The final architecture is left at the discretion of each Member State.

The presentation of the architecture also identifies common modules. These are software modules which in principle the Member States could develop and share with other Member States, or which DG TAXUD could develop for the benefit of all Member States (e.g. a dedicated Validation Module). The following figure presents an overview of a system architecture for the SME system, describing the relations between the identified high-level components.

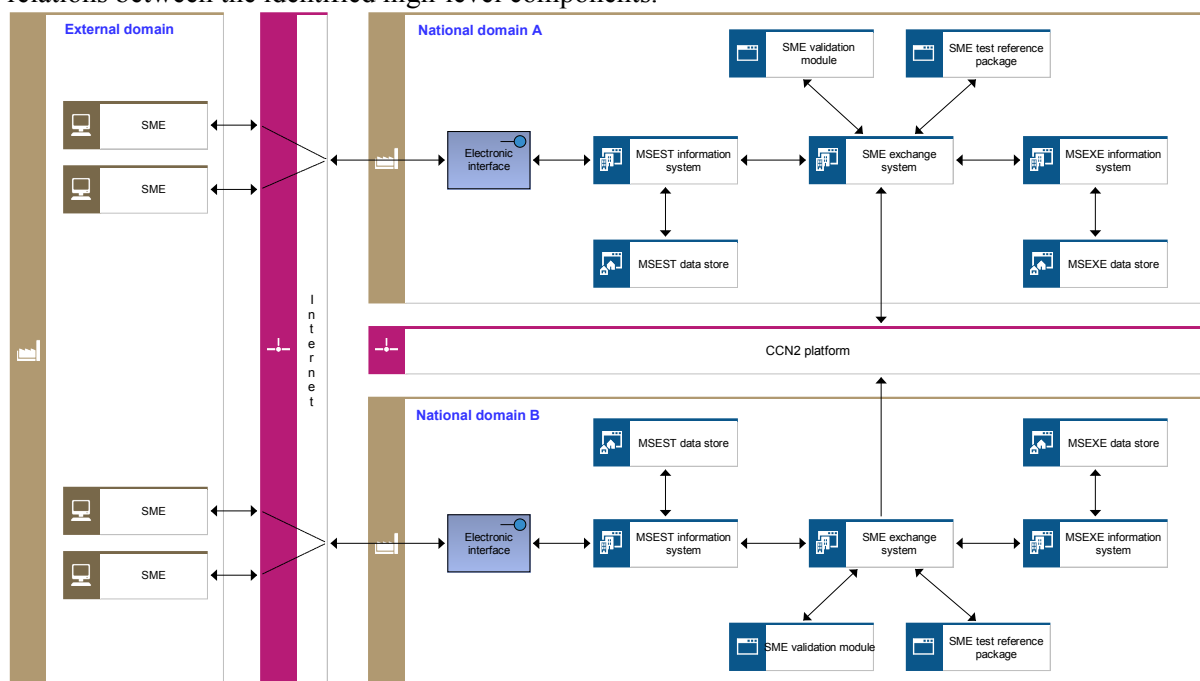


Figure 1: SME architecture overview

2.1.1 Model maintained properties

Model Property	Property Value
Name	SME architecture
Identifier	MCC.3004100
Type	ArchiMate Infrastructure Usage Viewpoint

Table 5: Maintained Properties of the model

2.1.2 Object maintained properties

Name	Description/Definition	Identifier
MSEST data store	Data Store of the MS of establishment. It contains all the information needed for using the	MCC.3004240

Name	Description/Definition	Identifier
	special scheme stored pursuant to Article 17(1) (g) [REG2010/904] and Article 3 [CIR2021/2007]. Any Member State is permitted to automatically access a minimum set of the stored information pursuant to Article 21(2b) of Regulation (EU) No 904/2010. The amount of information to be stored by the MS of establishment is the following: * the individual exempt identification number by which a taxable person availing itself of the exemption in any of those other MS is identified; * name, activity and business sector if relevant, legal form and address of that taxable person; * in case of change of the place of establishment, the date from which such change takes effect and, if available, the MS in which the taxable person has decided to establish itself; * the MSs in which the taxable person intends to avail itself of exemption as regards Prior Notification or update to a Notification; * the MSs in which the taxable person avails itself of exemption; * the date of commencement of the exemption in each of the MSs in which the taxable person avails itself of exemption; * the total value of supplies of goods and/or services carried out in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, during the calendar year of Notification and during the calendar years prior to Notification; * the total value of supplies of goods and/or services, including any amendments to it, carried out per calendar quarter in the MS in which the taxable person is established and in each of the other MS, specified by business sector if relevant, or “0” if no supplies have been made; * the date on which the Union annual turnover was exceeded and the total value of the supplies carried out in the MS in which the taxable person is established and in each of the other	

Name	Description/Definition	Identifier
	MSs, specified by business sector if relevant, or “0” if no supplies have been made, from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded; * the date on which the taxable person is no longer eligible to apply the exemption and the MS(s) in which cessation takes effect, following a notification by the MSs of exemption; * the date on which the decision of the taxable person to voluntarily cease applying the exemption scheme takes effect and the MS(s) in which cessation takes effect; * the date on which the activities of the taxable person have ceased and the MSs concerned; * the ID/VAT number of the taxable person, if any; * whether the taxable person is registered in the Union OSS and the taxable person’s OSS number.	
MSEST information system	The MSEST information system represents the system processing and storing all the taxable person related information as declared in Article 17(1)(g) [REG2010/904] and Article 3 [CIR2021/2007]. The MSEST information system prepares and generates the response messages mainly, but not exclusively, as an answer on the request messages coming from other Member States (aka MSEST automated access). The system also communicates with the taxable persons, informing him of the important events like acceptance of the Notification, exclusion from the special scheme or cessation from benefiting of the exemption in specific MS of exemption.	MCC.3004220
MSEXE data store	Data Store of the MS of exemption. It contains the information relevant to using the special scheme in that MS of exemption. However, the information to be stored is a national matter, the MS of exemption can freely decide what to store. The legal base does not oblige the MS of exemption to store the information related to the special scheme.	MCC.3004320

Name	Description/Definition	Identifier
MSEXE information system	The MSEXE information system represents the system processing and potentially storing the information on the taxable person, including the quarterly supplies, received from the MS of establishment. The MSEXE information system also prepares and generates the messages, which will be transmitted to MS of establishment.	MCC.3004300
SME exchange system	The SME exchange system is a multi-tasking system that: * Generates messages to be exchanged in the context of SME special scheme, using the information from the MEST data store; * Collects messages from other Member States to integrate the information in the MEST data store; * Validates the incoming and outgoing messages against the business and technical rules via the dedicated SME validation module; * Stores the information specific to the validated messages in the MEST data store; * Communicates with other modules like the Test reference package.	MCC.3004280
SME test reference package	SME test reference package contains all the logic for testing the SME system and is used in conformance testing. The purpose is a validation of the SME system against the Functional and Technical specifications.	MCC.3004340
SME validation module	The validation module is managed by each National Administration at National Domain level in order to validate the incoming and outgoing messages against the business and technical rules. A dedicated SME validation module will be made available to the Member States by the Commission, implementing the stateless rules. The use of this SME validation module is left at the discretion of the Member States, which are free to adapt this SME validation module to integrate it to their SME Exchange System.	MCC.3004360
Electronic interface	The electronic interface in the MS of establishment, by which a taxable person may be required, pursuant to Article 284c(2) of Directive 2006/112/EC, to submit a Prior	MCC.3004200

Name	Description/Definition	Identifier
	notification, any update to that notification and to report the value of supplies for the use of the special scheme in another Member State. Only Latin, Cyrillic and Greek characters are supported in the SME-SS user interfaces. Refer to section 2.2.	
SME	The entity represents the taxable person communicating the information required by the legal base to the MS of establishment mainly, but not exclusively, the Prior notification and Quarterly report including the updates or corrections to them. The taxable person also receives notifications from the MS of establishment.	MCC.3004160
External domain	External domain is represented by the taxable persons. The external domain is out of scope of the SME specifications, as it is a domain which is under the responsibility of the Member States.	MCC.3004140
National domain A	The National Domain A encompasses all the entities/systems specific to Member State A in context of SME special scheme. As in the context of SME special scheme each Member State can take the role of both MS of establishment and MS of exemption, the domain covers both of them.	MCC.3004120
National domain B	The National Domain B encompasses all the entities/systems specific to Member State B in context of SME special scheme. As in the context of SME special scheme each Member State can take the role of both MS of establishment and MS of exemption, the domain covers both of them.	MCC.3004441
CCN2 platform	The communication between the Member States relies on CCN2. The CCN2 platform is used as an orchestrator of the messages exchanged between the Member States.	MCC.3004380
Internet	The Internet represents a non-secure communication mean, which is used for communication between the taxable person and the MS of establishment.	MCC.3004161

Table 6: Maintained Properties of the objects

2.2 MESSAGE FORMAT

In the context of SME, the messages are exchanged in the Common Domain in XML format. The messages must comply with the specific XML Schema Definition, which is described in section 3.

The format of information exchanged in the National Domain between the taxable persons and the concerned MS of establishment is left at the discretion of the Member States.

The XML messages must be encoded in UTF-8 without Byte-Order Mark (BOM) and no transliteration of non-ASCII characters (e.g. accented or Cyrillic characters) is foreseen before the sending of the message. In case the records include such non-ASCII characters, the sending Member State must transmit them as-is.

It may happen that the national procedures of the receiving Member State require the transliteration of the information received. The receiving Member State may choose to transliterate the received data according to its national rules.

In order to improve interoperability, messages exchanged in the context of SME must start with the following XML declaration:

```
<?xml version="1.0" encoding="UTF-8"?>
```

As described in the XML specifications [W3XML], the XML messages must only use the “1.0” version number, and XML version “1.1” is not compatible. Moreover, as explained above, messages exchanged in the context of SME may only be encoded in UTF-8.

2.3 CCN2

The communication between the Member States relies on CCN2 network, meaning that all the messages are transmitted using this network.

Further information regarding CCN2 in the context of the SME will be provided in the DDNA document.

3 TECHNICAL MESSAGE SPECIFICATIONS

3.1 XML SCHEMA DEFINITION

3.1.1 Notification Group

Elaboration and processing of the Prior Notification and update of the Prior Notification.

Name	Description	Type	Mandatory Nature	Cardinality
NotificationGroup	Elaboration and processing of the Prior Notification and update of the Prior Notification.	NotificationGroup_Type	Mandatory	1 .. 1

3.1.1.1 ExemptionAcceptances_Type

Complex Type that contains elements and attribute related to the exemption acceptance of one or more taxable persons.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptionAcceptance	The element represents the information related to the approval of the taxable person's request to avail himself of the special scheme.	ExemptionAcceptance_Type	Mandatory	1 .. unbounded

3.1.1.2 ExemptionAcceptance_Type

Complex Type that contains elements and attributes related to the exemption acceptance of taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePerson	The taxable person represents the small	TaxablePersonAcceptance_Type	Mandatory	1 .. 1

	enterprise, which carries out supplies of goods and/or services and avails or wants to avail itself of exemption in a Member State other than the Member State of Establishment.			
CommencementDateMSEX E	The date of commencement of the exemption in each of the MS of exemption concerned.	RestrictedDateTime_Type	Mandatory	1 .. 1

3.1.1.3 ExemptionEligibilities_Type

Complex Type that contains elements and attributes related to the exemption acceptance message.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptionEligibility	The element represents the taxable person's eligibility to benefit from the exemption in the MS of exemption.	ExemptionEligibility_Type	Mandatory	1 .. unbounded

3.1.1.4 ExemptionEligibility_Type

The element represents the taxable person's eligibility to benefit from the exemption in the MS of exemption.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePerson	The taxable person represents the small enterprise, which carries out supplies of goods and/or services and avails or wants to avail itself of exemption in a Member State other than the Member State of Establishment.	TaxablePersonRes_Type	Mandatory	1 .. 1
ExceedanceOfMSThreshold	Information, whether or not the annual turnover threshold referred to in Article 284(2), point (b), of Directive 2006/112/EC was exceeded during the current calendar year.	xs:boolean	Mandatory	1 .. 1

FulfilmentOfConditions	Information whether the conditions referred to in Article 288a(1) of Directive 2006/112/EC are fulfilled.	xs:boolean	Mandatory	1 .. 1

3.1.1.5 IE3N01_Type

Complex Type that contains elements related to the notification notice message.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePersons	The element is a container of one or more taxable persons, which request to be registered in the SME special scheme or want to update the information in existing Notification.	TaxablePersons_Type	Mandatory	1 .. 1

3.1.1.6 IE3N02_Type

Complex Type that contains elements and attributes related to the notification request message.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePerson	The taxable person represents the small enterprise, which carries out supplies of goods and/or services and avails or wants to avail itself of exemption in a Member State other than the Member State of Establishment.	TaxablePersonRes_Type	Optional	0 .. 1
TradeDate	If the element is provided, the requesting MS is only interested in records modified on or after this date and time.	RestrictedDateTime_Type	Optional	0 .. 1
TaxablePersonStatus	Status of a taxable person. The possible values are Active, Excluded, or both	TaxablePersonStatus_Type	Optional	0 .. 1

	By default, the value is BOTH.			

