EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND FISHERIES

Fisheries Policy Atlantic, North Sea, Baltic and Outermost Regions
Data Management

THE INTEGRATED FISHERIES DATA MANAGEMENT PROGRAMME

Subject: FLUX Vessel Implementation Document in the EU – v3.3

1. INTRODUCTION

This document describes the implementation within the EU context of the UN/CEFACT[1] FLUX Vessel standard for the electronic data exchanges of vessel data.

The targeted audience of this document is business and technical staff responsible for the system implementation of the vessel domain.

2. GLOSSARY

BR	Business rule
BRS	Business Requirements Specifications
CFP	Common Fisheries Policy
CFR	Community fleet register number
CEN	Code for the census, as vessel entry event
CHA	Code for the change of the activity, as vessel entry event
COM	European Commission (DG MARE)
CST	Code for the construction, as vessel entry event
DES	Code for the destruction, break-up or shipwreck, as vessel exit event
EC	European Commission
EiS	Entry into service date
EU	European Union
EXP	Code for the export, as vessel exit event
FIR	Fleet Implementing Regulation
FLAP	Fishing Licence Authorisation and Permits
FLUX	Fisheries Language for Universal eXchange
FLUX TL ON	FLUX Transportation layer operation number
GP	General Principles
IMP	Code for the import, as vessel entry event
LBP	Length between perpendiculars
LOA	Length overall
LRE	Registered length
MDR	Master Data Register
MOD	Code for the modification, as vessel event
MS	Member State
NRT	Net registered tonnage
NT	Net tonnage
RET	Code for the change of activity or withdrawal from the fleet, as vessel exit event
SMEFF	Regulation on sustainable management of external fishing fleet
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
VCD	Vessel Core Data
VED	Vessel Extended Data
VR	Vessel Register: the central database of COM for VCD and VED
XML	eXtensible Markup Language
XSD	XML Schema Definition
YoC	Year (date) of construction

3. LEGAL BASIS

The exchanges of vessel data are governed by two sets of legal basis:

[1] https://unece.org/trade/uncefact

- the EU Fleet Register covering all the EU fishing vessels and their Vessel Core Data (VCD), and regulated by the following legal acts:
    - REGULATION (EU) No 1380/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the Common Fisheries Policy, in particular article 24 about fishing fleet registers.
    - COMMISSION IMPLEMENTING REGULATION (EU) No 2017/218 on the EU Fishing Fleet Register: called "FIR" (Fleet Implementing Regulation) in this document.
- the SMEFF regulation managing fishing authorisations, covering any vessel as part of external fleet and their VCD and VED (vessel extended data), and regulated by:
    - Regulation (EU) 2017/2403 of the European Parliament and of the Council of 12 December 2017 on the sustainable management of external fishing fleets, and repealing Council Regulation (EC) No 1006/2008 (called "SMEFF" (sustainable management of external fishing fleets) in this document).
    - COMMISSION IMPLEMENTING REGULATION (EU) 2020/38 of 16 January 2020 establishing technical operational requirements for the recording, formatting and transmission of information pursuant to Regulation (EU) 2017/2403 of the European Parliament and of the Council on the sustainable management of external fishing fleets.
    - Bilateral agreements concluded between the European Union and third countries (includes Northern agreements and Sustainable Fisheries partnership agreements).
    - Conventions and relevant resolutions, recommendations, etc, of the Regional Fisheries Management Organisations to which the EU is the contracting or cooperating Party.

4. REFERENCES

The following documents and data structures are directly linked and should be read in connection to this document:

Standard	Version
FLUX BRS: P1000 – 1: General principles	2.1
FLUX BRS: P1000 – 2: Vessel domain	3.2
FLUX TL: Transportation Layer	

Vessel UN/CEFACT XSD
FLUXReportVesselInformation_5p1.xsd
FLUXVesselQueryMessage_5p1.xsd
FLUXVesselResponseMessage_5p1.xsd

The documents are available on the Master Data Register page of the European Commission Fisheries website[2].