3.1.1.7 IE3N03_Type

Complex Type that contains elements and attributes related to the response on the notification request.

Name	Description	Type	Mandatory Nature	Cardinality
IE3N02	Notification request is a common electronic message, transmitted by any MS to the MS of establishment, requesting the Notification information of a specific taxable person.	IE3N02_Type	Mandatory	1 .. 1
Notifications	The element is a container of zero or many Notifications.	Notifications_Type	Mandatory	1 .. 1
TaxablePersons	The element is a container of none or many taxable persons, which request to be registered in the SME special scheme or want to update the information in existing Notification.	TaxablePersonsRes_Type	Mandatory	1 .. 1

3.1.1.8 IE3N04_Type

Complex Type that contains elements and attributes related to the exemption eligibility message.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptionEligibilities	The element is a container for one or more Exemption eligibilities.	ExemptionEligibilities_Type	Mandatory	1 .. 1

3.1.1.9 IE3N05_Type

Complex Type that contains elements and attributes related to the exemption acceptance message.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptionAcceptances	The element is a container of one or more exemption acceptances related information.	ExemptionAcceptances_Type	Mandatory	1 .. 1

3.1.1.10 IE3N06_Type

Complex Type that contains elements and attributes related to the exemption eligibility reminder message.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePersons	The element is a container of one or more taxable persons, which request to be registered in the SME special scheme or want to update the information in existing Notification.	TaxablePersons_Type	Mandatory	1 .. 1

3.1.1.11 IE3N07_Type

Complex Type that contains elements and attributes related to the additional clarification request message.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePerson	A business, sole trader or professional responsible for charging, collecting and paying VAT to the tax authorities.	TaxablePersonRes_Type	Mandatory	1 .. 1
AdditionalClarification	The data element contains the textual description of the Additional clarification, which is requested by the MS of exemption from the MS of establishment.	xs:string	Mandatory	1 .. 1

3.1.1.12 IE3N08_Type

Complex Type that contains elements and attributes related to the additional clarification response message.

Name	Description	Type	Mandatory Nature	Cardinality
IE3N07	The MS of exemption requests the MS of establishment for additional clarification, needed for evaluation of the taxable person's eligibility to benefit from the exemption in that MS of exemption.	IE3N07_Type	Mandatory	1 .. 1
AdditionalClarification	Response to the request for clarification containing the additional clarification in textual form, requested by the MS of exemption and transmitted by the MS of establishment.	AdditionalClarification_Type	Mandatory	1 .. 1

3.1.1.13 NotificationGroup_Type

Complex Type that contains elements related to the processing of the Prior Notification and update of the Prior Notification.

Name	Description	Type	Mandatory Nature	Cardinality
IE3N01	Notification Notice is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform of a taxable person seeking the exemption.	IE3N01_Type	Mandatory	1 .. 1
IE3N02	Notification request is a common electronic message, transmitted by any MS to the MS of establishment, requesting the Notification information of a specific taxable person.	IE3N02_Type	Mandatory	1 .. 1
IE3N03	The message represents the Notification information as a response to the Notification request. The Notification is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response to the Notification request message.	IE3N03_Type	Mandatory	1 .. 1

IE3N04	Exemption Eligibility is a common electronic message, transmitted by the MS of exemption to the MS of establishment, to inform the latter about the eligibility of the taxable person to benefit from the exemption in that MS of exemption.	IE3N04_Type	Mandatory	1 .. 1
IE3N05	Exemption Acceptance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about approved request of the taxable person to avail himself of the special scheme.	IE3N05_Type	Mandatory	1 .. 1
IE3N06	Exemption Eligibility reminder is a common electronic message, transmitted by the MS of establishment to the MS of exemption to remind the MS of exemption to validate the taxable person's eligibility to benefit of the exemption in that MS of exemption.	IE3N06_Type	Mandatory	1 .. 1
IE3N07	Additional clarification request is a common electronic message, transmitted by the MS of exemption to the MS of establishment requesting additional clarification on Notification to be able to verify the taxable person's eligibility to benefit from the exemption in that MS of exemption.	IE3N07_Type	Mandatory	1 .. 1
IE3N08	Additional clarification is a common electronic message, transmitted by the MS of establishment to the MS of exemption as a response to clarification request submitted by the MS of exemption.	IE3N08_Type	Mandatory	1 .. 1

3.1.1.14 Notifications_Type

Complex Type that contains elements and attributes related to the Notification information as a response on the Notification request.

Name	Description	Type	Mandatory Nature	Cardinality
Notification	The message represents the Notification information as a response to the Notification request. The Notification is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response to the Notification request message.	IdentificationNotification_Type	Optional	0 .. unbounded

3.1.1.15 TaxablePersons_Type

Complex Type that contains elements and attributes related to information of one or more taxable persons.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePerson	The taxable person represents the small enterprise, which carries out supplies of goods and/or services and avails or wants to avail itself of exemption in a Member State other than the Member State of Establishment.	TaxablePersonRes_Type	Mandatory	1 .. unbounded

3.1.1.16 TaxablePersonsRes_Type

Complex Type that contains elements and attributes related to information of none or many taxable persons.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePerson	The taxable person represents the small enterprise, which carries out supplies of goods and/or services and avails or wants to avail itself of exemption in a Member State other than the Member State of Establishment.	TaxablePersonResponse_Type	Optional	0 .. unbounded

3.1.1.17 TaxablePersonStatus_Type

TaxablePersonStatus_Type is an extension of StatusType.

3.1.1.18 StatusType

Description:

Restriction: xs:string

Enumeration:

- ACTIVE: Active taxable person identification numbers
- EXCLUDED: Excluded taxable person identification numbers
- BOTH: Active and excluded taxable person identification numbers

3.1.2 Quarterly Report Group

Quarterly report is the information that the taxable must submit to the MS of establishment for each quarter to report the value of the supplies of goods and/or services made in the Member state of establishment and in all other Member States, whether or not the exemption is applied there.

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReportGroup	Quarterly report is the information that the taxable must submit to the MS of establishment for each quarter to report the value of the supplies of goods and/or services made in the Member state of establishment and in all other Member States, whether or not the exemption is applied there.	QuarterlyReportGroup_Type	Mandatory	1 .. 1

3.1.2.1 IE3Q01_Type

Complex Type that contains elements and attributes related to the Quarterly report information submitted by the taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
Period	The period to which the Quarterly Report relates. The period is represented by one of the four calendar quarters.	Period_Type	Optional	0 .. 1
QuarterlyReportReference	The unique reference number of the Quarterly Report, including the version as a timestamp.	QuarterlyReportReferenceOpt_Type	Optional	0 .. 1
MSOfExemption	The Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	cm:MSCountryCode_Type	Optional	0 .. 1

3.1.2.2 IE3Q02_Type

Complex Type that contains elements and attributes related to the response on the Quarterly report request message.

Name	Description	Type	Mandatory Nature	Cardinality
IE3Q01	Quarterly report request is a common electronic message, transmitted by the MS of exemption to the MS of establishment to obtain the Quarterly report information submitted by the taxable person to MS of establishment.	IE3Q01_Type	Mandatory	1 .. 1
QuarterlyReports	The element is a container of the Quarterly reports submitted by the taxable person.	QuarterlyReports_Type	Mandatory	1 .. 1

3.1.2.3 IE3Q03_Type

Complex Type that contains elements and attributes related to the Quarterly report non compliance.

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReportNonCompliance s	The element is a container of particular Quarterly report non-compliances.	QuarterlyReportNonCompliances_Type	Mandatory	1 .. 1

3.1.2.4 IE3Q04_Type

Complex Type that contains elements and attributes related to the correction of the submitted Quarterly report.

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReportCorrNotifications s	The element is a container for the Quarterly report correction notifications.	QuarterlyReportCorrNotifications_Type	Mandatory	1 .. 1

3.1.2.5 IE3Q05_Type

Complex Type that contains elements and attributes related to the Final report non-compliance.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
ChangeDate	Date and time when information is stored in the database.	RestrictedDateTime_Type	Mandatory	1 .. 1

3.1.2.6 IE3Q06_Type

Complex Type that contains elements and attributes related to the Final report request

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
Period	The period to which the Final Report relates. The period represents the calendar quarter and the related year.	PeriodSplit_Type	Optional	0 .. 1

3.1.2.7 IE3Q07_Type

Complex Type that contains elements and attributes related to the Final report response.

Name	Description	Type	Mandatory Nature	Cardinality
IE3Q06	Notification request is a common electronic message, transmitted by any MS to the MS of establishment, requesting the Notification information of a specific taxable person.	IE3Q06_Type	Mandatory	1 .. 1
FinalReport	The element is a container of the Final report submitted by the taxable person.	FinalReport_Type	Mandatory	1 .. 1

3.1.2.8 QuarterlyReportCorrNotifications_Type

Complex Type that contains elements and attributes related to correction of one or more Quarterly reports.

Name	Description	Type	Mandatory	Cardinality

			Nature	
QuarterlyReportCorrNotification	The element contains information related to the correction of an existing Quarterly report.	QuarterlyReportCorrNotification_Type	Mandatory	1 .. unbounded

3.1.2.9 QuarterlyReportCorrNotification_Type

Complex Type that contains elements and attributes related to correction of Quarterly report.

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReportReference	The unique reference number of the Quarterly Report, including the version as a timestamp.	QuarterlyReportReference_Type	Mandatory	1 .. 1
Period	The period to which the Quarterly Report relates. The period is represented by the four calendar quarters including start and end date.	PeriodSplit_Type	Mandatory	1 .. 1

3.1.2.10 QuarterlyReportGroup_Type

Complex Type that contains elements and attributes related to the Quarterly report.

Name	Description	Type	Mandatory Nature	Cardinality
IE3Q01	Quarterly report request is a common electronic message, transmitted by the MS of exemption to the MS of establishment to obtain the Quarterly report information submitted by the taxable person to MS of establishment.	IE3Q01_Type	Mandatory	1 .. 1
IE3Q02	Quarterly report is a common electronic message, containing the value of supplies performed by the taxable person in the MS of establishment and in each of the Member States other than the Member	IE3Q02_Type	Mandatory	1 .. 1

	State of establishment.			
IE3Q03	Quarterly Report non-compliance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying that the Quarterly report or a correction to an existing Quarterly report which is not compliant with Article 284b of Directive 2020/285 or that MS of establishment did not receive the Quarterly report at all.	IE3Q03_Type	Mandatory	1 .. 1
IE3Q04	Quarterly Report Correction notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying the latter that there is a correction to an existing Quarterly report.	IE3Q04_Type	Mandatory	1 .. 1
IE3Q05	Final Report non-compliance is a common electronic message, transmitted by the MS of establishment to the MS of exemption, notifying that the taxable person having exceeded the Union annual turnover threshold has not notified the exceedance within 15 working days or not reported the value of the supplies made from the beginning of the calendar quarter up until the date the Union annual turnover threshold was exceeded pursuant to Article 284b(3) of Directive 2020/285.	IE3Q05_Type	Mandatory	1 .. 1
IE3Q06	The Final Report Request is a common electronic message, transmitted by any Member State to MS of establishment, to request the Final Report of a specific taxable person. The message contains the following information: The exempt identification number of the taxable person, issued by the Member State of establishment and referred to in Article	IE3Q06_Type	Mandatory	1 .. 1

	21(2b), point (a), of Regulation (EU) No 904/2010; and the calendar quarter to which the Final report relates.			
IE3Q07	Final Report is a common electronic message, transmitted by the MS of establishment to the requesting MS as a response to the Final report request message, containing the value of supplies that have been made by the taxable person from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded. The message contains the following information: • The exempt individual identification number of the taxable person, issued by the Member State of establishment and referred to in Article 21(2b), point (a), of Regulation (EU) No 904/2010; • The period to which the Final report relates; • The total value of supplies carried out in the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, or "0" if no supplies have been made; • The total value of supplies carried out in each of the Member States other than the MS of establishment from the beginning of the current calendar quarter up until the date the Union annual turnover threshold was exceeded, specified by business sector if relevant, of "0" if no supplies have been made.	IE3Q07_Type	Mandatory	1 .. 1

3.1.2.11 QuarterlyReportNonCompliances_Type

Complex Type that contains elements and attributes related to one or more non compliant Quarterly reports.

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReportNonCompliance	Quarterly report or a correction to an existing Quarterly report which is not compliant with Article 284b of Directive 2020/285 or MS of establishment did not receive the Quarterly report at all.	QuarterlyReportNonCompliance_Type	Mandatory	1 .. unbounded

3.1.2.12 QuarterlyReportNonCompliance_Type

Complex Type that contains elements and attributes related non-compliant Quarterly report.

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReportReference	The unique reference number of the Quarterly Report, including the version as a timestamp	QuarterlyReportReference_Type	Mandatory	1 .. 1
Period	The period to which the Quarterly Report relates. The period is represented by the four calendar quarters including start and end date.	PeriodSplit_Type	Mandatory	1 .. 1

3.1.2.13 QuarterlyReportReference_Type

Complex Type that contains elements and attributes related to the unique reference number and version of Quarterly report.

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReportReferenceNumber	The unique reference number of the	QuarterlyReportReferenceNumberFormat_Type	Mandatory	1 .. 1

r	Quarterly Report.	e		
Version	The version of the Quarterly report, expressed as a timestamp.	RestrictedDateTime_Type	Mandatory	1 .. 1

3.1.2.14 QuarterlyReportReferenceOpt_Type

Complex Type that contains elements and attributes related to the unique reference number and version of Quarterly report (optional).

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReportReferenceNumber	The unique reference number of the Quarterly Report.	QuarterlyReportReferenceNumberFormat_Type	Mandatory	1 .. 1
Version	The optional version of the Quarterly report, expressed as a timestamp.	RestrictedDateTime_Type	Optional	0 .. 1

3.1.2.15 QuarterlyReports_Type

Complex Type that contains elements and attributes related to the none or many responses on the Quarterly report request message.

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReport	The element contains the supplies performed by the taxable person in the MS of establishment and in each of the Member States other than the Member State of establishment.	QuarterlyReportResponses_Type	Optional	0 .. unbounded

3.1.2.16 FinalReport_Type

Complex Type that contains elements and attributes Final report.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
Period	The period to which the Final Report relates. The period is represented by one of the four calendar quarters including start and end date.	PeriodSplit_Type	Mandatory	1 .. 1
TotalValueOfSuppliesinOtherMS	The element is a container of the value of supplies performed by the taxable person in each MS other than the MS of establishment.	TotalValueOfSuppliesinEachMS_Type	Mandatory	1 .. 1
TotalValueOfSuppliesinMSEST	The entity represents the total value of supplies carried out during the calendar quarter in the Member State of establishment or “0” if no supplies have been made. By default, the value is 0.	EurAmountPositive_Type	Mandatory	1 .. 1
FinalReportGrandTotal	Final report grand total of supplies of goods and services. By default, the value is 0.	EurAmountPositive_Type	Mandatory	1 .. 1

3.1.3 Cessation And Exclusion Group

Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption.

Name	Description	Type	Mandatory	Cardinality

			Nature	
CessationAndExclusionGroup	Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption.	CessationAndExclusionGroup_Type	Mandatory	1 .. 1

3.1.3.1 CessationAndExclusionGroup_Type

Complex Type that contains elements and attributes related to the exclusion or notification message.

Name	Description	Type	Mandatory Nature	Cardinality
IE3E01	Exemption Cessation is a common electronic message, transmitted without delay by the MS of exemption to the MS of establishment, to inform the latter about the taxable persons' cessation from benefiting of the exemption in that MS of exemption.	IE3E01_Type	Mandatory	1 .. 1
IE3E02	Special Scheme Cessation is a common electronic message, transmitted by the MS of exemption to the MS of establishment, to inform the latter about the cessation to apply the special scheme in that MS of exemption.	IE3E02_Type	Mandatory	1 .. 1
IE3E03	Exclusion or Cessation Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exclusion of the taxable person from the special scheme or cessation from that MS of exemption.	IE3E03_Type	Mandatory	1 .. 1
IE3E04	Exceedance of Union Annual Threshold Notification	IE3E04_Type	Mandatory	1 .. 1

	is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exceedance of the Union annual threshold by a taxable person.			

3.1.3.2 CessationCode_Type

Description: Simple Type that defines values of cessation or exclusion reason in form of unique identifying code.

Restriction: xs:string

Enumeration:

- 4: Exceeding the MS of exemption's annual threshold in the year of notification or exceeding the annual threshold of the MS of exemption in the current year (or in another year if resulting from a correction to a quarterly report): a) Threshold exceeded and no transitional period applicable; b) Threshold exceeded, transitional period applicable, ceiling applicable (10% or 25%) but exceeded; c) Threshold exceeded, transitional period applicable, no ceiling applicable or ceiling of 25% not exceeded but turnover in MS of exemption exceeds EUR 100.000.
- 5: Exceeding the MSEXEX annual threshold in the year of notification or falling within Article 288a (1) in MSEXEX, if discovered afterwards following an update to a prior notification by the taxable person correcting wrong data previously transmitted in the notification (threshold exceeded in the previous year or in the year prior to the previous year, if applicable).
- 6: The taxable person informs the MS of establishment of a change in the activity of the taxable person: The taxable person is no longer fulfilling the criteria set by MS of exemption for the sectoral threshold, or the taxable person is fulfilling the criteria set by MS of exemption for another sectoral threshold but exceeding with its turnover that sectoral threshold.
- 7: The taxable person informs the MS of establishment of a change in the activity of the taxable person: The supply of the taxable person is now falling within the supplies excluded from the special scheme in that MS of exemption.
- 8: The Member State granting the exemption has notified that the SME scheme has ceased to apply in that Member State.
- 9: MS of exemption changes its legislation: a) change in threshold; or b) in criteria for sectoral threshold, or c) transaction excluded from the threshold. As a result, the taxable person is not eligible anymore.
- 10: The taxable person has informed of its decision to cease to apply the exemption in a certain MS of exemption.

3.1.3.3 CessationReason_Type

Complex Type that contains elements and attributes related to the code and description of cessation reason.

Name	Description	Type	Mandatory Nature	Cardinality
Code	Code representing the reason of taxable person's cessation from MS of exemption. The following values are acceptable: 4, 5, 6, 7, 8, 9, and 10.	CessationCode_Type	Mandatory	1 .. 1
AdditionalInfo	Additional info related to the cessation of taxable person from the MS of exemption.	xs:string	Mandatory	1 .. 1

3.1.3.4 Cessation_Type

Complex Type that contains elements and attributes related to the cessation date and exclusion reason.

Name	Description	Type	Mandatory Nature	Cardinality
MSOfExemption	The Member State of exemption which informs about cessation of taxable person from benefiting from exemption.	cm:MSCountryCode_Type	Mandatory	1 .. 1
CessationEffectiveDate	The date from which the taxable person's cessation from the special scheme is effective.	RestrictedDate_Type	Mandatory	1 .. 1
Reason	Reason of taxable person's exclusion from the special scheme or cessation from MS of exemption. Reason consists of code and description.	CessationReason_Type	Optional	0 .. 1

3.1.3.5 ExceedancesOfUnionAnnualThresholds_Type

The element is a container for one or more Exceedances of the Union annual threshold by the taxable persons.

Name	Description	Type	Mandatory	Cardinality

			Nature	
ExceedanceOfUnionAnnualThreshold	The element is a container for one or more Exceedances of the Union annual threshold by the taxable persons.	ExceedanceOfUnionAnnualThreshold_Type	Mandatory	1 .. unbounded

3.1.3.6 ExceedanceOfUnionAnnualThreshold_Type

The element contains information related to Exceedance of the Union annual threshold by the taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
DateOfThresholdExceedance	The date of the Union annual threshold exceedance.	RestrictedDate_Type	Mandatory	1 .. 1

3.1.3.7 ExclusionOrCessation_Type

Complex Type that contains elements and attributes related to information whether taxable person is excluded or ceased from special scheme.

Name	Description	Type	Mandatory Nature	Cardinality
Exclusion	Exclusion of the taxable person from the special scheme.	Exclusion_Type	Mandatory	1 .. 1
Cessation	Cessation of the taxable person from benefiting of the exemption in MS of exemption.	Cessation_Type	Mandatory	1 .. 1

3.1.3.8 ExemptionCessations_Type

Complex Type that contains elements and attributes related to one or more exemption cessations.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptionCessation	Cessation of one or more taxable persons from the special scheme.	ExemptionCessation_Type	Mandatory	1 .. unbounded

3.1.3.9 ExemptionCessation_Type

Complex Type that contains elements and attributes related to the exemption cessation.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
CessationDetails	The element contains the details of the taxable person cessation from exemption in specific MS of exemption.	Cessation_Type	Mandatory	1 .. 1

3.1.3.10 ExclusionCode_Type

Description: Simple Type that defines values of cessation or exclusion reason in form of unique identifying code.

Restriction: xs:int

Enumeration:

- -1: Cancellation of exclusion made by MEST by mistake

- 1: Exclusion of taxable person from the special scheme - exceeding the Union annual threshold in the current year (or in another year if resulting from a correction to a quarterly report)
- 2: Retroactive exclusion of taxable person from the special scheme - exceeding the Union annual threshold in the year of Prior notification or in the previous year
- 3: It is assumed that the activities of the taxable person have ceased or that the taxable person has changed its MS of establishment
- 11: The taxable person has informed of its decision to cease to apply the special scheme
- 12: The taxable person has informed that his activities have ceased
- 13: The taxable person changes his MS of establishment
- 14: The taxable person informs the MS of establishment he has exceeded the Union turnover
- 15: The taxable person is no longer eligible to benefit from the exemption in any MS of exemption as a consequence of the Member State of establishment having received notification from each MS of exemption that the taxable person is no longer eligible for the exemption or the exemption has ceased to apply in that Member State.

3.1.3.11 ExclusionReason_Type

Complex Type that contains elements and attributes related to the code and description of exclusion reason.

Name	Description	Type	Mandatory Nature	Cardinality
Code	Code representing the reason of taxable person's exclusion from MS of exemption. The following values are acceptable: -1, 1, 2, 3, 11, 12, 13, 14 and 15.	ExclusionCode_Type	Mandatory	1 .. 1
AdditionalInfo	Additional info related to the exclusion of taxable person from the MS of exemption.	xs:string	Mandatory	1 .. 1

3.1.3.12 ExclusionCessations_Type

Complex Type that contains elements and attributes related to one or more cessations or exclusions.

Name	Description	Type	Mandatory Nature	Cardinality
ExclusionCessation	Taxable person's cessation from benefiting of the	ExclusionCessation_Typ	Mandatory	1 .. unbounded

	exemption in a specific MS of exemption or exclusion of the taxable person from the special scheme.			

3.1.3.13 ExclusionCessation_Type

Complex Type that contains elements and attributes related to cessation or exclusion.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
ExclusionOrCessation	Exclusion of taxable person from the special scheme or cessation of the taxable person to apply the exemption in MS of exemption.	ExclusionOrCessation_Type	Mandatory	1 .. 1

3.1.3.14 Exclusion_Type

Complex Type that contains elements and attributes related to the exclusion date and exclusion reason.

Name	Description	Type	Mandatory Nature	Cardinality
ExclusionEffectiveDate	The date from which the taxable person's exclusion from the special scheme is effective.	RestrictedDate_Type	Mandatory	1 .. 1
Reason	Reason of taxable person's exclusion from the special scheme or cessation from MS of exemption. Reason consists of code and description.	ExclusionReason_Type	Optional	0 .. 1

3.1.3.15 IE3E01_Type

Complex Type that contains elements and attributes related to the taxable person cessation from benefiting of the exemption in that MS of exemption.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptionCessations	The element is a container for one or more Exemption cessations.	ExemptionCessations_Type	Mandatory	1 .. 1

3.1.3.16 IE3E02_Type

Complex Type that contains elements and attributes related to the cessation of scheme applicability in particular MS of exemption.

Name	Description	Type	Mandatory Nature	Cardinality
SpecialSchemeCessations	The element is a container for one or more Special scheme cessations.	SpecialSchemesCessations_Type	Mandatory	1 .. 1

3.1.3.17 IE3E03_Type

Complex Type that contains elements and attributes related to the exclusion or cessation of taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
ExclusionCessations	The element is a container of one or more taxable persons ceased from benefiting of the exemption in MS of exemption or exclusions of taxable persons from the special scheme.	ExclusionCessations_Type	Mandatory	1 .. 1

3.1.3.18 IE3E04_Type

Complex Type that contains elements and attributes related to the exceedance of Union Annual Threshold message.

Name	Description	Type	Mandatory Nature	Cardinality
ExceedancesOfUnionAnnualThresholds	Exceedance of Union Annual Threshold Notification is a common electronic message, transmitted by the MS of establishment to the MS of exemption, to inform the latter about exceedance of the Union annual threshold.	ExceedancesOfUnionAnnualThresholds_Type	Mandatory	1 .. 1

3.1.3.19 SpecialSchemesCessations_Type

Complex Type that contains elements and attributes related to the cessation of scheme applicability in particular MS of exemption.

Name	Description	Type	Mandatory Nature	Cardinality
SpecialSchemeCessation	The element contains the list of the taxable persons which were ceased from benefiting from the exemption in a specific MS of exemption.	SpecialSchemesCessation_Type	Mandatory	1 .. unbounded

3.1.3.20 SpecialSchemesCessation_Type

Complex Type that contains elements and attributes related to the cessation of scheme applicability in particular MS of exemption.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of the exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1

CessationEffectiveDate	The date on which the special scheme for small enterprises has ceased to apply in that Member State.	xs:date	Mandatory	1 .. 1

3.1.4 Common Group

The element contains information about validation error(s), detected in the received business message.