5. SCOPE, STAKEHOLDERS AND TERMINOLOGY

5.1. Scope

The scope of this document is limited to the exchange of vessel messages between a flag state and the Commission (DG MARE) for vessel data of the EU vessels. It includes vessel data submissions and queries.

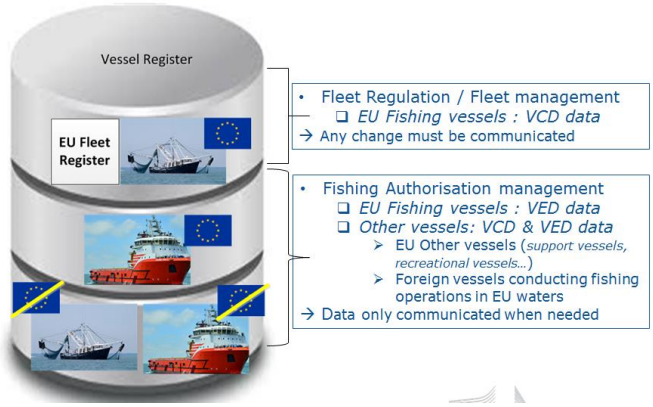
The technical infrastructure needed for data exchanges is not in the scope of this document.

5.2. Terminology used in this document

- **EU fishing vessel**: definition of FIR and falling under that scope.
- **EU other vessel**: vessels conducting fishing activities excluding EU fishing vessels.
- **Vessel Register** (VR): a central database of the Commission storing any data of vessels under the scope of this document.
- **Vessel Data**:
    - **VCD**: Vessel Core Data: set of information about the main characteristics of a vessel, like the identifications, the length, the tonnages, the gears, etc. According to FIR, a history of VCD data is kept in the Vessel Register. The list of VCD data elements is provided in the Annex I Part 1 of this document and must be in accordance with the Annex I of FIR regulation.
    - **VED**: Vessel Extended Data: set of information requested in the context of the requirements of the SMEFF regulation, RFMOs, SFPA and bilateral agreements, as well as international organisations, like the FAO. They are defined in the relevant third parties' documents. The history of the submissions of VED data events is not kept in the Vessel Register. The last reported value of VED overwrites the previously reported VED value,

[2] https://oceans-and-fisheries.ec.europa.eu/fisheries/rules/enforcing-rules_en, paragraph 'Master data register'

even if the reported value is null. The list of VED data is provided in the Annex I Part 2 of this document. **All VED data are optional when being submitted.**



Overview of the content of the Vessel Register

- **Message types**:

There are three types of UN/FLUX standardised XML messages:

(1) FLUX Report Vessel Information XML message

This type of message is called a **submission** in this document and is used by:

- a flag state to report vessel data to the Vessel Register;
- the Vessel Register to send vessel data resulting from a query of a party requested it;

(2) FLUX Vessel Query XML message

This message is a request to get vessel data. It can be sent by COM to request data from a flag state or by a flag state to Vessel Register to request information from it.

(3) FLUX Vessel Response XML message

This message is used by a party to reply to each submission or a query. It contains a general status (OK/NOK) for the reception of a submission or query and the list of errors and warnings detected in those messages.

The following table summarizes the different terminologies used for message types:

UN/FLUX Message Type name	FLEET Message Type name	Comment
FLUX Report Vessel Information	Submission	Snapshot is a type of submission
FLUX Vessel Query	Query	
FLUX Vessel Response	Response	

6. PROCEDURES

6.1. Assumptions

The exchange of the business messages described in this document will be done through the FLUX Transportation Layer, for which technical and functional documentations have been already published on the Master Data Register (MDR) page of the European Commission Fisheries website[3].

It is assumed that data exchanges are fully automated and immediate. No human approval or intervention should be needed for data exchanges defined in this document.