Name	Description	Type	Mandatory Nature	Cardinality
CommonGroup	The element contains information about validation error(s), detected in the received business message.	CommonGroup_Type	Mandatory	1 .. 1

3.1.4.1 Error_Type

Complex Type that contains elements and attributes related to the error.

Name	Description	Type	Mandatory Nature	Cardinality
Code	Error code referring to the error detected during the validation of the received business message.	xs:token	Mandatory	1 .. 1
Detail	The free text element allows for further description of the detected error.	xs:string	Optional	0 .. 1
TaxablePerson	A business, sole trader or professional responsible for charging, collecting and paying VAT to the tax authorities.	TaxablePerson_Type	Mandatory	1 .. 1
QuarterlyReportReferenceNumber	The unique identifier of the requested Quarterly report, including the version.	QuarterlyReportReferenceOpt_Type	Mandatory	1 .. 1

3.1.4.2 IE3C01_Type

The element is a container for the errors detected during the validation of the business message.

Name	Description	Type	Mandatory Nature	Cardinality
Error	The element represents information on the error detected during the validation of the business message.	Error_Type	Mandatory	1 .. unbounded

3.1.4.3 CommonGroup_Type

Complex Type that contains elements related to the processing of messages common to all other groups.

Name	Description	Type	Mandatory Nature	Cardinality
IE3C01	The element contains information about validation error(s), detected in the received business message.	IE3C01_Type	Mandatory	1 .. 1

3.1.5 Other Elements

3.1.5.1 AdditionalClarification_Type

Complex Type that contains elements and attributes related to the clarification response message.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePerson	A business, sole trader or professional responsible for charging, collecting and paying VAT to the tax authorities.	TaxablePersonResponse_Type	Mandatory	1 .. 1
RequestedClarification	The element represents the clarification information in textual form as an answer to the	xs:string	Mandatory	1 .. 1

	request transmitted by the MS of exemption.			

3.1.5.2 AddressFreeOrStruct_Type

Complex Type that contains elements and attributes related to the entry of address of the taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
AddressFree	Address of Taxable person in a free entry format.	xs:string	Mandatory	1 .. 1
AddressStruct	Address of Taxable person in a structured format.	cm:AddressStruct_Type	Mandatory	1 .. 1
Country	Address country.	cm:CountryCode_Type	Mandatory	1 .. 1

3.1.5.3 Amount_Type

Description: Simple Type that defines information about value and restriction of the Amount element.

Restriction: xs:decimal

Fraction digits: 2

3.1.5.4 AmountPositive_Type

Description: Simple Type that defines information about value and restriction of the Amount element whereas Amount cannot be lower than 0.

Restriction: xs:decimal

Fraction digits: 2

Min.Inclusive: 0

3.1.5.5 EurAmount_Type

Complex Type that contains elements and attributes related to the Amount as such that Amount is fixed to EUR.

EurAmount_Type is an extension of Amount_Type.

Name	Description	Type	Mandatory Nature	Cardinality
currency (Attribute)	The value is fixed to EUR.	cm:MSCurrCode_Type	Mandatory	1 .. 1

3.1.5.6 ExemptIdentificationNumber_Type

Complex type that contains elements and attributes related to the Exempt Identification Number of taxable person.

ExemptIdentificationNumber_Type is an extension of cm:ExemptIdentificationNumber_Type.

Name	Description	Type	Mandatory Nature	Cardinality
issuedBy (Attribute)	The code of the country or territory that issued the number.	cm:MSCountryCode_Type	Mandatory	1 .. 1

3.1.5.7 EurAmountPositive_Type

Complex Type that contains elements and attributes related to the Amount as such that Amount is fixed to EUR and value cannot be lower than 0.

EurAmountPositive_Type is an extension of AmountPositive_Type.

3.1.5.8 ExclusionDetails_Type

Complex Type that contains elements and attributes related to the exclusion details of taxable person.

Name	Description	Type	Mandatory Nature	Cardinality

UnionAnnualThresholdExceedanceDate	The Date of the Union annual threshold exceedance represents the date when the taxable person exceeded the Union annual threshold.	xs:date	Optional	0 .. 1
ExclusionEffectiveDate	The date from which the taxable person's exclusion from the special scheme is effective.	xs:date	Mandatory	1 .. 1
ExclusionReason	Complex Type that contains elements and attributes related to the exclusion date and exclusion reason.	ExclusionReason_Type	Optional	0 .. 1
DecisionDate	Date the MS of establishment took the decision to exclude the taxable person from the special scheme.	xs:date	Mandatory	1 .. 1
ExclusionDateReqByTaxablePerson	The exclusion date requested by the taxable person in case of changing MS of establishment or in case when taxable person decides to stop using the special scheme.	xs:date	Optional	0 .. 1

3.1.5.9 IdentificationNotification_Type

Complex Type that contains elements and attributes related to the response on the Notification request message.

Name	Description	Type	Mandatory Nature	Cardinality
TaxablePerson	The taxable person represents the small enterprise, which carries out supplies of goods and/or services and avails or wants to avail itself of exemption in a Member State other than the Member State of Establishment.	TaxablePersonResponse_Type	Mandatory	1 .. 1
ChangeDate	Date and time when information is stored in the database.	RestrictedDateTime_Type	Mandatory	1 .. 1

TaxablePersonDetails	Additional information related to the taxable person.	TaxablePersonDetails_Type	Mandatory	1 .. 1
MSOfEstablishment	The Member State in which the taxable person availing itself of the special scheme is established.	cm:MSCountryCode_Type	Mandatory	1 .. 1
MSOfExemptions	The Member State granting the exemption from VAT to the supply of goods and services made within its territory by taxable persons eligible for exemption under the special scheme.	MSOfExemptions_Type	Mandatory	1 .. 1
TotalValueOfSupplies	Union annual turnover of the taxable person. The Union annual turnover threshold is set to EUR 100.000.	TotalValueOfSupply_Type	Mandatory	1 .. 1
NotRegisteredInOtherMSEST	By clicking this box, Taxable Person declares that he is not already identified by an individual number in another Member State of Establishment for the application of exemption pursuant to Article 284(3)(b) of Directive 2006/112/EC.	xs:boolean	Mandatory	1 .. 1
RegistrationInOSS	Check if taxable person is registered within OSS Union scheme.	RegistrationInOSS_Type	Optional	0 .. 1
SchemeDetails	Details of the scheme	SchemeDetails_Type	Mandatory	1 .. 1

3.1.5.10 Month_Type

Description: Simple Type that defines information about value and restriction of the Month element.

Restriction: xs:string

Enumeration:

- 01: January
- 02: February

- 03: March
- 04: April
- 05: May
- 06: June
- 07: July
- 08: August
- 09: September
- 10: October
- 11: November
- 12: December

3.1.5.11 LegalForm_Type

Description: Complex Type that contains elements and attributes related to the legal type of taxable person.

Restriction: xs:string

Enumeration:

- Natural Person: Code-1
- Private Company: Code-2
- Public Law Body: Code-3

3.1.5.12 MSOfExemptions_Type

Complex Type that contains elements and attributes related to the taxable persons information in MS of exemption.

Name	Description	Type	Mandatory Nature	Cardinality
MSOfExemption	Any country that is a Member State of the European Union.	MSOfExemption_Type	Mandatory	1 .. unbounded

3.1.5.13 MSOfExemption_Type

Complex Type that contains elements and attributes related to the taxable persons information in MS of exemption.

Name	Description	Type	Mandatory Nature	Cardinality
MemberState	Any country that is a Member State of the European Union.	cm:MSCountryCode_Type	Mandatory	1 .. 1
CommencementDateMSEXE	The date of commencement of the exemption in each of the MS of exemption concerned.	xs:date	Mandatory	1 .. 1
CessationEffectiveDate	The date from which the taxable person's cessation from the special scheme is effective.	xs:date	Optional	0 .. 1
CessationReason	Reason of taxable person's exclusion from the special scheme or cessation from MS of exemption. Reason consists of code and description.	CessationReason_Type	Optional	0 .. 1

3.1.5.14 TaxablePerson_Type

Complex Type that contains elements and attributes related to the taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
VATIdentificationNumber	The VAT identification number of the taxable person, assigned to him by the national tax authority for VAT purposes.	VATNumber_Type	Mandatory	1 .. 1
TaxIdentificationNumber	The national tax identification number of the	TaxIdentificationNumber_Type	Mandatory	1 .. 1

	taxable person.			
AnyOtherIdentification	Any other number of the taxable person for the purpose of the identification under the special SME scheme.	AnyOtherIdentification_Type	Mandatory	1 .. 1

3.1.5.15 TaxablePersonResponse_Type

Complex Type that contains elements and attributes related to the taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Optional	0 .. 1
VATIdentificationNumber	The VAT identification number of the taxable person, assigned to him by the national tax authority for VAT purposes.	VATNumber_Type	Mandatory	1 .. 1
TaxIdentificationNumber	The national tax identification number of the taxable person.	TaxIdentificationNumber_Type	Mandatory	1 .. 1
AnyOtherIdentification	Any other number of the taxable person for the purpose of the identification under the special SME scheme.	AnyOtherIdentification_Type	Mandatory	1 .. 1

3.1.5.16 TaxablePersonAcceptance_Type

Complex Type that contains elements and attributes related to the taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
VATIdentificationNumber	The VAT identification number of the taxable person, assigned to him by the national tax authority for VAT purposes.	VATNumber_Type	Mandatory	1 .. 1
TaxIdentificationNumber	The national tax identification number of the taxable person.	TaxIdentificationNumber_Type	Mandatory	1 .. 1
AnyOtherIdentification	Any other number of the taxable person for the purpose of the identification under the special SME scheme.	AnyOtherIdentification_Type	Mandatory	1 .. 1

3.1.5.17 PeriodSplit_Type

PeriodSplit_Type is an extension of Period_Type.

Name	Description	Type	Mandatory Nature	Cardinality
StartDate	Start date of the period, to be used only where the taxable person did not supply goods or services from the beginning of the quarter (in case of change the MEST). The scheme Commencement Date is different than the first day of the quarter.	RestrictedDate_Type	Optional	0 .. 1
EndDate	End date of the period, to be used only where the	RestrictedDate_Type	Optional	0 .. 1

	taxable person did not supply goods or services until end of the quarter (in case of change the MEST). The cessation Effective Date is different than the last day of the quarter).			

3.1.5.18 Period_Type

Complex Type that contains elements and attributes related to the definition of specific period.

Name	Description	Type	Mandatory Nature	Cardinality
Year	The year to which the supplies of goods and/or services performed by the taxable person refer.	Year_Type	Mandatory	1 .. 1
Quarter	The quarter to which the supplies of goods and/or services performed by the taxable person refer.	Quarter_Type	Mandatory	1 .. 1

3.1.5.19 Quarter_Type

Description: Simple Type that defines information about value and restriction of the quarter element, defined as a number per quarter.

Restriction: xs:int

Enumeration:

- 1: January to March
- 2: April to June
- 3: July to September
- 4: October to December

3.1.5.20 QuarterlyReportResponses_Type

Complex Type that contains elements and attributes related to information of one or more quarterly responses.

Name	Description	Type	Mandatory Nature	Cardinality
QuarterlyReportReference	The unique reference number of the Quarterly Report, including the version as a timestamp.	QuarterlyReportReference_Type	Mandatory	1 .. 1
SubmissionDate	The date the MS of establishment received the initial version of the Quarterly Report.	xs:date	Mandatory	1 .. 1
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
Period	The period to which the Quarterly Report relates. The period is represented by one of the four calendar quarters including start and end date.	PeriodSplit_Type	Mandatory	1 .. 1
TotalValueOfSuppliesinMSEST	The entity represents the total value of supplies carried out during the calendar quarter in the Member State of establishment or "0" if no supplies have been made. By default, the value is 0.	EurAmountPositive_Type	Mandatory	1 .. 1
TotalValueOfSuppliesinOtherMS	The element is a container of the total value of supplies performed by the taxable person in each MS other than the MS of establishment.	TotalValueOfSuppliesinEachMS_Type	Mandatory	1 .. 1
QuarterlyReportGrandTotal	Quarterly report grand total of supplies of goods and services. By default, the value is 0.	EurAmountPositive_Type	Mandatory	1 .. 1

3.1.5.21 QuarterlyReportReferenceNumberFormat_Type

Description: The format is MEST/Exempt identification number/Period.Year e.g. SI/SI123456789-EX/Q1.2025

Restriction: xs:string

Pattern: [A-Z]{2}/\p{IsBasicLatin}* -EX/Q([1-4])[.]{1}[0-9]{4}

3.1.5.22 RegistrationInOSS_Type

Complex Type that contains elements and attributes related to the taxable person participation in OSS Union schema.

Name	Description	Type	Mandatory Nature	Cardinality
OSSRegistration	By this tick box the taxable person informs whether he is registered in the OSS Union scheme.	xs:boolean	Mandatory	1 .. 1
OSSIdentifier	The identifier of the taxable person used for identification in the OSS Union scheme.	VATNumber_Type	Mandatory	1 .. 1

3.1.5.23 RestrictedDate_Type

Description: Simple Type that defines information about value and restriction of the format of a date element.

Restriction: xs:date

Pattern: \d{4}-\d{2}-\d{2}

3.1.5.24 RestrictedDateTime_Type

Description: Simple Type that defines information about value and restriction of the format of a date and time element.

Restriction: xs:dateTime

Pattern: \d{4}-\d{2}-\d{2}T\d{2}:\d{2}:\d{2}(\.\d{3}){0,1}

3.1.5.25 SchemeDetails_Type

Complex Type that contains elements and attributes related to the taxable person participation in OSS Union schema.

Name	Description	Type	Mandatory Nature	Cardinality
RegistrationDate	The date the MS of establishment took the decision to register the taxable person for the special scheme.	xs:date	Optional	0 .. 1
RequestDate	The date the taxable person requested to use the special scheme.	xs:date	Optional	0 .. 1
CommencementDateScheme	The date the taxable person started its activities covered by the special scheme.	xs:date	Mandatory	1 .. 1
ExclusionDetails	Details of the exclusion of the taxable person from the special scheme	ExclusionDetails_Type	Optional	0 .. 1

3.1.5.26 TaxablePersonRes_Type

Complex Type that contains elements and attributes related to the taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
ExemptIdentificationNumber	Individual identification number of exempt taxable persons issued by the Member State of establishment for identification purposes within the SME special scheme.	ExemptIdentificationNumber_Type	Mandatory	1 .. 1
VATIdentificationNumber	The VAT identification number of the taxable person, assigned to him by the national tax authority for VAT purposes.	VATNumber_Type	Mandatory	1 .. 1

TaxIdentificationNumber	The national tax identification number of the taxable person.	TaxIdentificationNumber_Type	Mandatory	1 .. 1
AnyOtherIdentification	Any other number of the taxable person for the purpose of the identification under the special SME scheme.	AnyOtherIdentification_Type	Mandatory	1 .. 1

3.1.5.27 TaxablePersonDetails_Type

Complex Type that contains elements and attributes related to the details of taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
ActivityType	Activity and business sector if relevant pursuant to Article 284(1), second subparagraph, of Directive 2006/112/EC.	xs:string	Mandatory	1 .. 1
LegalForm	The legal form of the taxable person.	LegalForm_Type	Mandatory	1 .. 1
Name	The official name to the taxable person.	cm:Name_Type	Mandatory	1 .. 1
Address	The address of the taxable person.	AddressFreeOrStruct_Type	Mandatory	1 .. 1
TelephoneNumber	The phone contact of the taxable person to be used in matters concerning the special scheme.	cm:PhoneNumber_Type	Optional	0 .. 1
EmailAddress	The email address of the taxable person to be used in matters concerning the special scheme.	cm:EMail_Type	Optional	0 .. 1
Websites	The Website of the taxable person.	WebSites_Type	Optional	0 .. 1

3.1.5.28 ThresholdApplicable_Type

Complex Type that contains elements and attributes related to the varying threshold applicability.

Name	Description	Type	Mandatory	Cardinality

			Nature	
ThresholdApplicableNo	Varying threshold not applicable in Member State of Exemption.	ThresholdApplicableNo_Type	Mandatory	1 .. 1
ThresholdApplicableYes	Varying threshold applicable in Member State of Exemption.	ThresholdApplicableYes_Type	Mandatory	1 .. 1

3.1.5.29 ThresholdApplicableWithYear_Type

Complex Type that contains elements and attributes related to the varying threshold applicability for a specific year.

Name	Description	Type	Mandatory Nature	Cardinality
ThresholdApplicableNo	Varying threshold not applicable in Member State of Exemption for a specific year.	ThresholdApplicableNoWithYear_Type	Mandatory	1 .. 1
ThresholdApplicableYes	Varying threshold applicable in Member State of Exemption for a specific year.	ThresholdApplicableYesWithYear_Type	Mandatory	1 .. 1

3.1.5.30 ThresholdApplicableNo_Type

Complex Type that contains elements and attributes related to the option when threshold is not applicable.

Name	Description	Type	Mandatory Nature	Cardinality
MemberState	Any country that is a Member State of the European Union.	cm:MSCountryCode_Type	Mandatory	1 .. 1
TotalValueOfSupplies	Total Value of Supplies of goods and services in the Member State. By default, the value is 0.	EurAmountPositive_Type	Mandatory	1 .. 1

3.1.5.31 ThresholdApplicableNoWithYear_Type

Complex Type that contains elements and attributes related to the option when threshold is not applicable.

ThresholdApplicableNoWithYear_Type is an extension of ThresholdApplicableNo_Type.

Name	Description	Type	Mandatory Nature	Cardinality
Year	The year to which the supplies of goods and/or services performed by the taxable person refer.	Year_Type	Mandatory	1 .. 1

3.1.5.32 ThresholdApplicableYes_Type

Complex Type that contains elements and attributes related to the option when threshold is applicable.

Name	Description	Type	Mandatory Nature	Cardinality
MemberState	Any country that is a Member State of the European Union.	cm:MSCountryCode_Type	Mandatory	1 .. 1
BusinessSector	The business sector, to which the reported supplies refer.	xs:string	Mandatory	1 .. 1
TotalValueOfSupplies	Total Value of Supplies of goods and services in the Member State. By default, the value is 0.	EurAmountPositive_Type	Mandatory	1 .. 1

3.1.5.33 ThresholdApplicableYesWithYear_Type

Complex Type that contains elements and attributes related to the option when threshold is applicable.

ThresholdApplicableYesWithYear_Type is an extension of ThresholdApplicableYes_Type.

Name	Description	Type	Mandatory Nature	Cardinality
Year	The year to which the supplies of goods and/or services performed by the taxable person refer.	Year_Type	Mandatory	1 .. 1

3.1.5.34 TotalValueOfSuppliesinEachMS_Type

Complex Type that contains elements and attributes related to the total value of supplies in each MS.

Name	Description	Type	Mandatory Nature	Cardinality
TotalValueOfSuppliesInMSE	Total value of supplies in MS other than the MS of establishment. The declaration of the supplies is dependent on the fact whether the MS applies the sectoral threshold.	ThresholdApplicable_Type	Mandatory	1 .. unbounded

3.1.5.35 TotalValueOfSupply_Type

Complex Type that contains elements and attributes related to the total value of provided supply per member state.

Name	Description	Type	Mandatory Nature	Cardinality
TotalValueOfSupply	Total value of supply.	ThresholdApplicableWithYear_Type	Mandatory	1 .. unbounded

3.1.5.36 VATNumber_Type

Complex type that contains elements and attributes related to the VAT number of taxable person.

VATNumber_Type is an extension of cm:VATNumber_Type.

Name	Description	Type	Mandatory Nature	Cardinality
issuedBy (Attribute)	The code of the country or territory that issued the number.	cm:MSCountryCode_Type	Mandatory	1 .. 1

3.1.5.37 WebSites_Type

Complex type that contains elements related to the Website of taxable person.

Name	Description	Type	Mandatory Nature	Cardinality
WebsiteURL	Taxable person Website URL.	xs:token	Mandatory	1 .. unbounded

3.1.5.38 Year_Type

Description: Simple Type that defines information about value and restriction of the Year element.

Restriction: xs:gYear

Pattern: [0-9]{4}

3.1.5.39 TaxIdentificationNumber_Type

Complex Type that contains attribute related to the the national tax identification number of the taxable person.

TaxIdentificationNumber_Type is an extension of cm:VATNumberOrTIN_Type.

Name	Description	Type	Mandatory Nature	Cardinality
issuedBy (Attribute)	The code of the country or territory that issued the number.	cm:MSCountryCode_Type	Mandatory	1 .. 1

3.1.5.40 AnyOtherIdentification_Type

Complex Type that contains attribute related to any other number of the taxable person for the purpose of the identification under the special SME scheme.

AnyOtherIdentification_Type is an extension of cm:VATNumberOrTIN_Type.

Name	Description	Type	Mandatory Nature	Cardinality
issuedBy (Attribute)	The code of the country or territory that issued the number.	cm:MSCountryCode_Type	Mandatory	1 .. 1

4 COMMON TECHNICAL PROCEDURES

4.1 CORRELATION BETWEEN EXCHANGED MESSAGES

The section describes the correlation mechanism of related SME messages, like:

- Request and response messages used in automated access to MEST data store;
- Any SME message, exchanged between the Member States, and the related error message.

The correlation mechanism will allow the Member States to link the SME messages together, to logically group them. This is made possible by using 2 elements:

- The unique reference of the message;
- The reference of the correlated message.

Two critical points are to be considered regarding those two references:

1. The unique reference of the message must be unique per sender;
2. The reference of the correlated message allows the link of the dependent message. The correction message must refer to the previous message only.

4.1.1 Correlating the request and response messages used in automated access to MEST data store

The following mechanism is applicable:

1. The MS of exemption sends the request message to the MEST automated access with the following identifiers:
 - a) Message reference ID = 'A';
 - b) Message correlation ID remains empty as it is the very first message of this exchange.
2. The MEST automated access prepares the response message and sends it to MS of exemption with the following identifiers:
 - a) Message reference ID = 'B';
 - b) Message correlation ID = 'A', indicating that the message refers to the request message having the message reference = 'A'.

The following extension is applicable:

- If parsing of the request message received by the MEST automated access failed, the MEST automated access will respond with an error message as depicted in section 4.1.2;
- If parsing of the response message received by the MS of exemption failed, the MS of exemption will respond with an error message as depicted in section 4.1.2.

4.1.2 Correlation of any SME message with the related error message

The following mechanism is applicable:

1. The MS1 sends any SME message to the MS2 with the following identifiers:
 - a) Message reference ID = 'C';
 - b) Message correlation ID remains empty as it is the very first message of this exchange.

2. The MS2 receives the message but parsing of the message fails, so the MS2 sends an error message to MS1 with the following identifiers:
 - a) Message reference ID = 'D';
 - b) Message correlation ID = 'C', indicating that the error message refers to the message having the message reference = 'C'.

4.2 FUNCTIONAL SPLIT MECHANISM OF SME MESSAGES

The messages exchange via the CCN2 platform have a limitation of 20Mb. It is not expected that any SME message will exceed this threshold. However, if this is the case, the SME messages will have to be split into more standalone messages, each of them below 20Mb. This limitation may impact the following SME messages:

- The Notification message;
- Quarterly report message.

Both can contain multiple Notifications, resp. Quarterly reports.

The following key points are to be considered as a must in the functional split:

1. The maximum size of an SME message (maximum size of the XML file) is 20Mb;
2. Each message must be technically and semantically valid (meaning each message must be conform to the structure of the XSD);
3. SME does not impose any minimum level of splitting as long as point (1) and (2) are respected. This means that the minimum granularity level of splitting is one Notification or one Quarterly report (one Notification or Quarterly report cannot be split over two files).

The Member States are free to implement their own splitting algorithms, as far as the 3 points above are respected. Then the splitting of the message will be most probably performed at the SME automated access side.

4.3 CORRECTION MECHANISM

This section describes how the Prior notification and the Quarterly report can be corrected after the submission to MS of establishment.

4.3.1 Prior notification

For the simplification of the process, no specific correction mechanism is applied on the Prior notification. In case the taxable person needs to update the information included in the current Notification, he will simply update this Notification and re-submit it to the MS of establishment. When the MS of establishment receives the updated Notification from an already registered taxable person (and positively validates it), the MS of establishment will update the information in the MEST data store accordingly and will notify the MS of exemption.

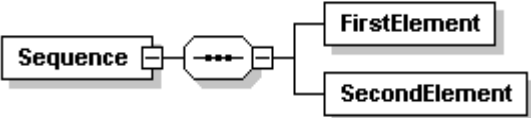
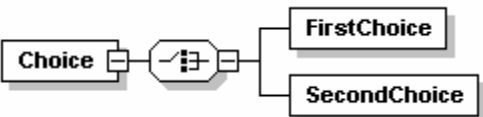
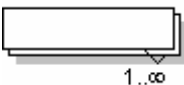
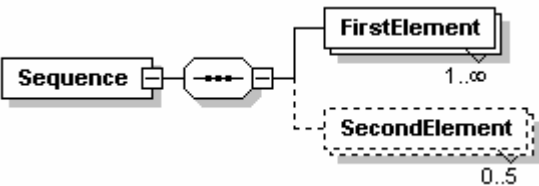
4.3.2 Quarterly report

Similarly like in case of Prior notification, no specific correction mechanism is applied for Quarterly report. If the taxable person needs to update the previously submitted Quarterly report, he will update the information in the already submitted Quarterly report and re-submit it to the MS of establishment. When the MS of establishment receives this Quarterly report, he will recognise that the taxable person has already submitted the Quarterly report for that quarter and will assume it as a correction to existing one. The new Quarterly report will replace the existing one. The different Quarterly reports for the same quarter are distinguished by the version (represented by the timestamp of submission).