The system of each party is adapted:

- to store and manage all data requested by COM;
- to send automatically submissions to COM;
- to reply automatically at any time to queries sent by COM requesting a snapshot;
- to prepare and send XML messages compliant to the UN/FLUX Vessel standard;
- to query the Vessel Register;

6.2. Data exchange procedures

There are two main ways of exchanging information – submission and query. The third way is a snapshot procedure, which is a combination of both query and submission.

6.2.1. The SUBMISSION procedures

The procedure is used by a flag state to report any new or updated information about a vessel that must be registered in the Vessel Register. A submission message can contain data about one vessel only.

Sending of data can be initiated by a flag state at any time. However:

i. For EU fishing vessels, according to FIR, any submission must be sent to COM not later than at the end of the day when the change has been fully[4] applied in the national register.

ii. For EU non-fishing vessels or for VED data for any EU vessel, the time of submission is decided by the party based on business needs[5].

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[3] [3] https://oceans-and-fisheries.ec.europa.eu/fisheries/rules/enforcing-rules_en, paragraph 'Master data register'

[4] A new change entered in a national register could be subject to an administrative process before to be declared as valid for production. The change should be submitted to COM only when this final status is reached.

[5] For example, when a vessel requires a fishing authorisation.

There are different types of submissions depending on data and vessel type communicated:

- SUB-VCD: message with a full set of VCD data in it and only for **EU fishing vessels** in the context of FIR (EU Fleet Register). The message contains either one event (the latest) with the updated data set or the complete history of all the events of one vessel. In case of the latest event, its start date must be equal or later than the latest event start date in Vessel Register for the vessel. If a message contains more than one event, it is considered as the complete history.
- SUB-VCD-F: message is used to submit the full history of one vessel, independently how many events a vessel contains (one or many). Each event contains a full set of VCD data. Applicable only for **EU fishing vessels** in the context of FIR (EU Fleet Register).
- SUB-VED: message with a full set of available VED data in it and only for **EU fishing vessels**. The message can contain only one event with the full new updated data set of one vessel. The message must be supplemented by the following VCD data to identify the vessel:
    - Flag State;
    - Vessel Type;
    - CFR number.
- SUB: message with a full set of all available VCD and VED in it but only for **EU non-fishing vessels**. The message can contain only one event with the updated data set of one vessel. The message must be supplemented by the following VCD data to identify the vessel:
    - Flag State;
    - Vessel Type;
    - CFR number (if available);
    - UVI/IMO number for vessels without CFR numbers;
    - IRCS number for vessels without CFR or UVI/IMO numbers;
    - National registration number for vessels without CFR, UVI/IMO or IRCS numbers.

Workflow

A FLUX Report Vessel Information message is sent by a flag state to COM using the FLUX Transportation Layer. When a message is received, it is delivered to the Fleet business system. It automatically undergoes the validation process where the content of the message is validated against the defined set of business rules.

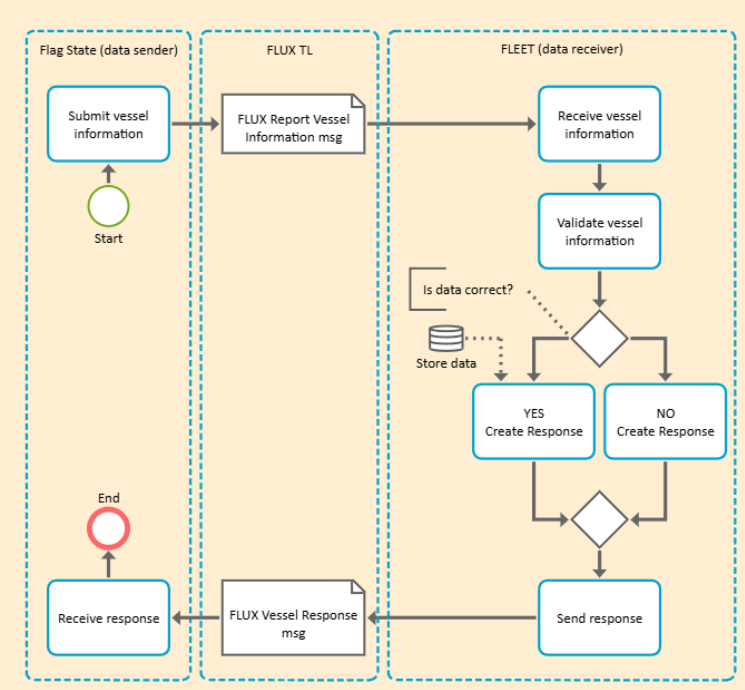
The submission is accepted if all the business rules having Error Type = ‘E’ pass. In this case the content of the message is accepted, and data is updated in the Vessel Register.