5 ANNEXES

5.1 XML NOTATION CATALOGUE

The notation catalogue explains notation used in document figures. The following table describes the symbols used in the XML schema diagrams.

Symbol	Explanation	Example
	This symbol means that an element is a sequence of other inner elements.	 The element <i>Sequence</i> is composed of two (child) elements: <i>FirstElement</i> and <i>SecondElement</i>.
	This symbol means that an element is made of one and only one of the inner elements.	 The element <i>Choice</i> contains as child element either <i>FirstChoice</i> or <i>SecondChoice</i>.
	This continuous border indicates a mandatory element or attribute within an instance document. The three lines in the upper left corner indicate that the element has no child element (this notation does not apply to attributes).	 The element <i>MandatoryElement</i> must be present in any XML instance document.
	This dashed border means that the element or attribute is optional within an instance document.	 The <i>OptionalElement</i> is optional in any XML instance document.
	The figures indicate the cardinality.	 The element <i>Sequence</i> is made of the following child elements: <i>FirstElement</i>: this element must occur at least one time; <i>SecondElement</i>: this element is optional and can occur at most five times.

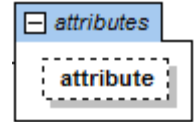
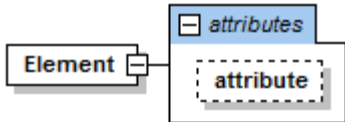
	This symbol indicates an attribute of an element.	

Table 7: Notation Catalogue - XSD Symbols

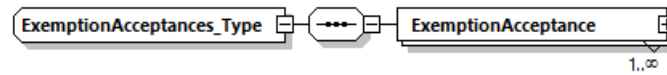
5.2 REQUIREMENT MATRIX

ID	Summary	Description	Implementation
NFR-01	Information exchange	The System must allow uninterrupted exchange of information between MSs. To avoid manual treatment of messages, automatic exchange shall be used whenever possible.	CCN2 is used, as described in section.
NFR-02	Security	Information exchanged between MSs will be secured.	CCN2 platform allows enforcement of security policies in accordance to offered features of platform itself.
NFR-03	Reliability	The System must be reliable and, in case of disruption be able to recover to further operational readiness.	Supported through capabilities of CCN2 platform: - No Message Lost Assurance - Asynchronous Acknowledgement - Exactly Once Delivery

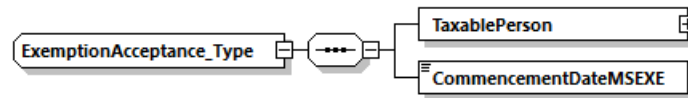
5.3 DIAGRAMS

5.3.1 Notification Group

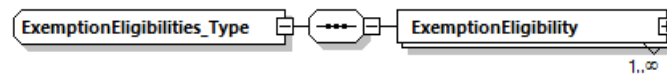
5.3.1.1 ExemptionAcceptances_Type



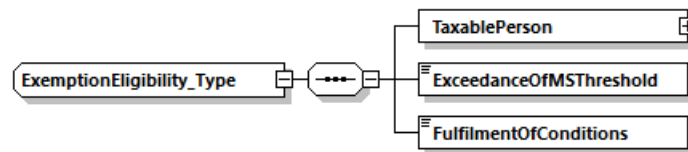
5.3.1.2 ExemptionAcceptance_Type



5.3.1.3 ExemptionEligibilities_Type



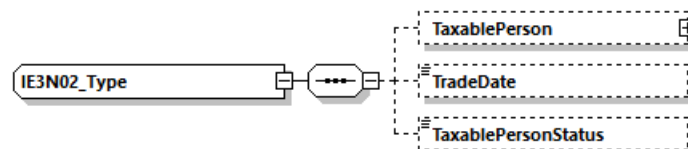
5.3.1.4 ExemptionEligibility_Type



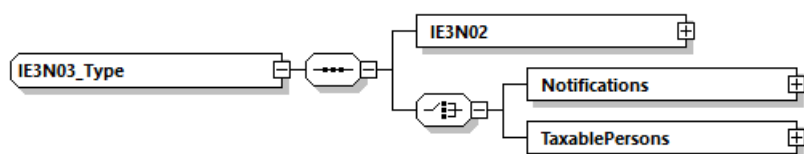
5.3.1.5 IE3N01_Type



5.3.1.6 IE3N02_Type



5.3.1.7 IE3N03_Type



5.3.1.8 IE3N04_Type



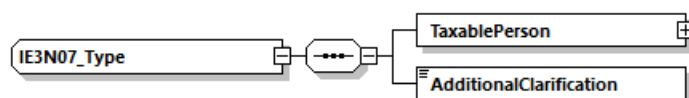
5.3.1.9 IE3N05_Type



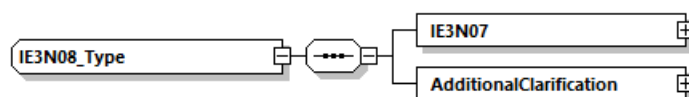
5.3.1.10 IE3N06_Type



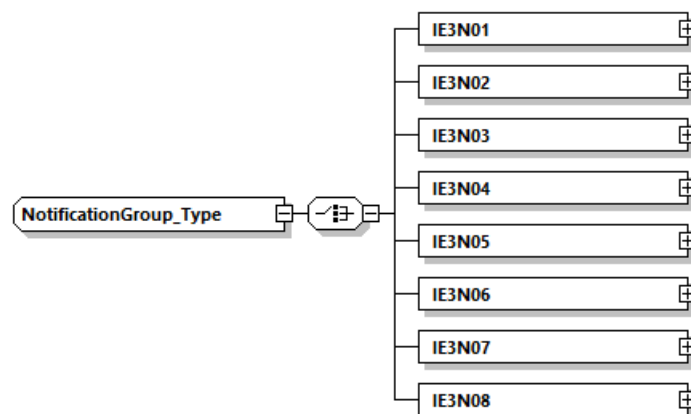
5.3.1.11 IE3N07_Type



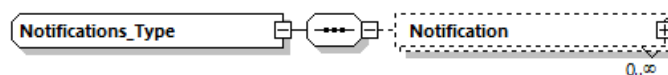
5.3.1.12 IE3N08_Type



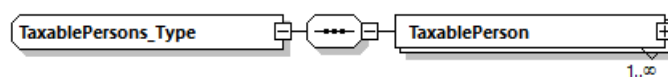
5.3.1.13 NotificationGroup_Type



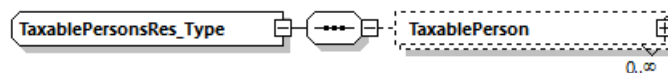
5.3.1.14 Notifications_Type



5.3.1.15 TaxablePersons_Type

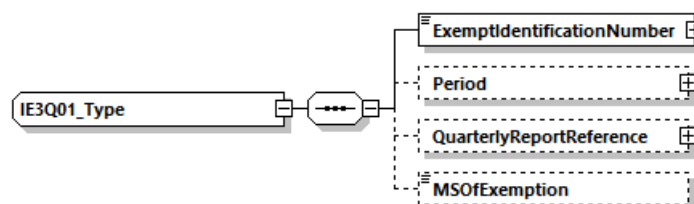


5.3.1.16 TaxablePersonsRes_Type

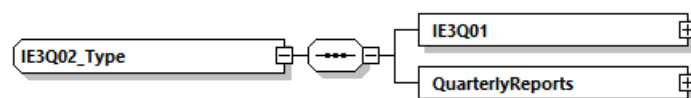


5.3.2 Quarterly report group

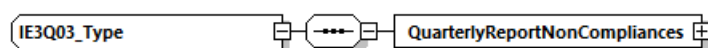
5.3.2.1 IE3Q01_Type



5.3.2.2 IE3Q02_Type



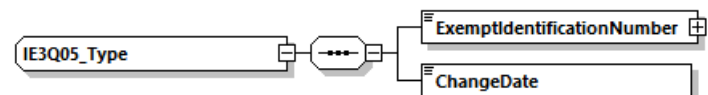
5.3.2.3 IE3Q03_Type



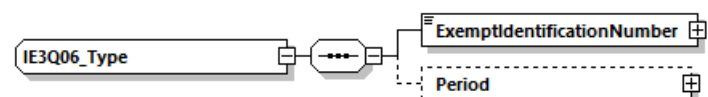
5.3.2.4 IE3Q04_Type



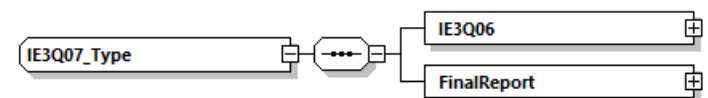
5.3.2.5 IE3Q05_Type



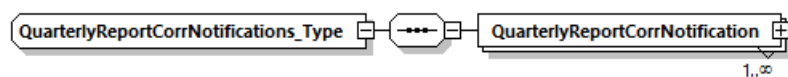
5.3.2.6 IE3Q06_Type



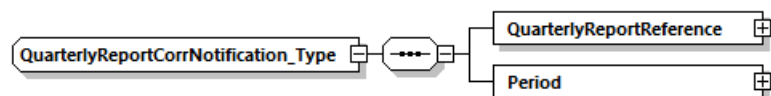
5.3.2.7 IE3Q07_Type



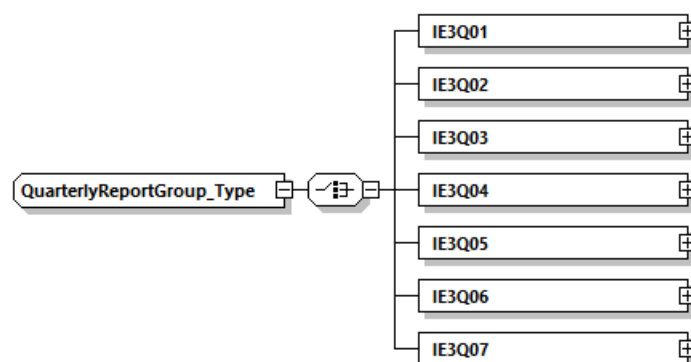
5.3.2.8 QuarterlyReportCorrNotifications_Type



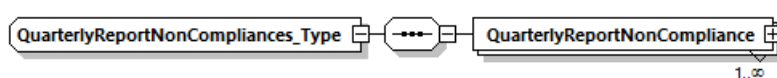
5.3.2.9 QuarterlyReportCorrNotification_Type



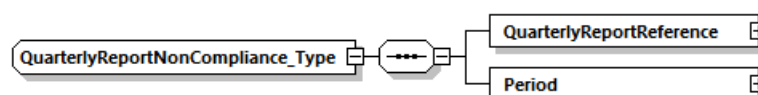
5.3.2.10 QuarterlyReportGroup_Type



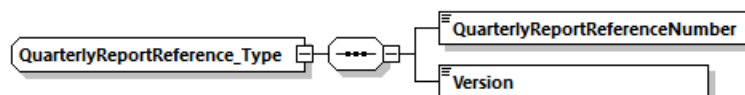
5.3.2.11 QuarterlyReportNonCompliances_Type



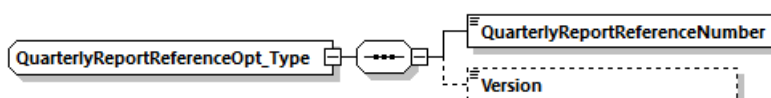
5.3.2.12 QuarterlyReportNonCompliance_Type



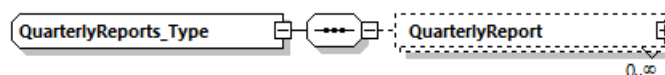
5.3.2.13 QuarterlyReportReference_Type



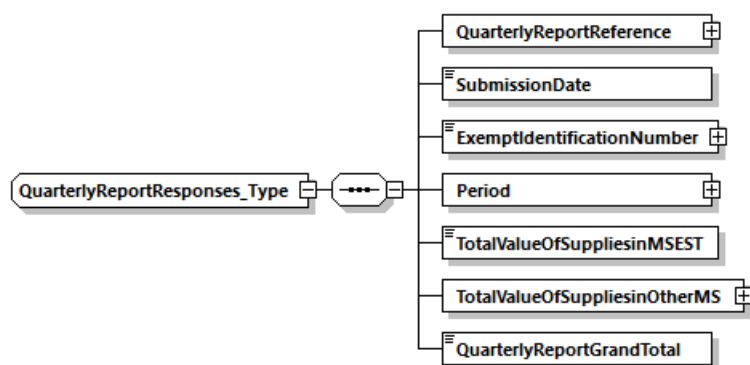
5.3.2.14 QuarterlyReportReferenceOpt_Type