The submission is refused if at least one business rules having Error Type = ‘E’ fails. In this case the Vessel Register is not updated.

When the validation process is finalised, the system prepares a response message. It contains the status of the submission (accepted or refused) and all the business rules

(errors and warnings) failed during the validation process. This message is sent to the sender (flag state).

The below activity diagram visualises the submission workflow.



Activity diagram for the submission procedures

6.2.2. The QUERY procedures

Query procedures are used to ask the receiver party to provide information (VCD data) on EU fishing vessels according to the parameters communicated in a query message. Query can be sent by any party to the Vessel Register.

6.2.2.1. Q-NR query by MS to Fleet

This query message can be sent at any time by Member states to get a full set of VCD data from the Vessel Register on EU fishing vessels indicated in query parameters and for the time period indicated in the query message.

A query message must contain the query period, but also at least one of the following parameters. If more than one is listed, 'and' condition is applied:

- Flag state: none or one;
- Vessel identifier: one value from CFR, UVI, external marking (also wildcard can be used), IRCS or MMSI;
- Vessel name (also wildcard can be used);
- Vessel type.

Also parameters to query historical data or only active vessels can be used as described in paragraph 7.2.4.

Workflow

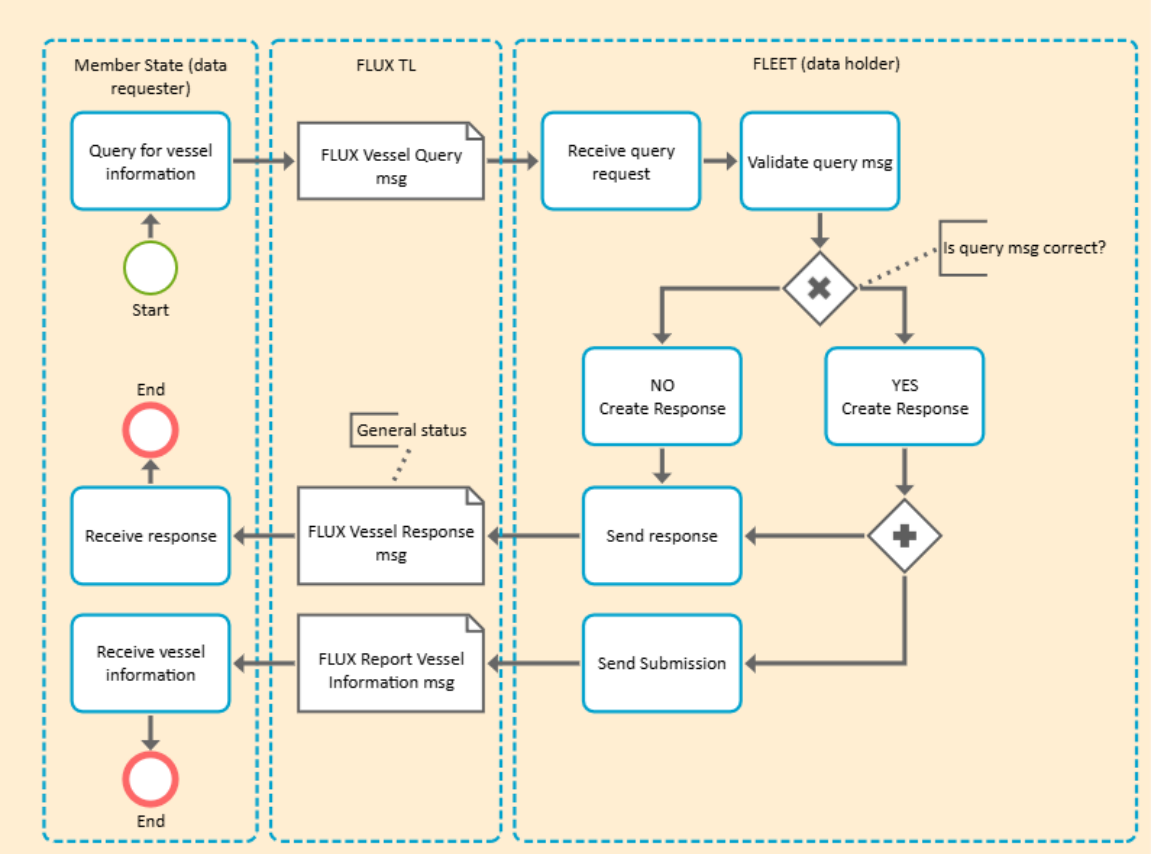
A FLUX Query message is sent by a MS to COM using the FLUX Transportation Layer. When a message is received, it is delivered to the Fleet business system. It automatically undergoes the validation process where the content of the message is validated against set of business rules.