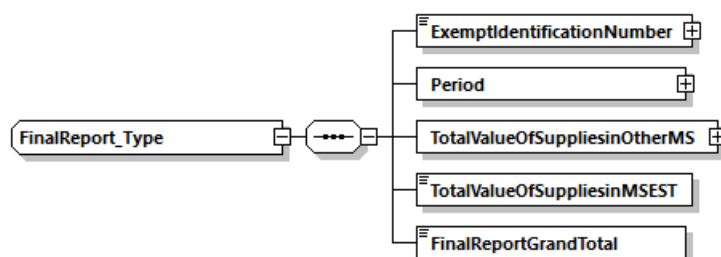
5.3.2.15 QuarterlyReports_Type



5.3.2.16 QuarterlyReportResponses_Type

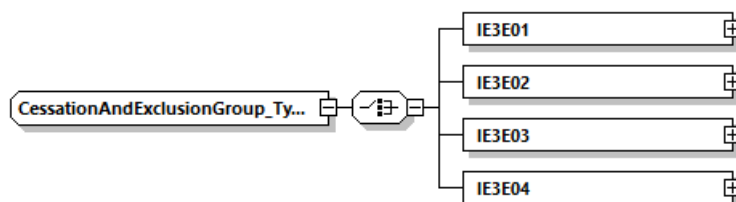


5.3.2.17 FinalReport_Type

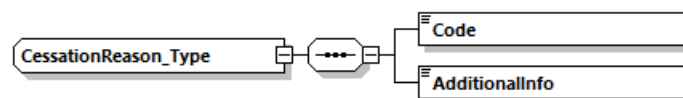


5.3.3 Cessation and Exclusion group

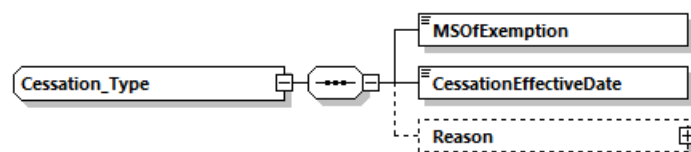
5.3.3.1 CessationAndExclusionGroup_Type



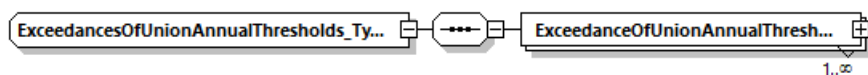
5.3.3.2 CessationReason_Type



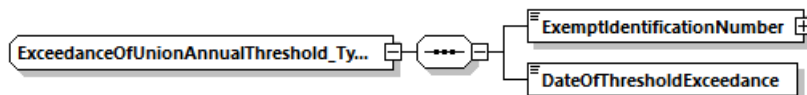
5.3.3.3 Cessation_Type



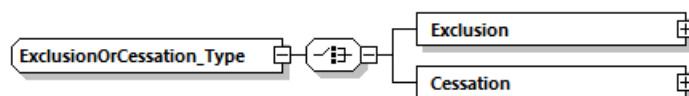
5.3.3.4 ExceedancesOfUnionAnnualThresholds_Type



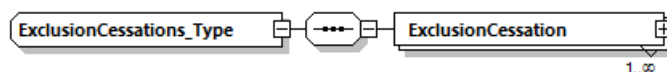
5.3.3.5 ExceedancesOfUnionAnnualThreshold_Type