The query is accepted if all the business rules having Error Type = 'E' pass. The query is refused if at least one business rules having Error Type = 'E' fails. A response message is prepared and sent to the query message sender by the system containing the status of the query received (accepted or refused).

If a query is accepted, the system searches for the requested data in the Vessel Register and prepares a submission of type SUB-Q (submission from a query) with vessel data corresponding to the query. Warnings, if any, attached to each vessel data and registered in the Vessel Register are also provided.

Chapter 6.3 explains how the selection of vessel events is performed. If no data is found based on query parameters, the empty FLUX Report Vessel Information messages is prepared and sent to the requester.

The below activity diagram visualises the query workflow.



Activity diagram for the query procedures

6.2.2.2. Q-NEWS query by MS to Fleet

This query message can be sent at any time by Member states to get a full set of VCD data from the Vessel Register on EU fishing vessel events indicated in query parameters.

The query report returns all events starting in the queried period till the latest event available in Vessel Register.

A query message must contain the query period, but also at least one of the following parameters. If more than one is listed, 'and' condition is applied:

- Flag state: none or one;
- Vessel identifier: one value from CFR, UVI, external marking (also wildcard can be used), IRCS or MMSI;
- Vessel name (also wildcard can be used);
- Vessel type.

Also parameters to query historical data or only active vessels can be used as described in paragraph 7.2.4.

Workflow

It is the same workflow as for Q-NR (see paragraph 6.2.2.1). Chapter 6.3 explains how the selection of vessel events is performed.

6.2.3. The SNAPSHOT procedure

The snapshot procedure is a query procedure initiated only by COM at any time to any MS. The goal is to synchronize the complete content of the Vessel Register for the relevant MS with the complete data in the national fleet register of a MS, and only in specific circumstances. Only VCD data is exchanged.

Discrepancies between both registers could exist when updates accepted in the national system are sent to Vessel Register but refused by the validation process and not corrected afterwards due time by MS. Or, if the regular updates have not been sent by MS for a long time and a lot of them have been accumulating, i.e. because of any technical problems. The snapshot allows to send all the updates in one-go but is not used as a regular data update mechanism.

Workflow

COM sends a FLUX Vessel Query message (type Q-SNAP-F) to a MS using the FLUX Transportation Layer. When a message is received, MS validates the content of the query message against the business rules, prepares and sends a FLUX Vessel Response message back to Fleet. It contains the status of the operation (accepted or refused).