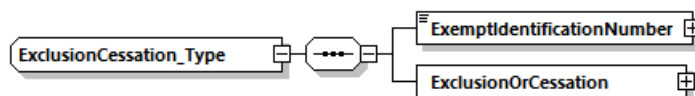
5.3.3.6 ExclusionOrCessation_Type



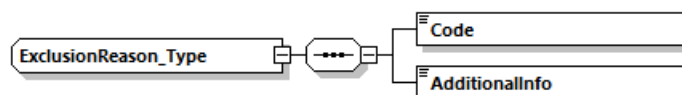
5.3.3.7 ExemptionCessations_Type



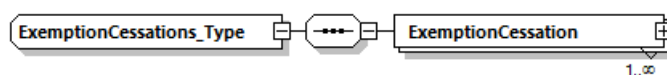
5.3.3.8 ExemptionCessation_Type



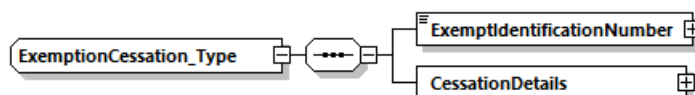
5.3.3.9 ExclusionReason_Type



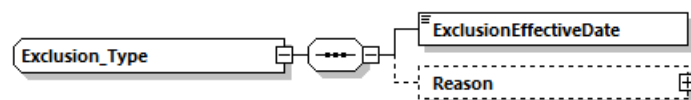
5.3.3.10 ExemptionCessations_Type



5.3.3.11 ExemptionCessation_Type



5.3.3.12 Exclusion_Type



5.3.3.13 IE3E01_Type



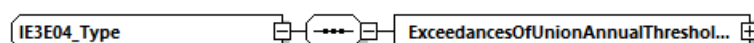
5.3.3.14 IE3E02_Type



5.3.3.15 IE3E03_Type

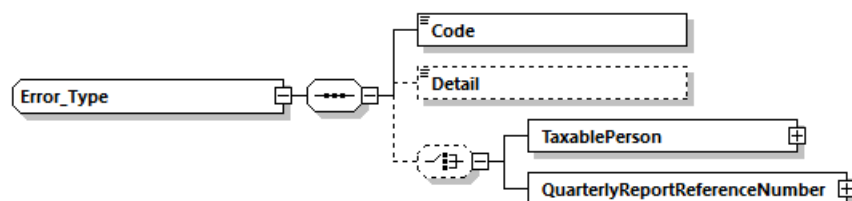


5.3.3.16 IE3E04_Type

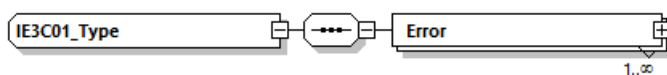


5.3.4 Common Errors

5.3.4.1 Error_Type



5.3.4.2 IE3C01_Type

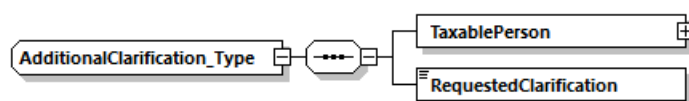


5.3.4.3 CommonGroup_Type

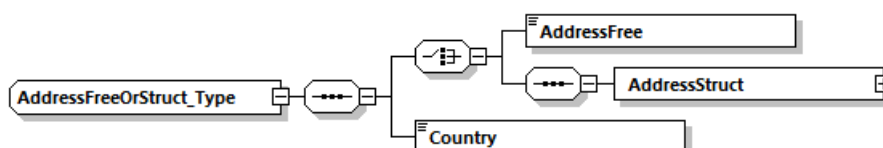


5.3.5 Other elements

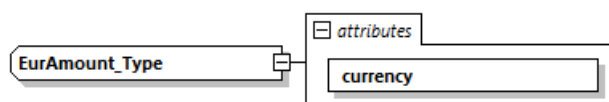
5.3.5.1 AdditionalClarification_Type



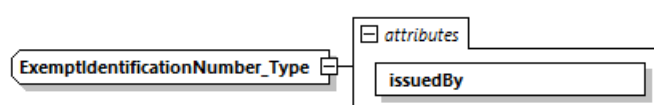
5.3.5.2 AddressFreeOrStruct_Type



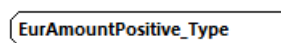
5.3.5.3 EurAmount_Type



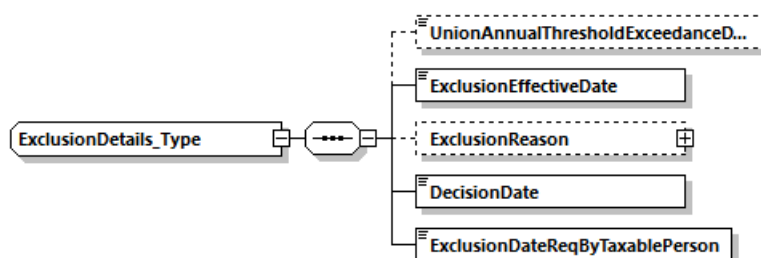
5.3.5.4 ExemptIdentificationNumber_Type



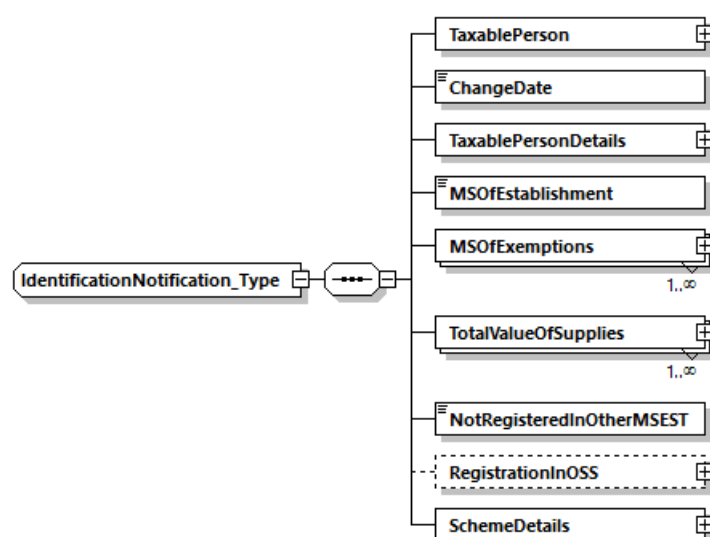
5.3.5.5 EurAmountPositive_Type



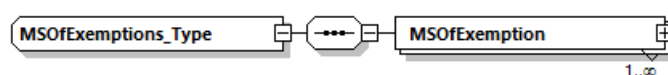
5.3.5.6 ExclusionDetails_Type



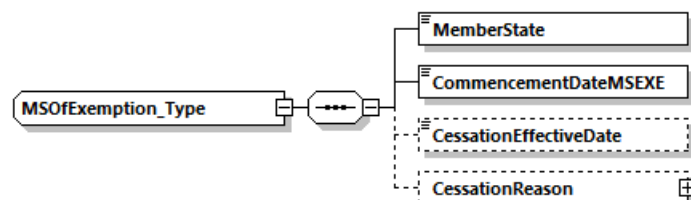
5.3.5.7 IdentificationNotification_Type



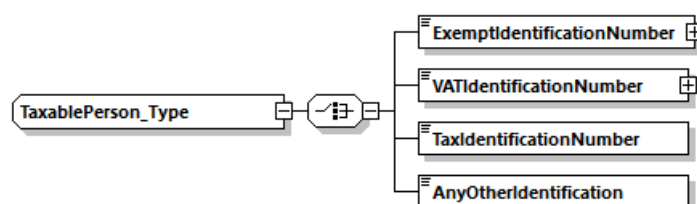
5.3.5.8 MSOfExemptions_Type



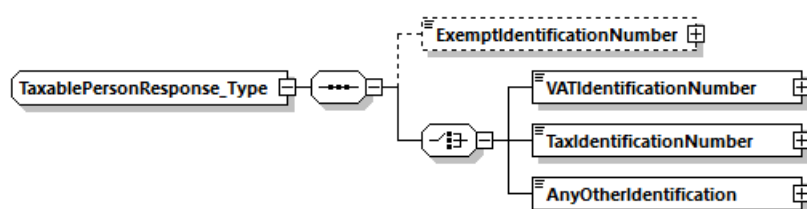
5.3.5.9 MSOfExemption_Type



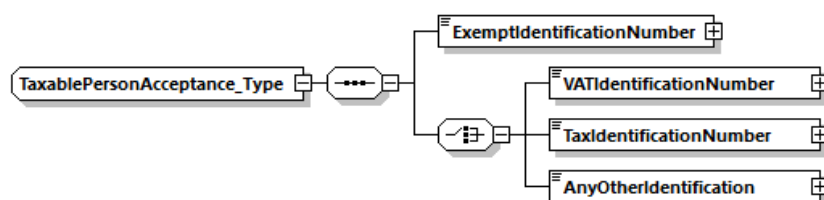
5.3.5.10 TaxablePerson_Type



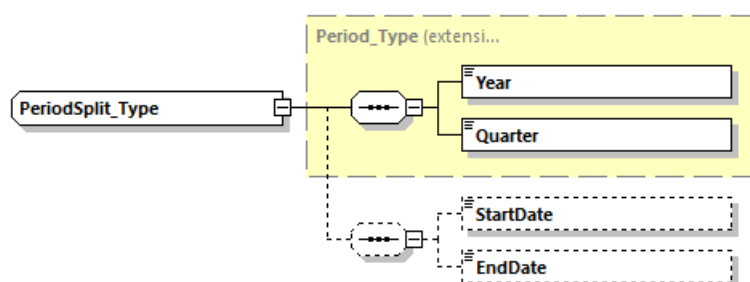
5.3.5.11 TaxablePersonResponse_Type



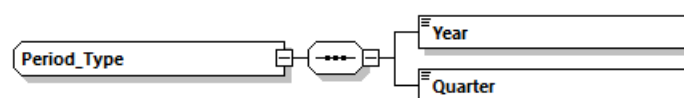
5.3.5.12 TaxablePersonAcceptance_Type



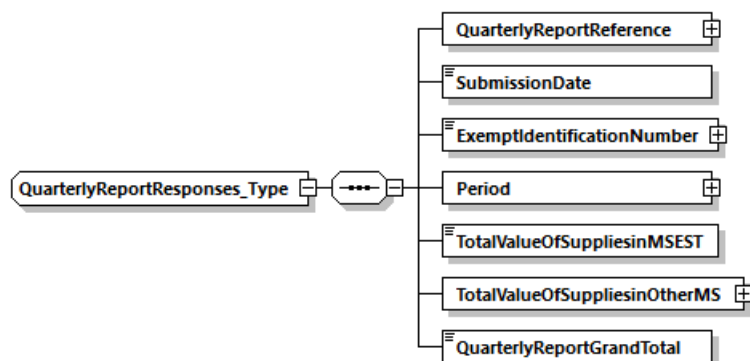
5.3.5.13 PeriodSplit_Type



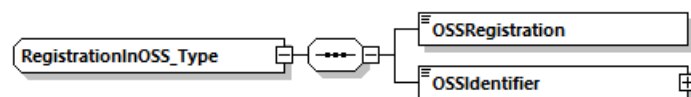
5.3.5.14 Period_Type



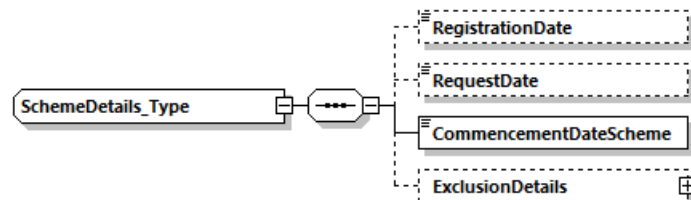
5.3.5.15 QuarterlyReportResponses_Type



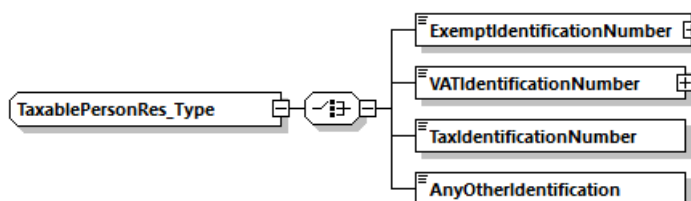
5.3.5.16 RegistrationInOSS_Type



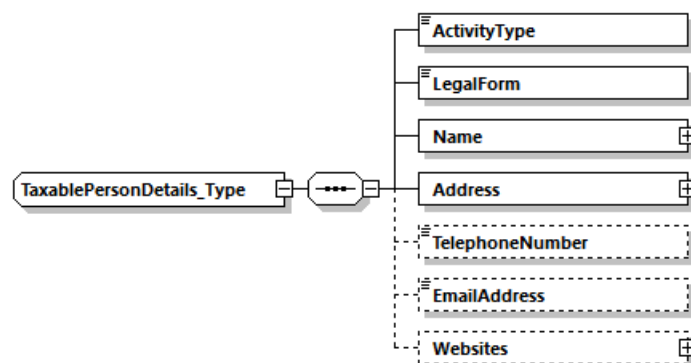
5.3.5.17 SchemeDetails_Type



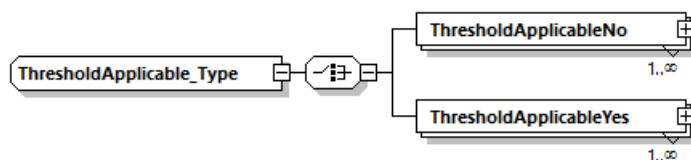
5.3.5.18 TaxablePersonRes_Type



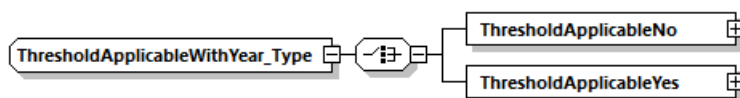
5.3.5.19 TaxablePersonDetails_Type



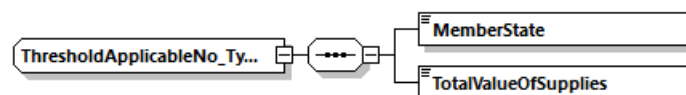
5.3.5.20 ThresholdApplicable_Type



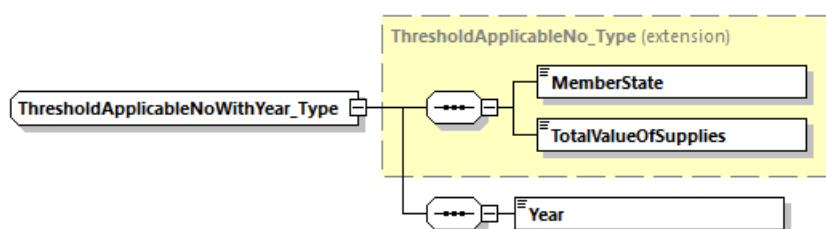
5.3.5.21 ThresholdApplicableWithYear_Type



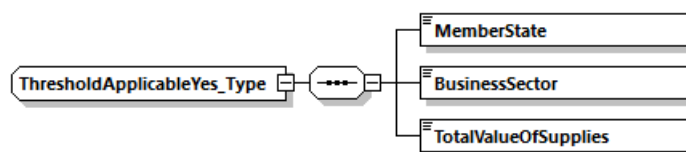
5.3.5.22 ThresholdApplicableNo_Type



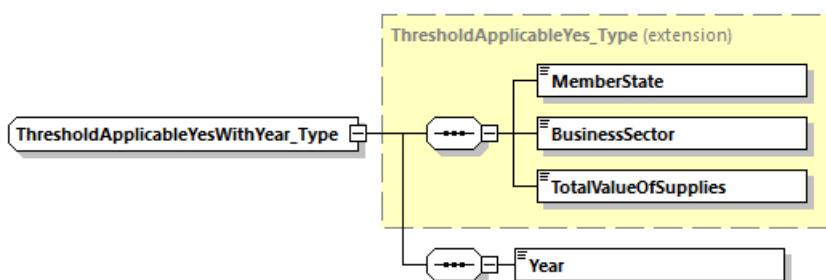
5.3.5.23 ThresholdApplicableNoWithYear_Type



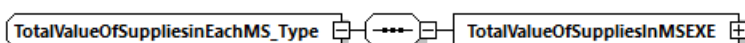
5.3.5.24 ThresholdApplicableYes_Type



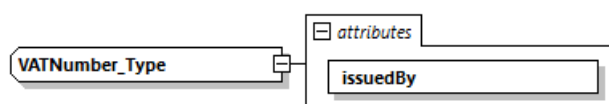
5.3.5.25 ThresholdApplicableYesWithYear_Type



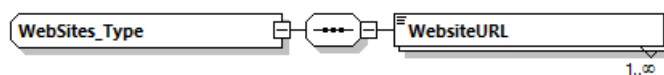
5.3.5.26 TotalValueOfSuppliesInEachMS_Type



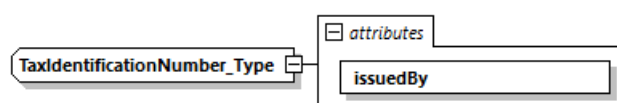
5.3.5.27 VATNumber_Type



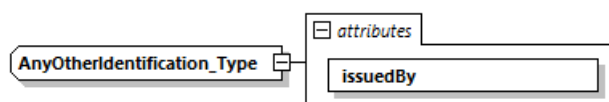
5.3.5.28 WebSites_Type



5.3.5.29 TaxIdentificationNumber_Type



5.3.5.30 AnyOtherIdentification_Type



DETALŪS METADUOMENYS

Dokumento sudarytojas (-ai)	Valstybinė mokesčių inspekcija prie Lietuvos Respublikos finansų ministerijos 188659752, Vasario 16-osios g. 14, Vilniaus m., Vilniaus m. sav. Valstybinė mokesčių inspekcija prie Lietuvos Respublikos finansų ministerijos 188659752, Vasario 16-osios g. 14, Vilniaus m., Vilniaus m. sav. UAB "ELSYS PRO" 300064148, Baltupio g. 14, Vilniaus m., Vilniaus m. sav.
Dokumento pavadinimas (antraštė)	PRIDĖTINĖS VERTĖS MOKESČIO INFORMACIJOS MAINAMS TARP EUROPOS SĄJUNGOS VALSTYBIŲ SKIRTOS INFORMACINĖS SISTEMOS ITIS_EU PLĖTROS PASLAUGŲ VIEŠOJO PIRKIMO SUTARTIS
Dokumento registracijos data ir numeris	2023-10-04 Nr. (1.10-04-2 E) 22-117
Dokumento gavimo data ir dokumento gavimo registracijos numeris	–
Dokumento specifikacijos identifikavimo žymuo	ADOC-V1.0
Parašo paskirtis	Suderinimas
Parašą sukūrusio asmens vardas, pavardė ir pareigos	Inesa Gineitienė, Skyriaus vedėjas, Vidaus saugumo skyrius
Sertifikatas išduotas	INESA GINEITIENĖ, Valstybinė mokesčių inspekcija prie FM LT
Parašo sukūrimo data ir laikas	2023-09-25 11:57:36 (GMT+03:00)
Parašo formatas	XAdES-EPES
Laiko žymoje nurodytas laikas	–
Informacija apie sertifikavimo paslaugų teikėją	ADIC CA-B, Asmens dokumentu israsymo centras prie LR VRM LT
Sertifikato galiojimo laikas	2023-05-29 15:06:19 – 2026-05-28 15:06:19
Parašo paskirtis	Pasirašymas
Parašą sukūrusio asmens vardas, pavardė ir pareigos	Martynas Endrijaitis, VMI prie FM viršininko pavaduotojas, Vadovybė
Sertifikatas išduotas	MARTYNAS ENDRIJAİTIS, Valstybinė mokesčių inspekcija prie FM LT
Parašo sukūrimo data ir laikas	2023-09-25 16:54:47 (GMT+03:00)
Parašo formatas	XAdES-X-L
Laiko žymoje nurodytas laikas	2023-09-25 16:55:00 (GMT+03:00)
Informacija apie sertifikavimo paslaugų teikėją	ADIC CA-B, Asmens dokumentu israsymo centras prie LR VRM LT
Sertifikato galiojimo laikas	2023-05-11 10:17:43 – 2026-05-10 10:17:43
Parašo paskirtis	Pasirašymas
Parašą sukūrusio asmens vardas, pavardė ir pareigos	Rimvydas Janciauskas, generalinis direktorius, UAB "Elsis PRO"
Sertifikatas išduotas	RIMVYDAS JANČIAUSKAS LT
Parašo sukūrimo data ir laikas	2023-09-28 12:02:17 (GMTZ)
Parašo formatas	XAdES-X-L
Laiko žymoje nurodytas laikas	2023-09-30 01:42:42 (GMT+03:00)
Informacija apie sertifikavimo paslaugų teikėją	EID-SK 2016, AS Sertifitseerimiskeskus EE
Sertifikato galiojimo laikas	2023-03-28 09:24:45 – 2028-03-26 23:59:59
Informacija apie būdus, naudotus metaduomenų vientisumui užtikrinti	"Registravimas" paskirties metaduomenų vientisumas užtikrintas naudojant "RCSC IssuingCA, VI Registru centras - i.k. 124110246 LT" išduotą sertifikatą "Darbo organizavimo ir dokumentų valdymo sistema, Valstybinė mokesčių inspekcija prie Lietuvos Respublikos finansų ministerijos, į.k.188659752 LT", sertifikatas galioja nuo 2022-12-08 09:05:46 iki 2025-12-07 09:05:46
Pagrindinio dokumento priedų skaičius	5
Pagrindinio dokumento pridedamų dokumentų skaičius	–
Pridedamo dokumento sudarytojas (-ai)	–

DETALŪS METADUOMENYS

Priedamo dokumento pavadinimas (antraštė)	–
Priedamo dokumento registracijos data ir numeris	–
Programinės įrangos, kuria naudojantis sudarytas elektroninis dokumentas, pavadinimas	Dokumentų valdymo sistema Avilys, versija 3.5.72
Informacija apie elektroninio dokumento ir elektroninio (-ių) parašo (-ų) tikrinimą (tikrinimo data)	Atitinka specifikacijos keliamus reikalavimus. Visi dokumente esantys elektroniniai parašai galioja (2023-10-04 14:33:37)
Paieškos nuoroda	–
Papildomi metaduomenys	Nuorašą suformavo 2023-10-04 14:33:37 Dokumentų valdymo sistema Avilys