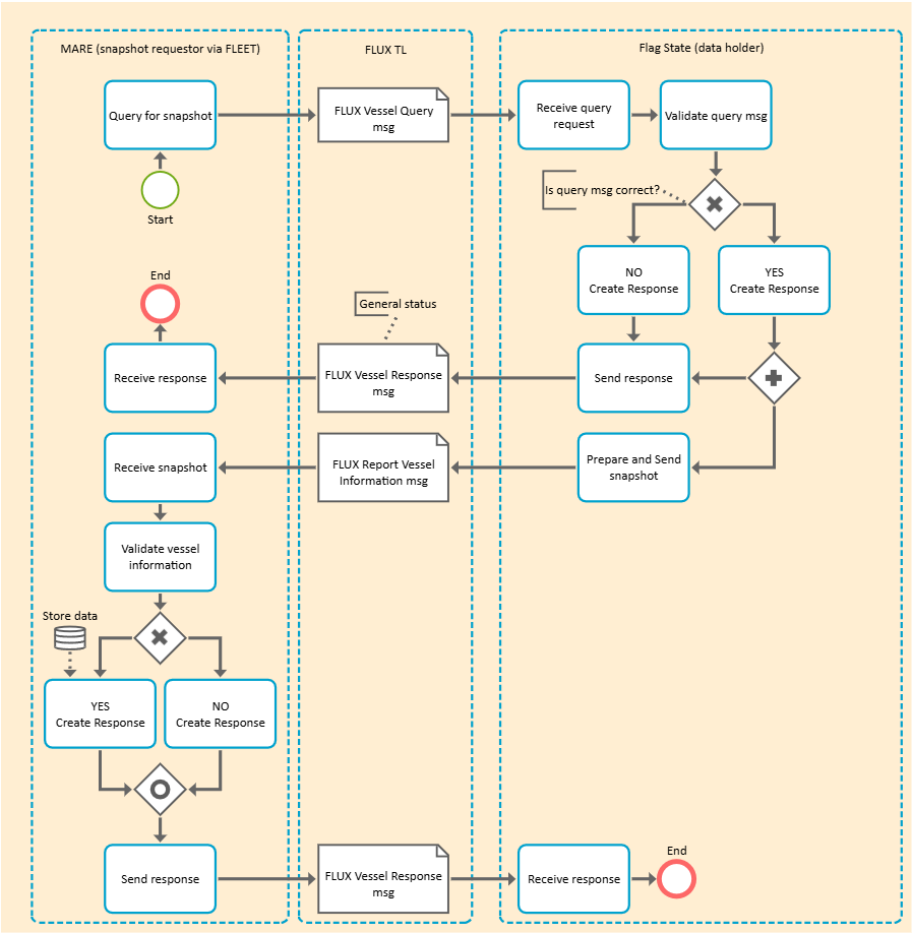
If a query message is refused, workflow ends.

If a query message is accepted, Member State searches data in the national fleet register, prepares a submission of type SNAP-F with the complete national register data set and sends it to Fleet. It is expected that SNAP-F message is sent to Fleet not later than 3 (three) hours after the reception of the request.

The snapshot is accepted if all the business rules having Error Type = ‘E’ pass. In this case the content of the SNAP-F message (full data set of a MS fleet) is accepted, consequently replacing the whole member State’s fleet data in the EU Vessel Register. The relevant FLUX Vessel Response message is sent by the Fleet to MS.

The snapshot is refused if at least one business rule having Error type = "E" fails. In this case the Vessel Register is not updated. A FLUX Vessel Response message is prepared by the Fleet and sent to MS. It contains the status of the submission (accepted or refused) and the business rules (warnings and errors) failed during the validation process.

The below activity diagram visualises the snapshot submission workflow.



Activity diagram for snapshot procedure

6.2.4. Overview of procedures

The following table summarizes the main characteristics and content of all the message types.

Message type	FLUX XSD	Actors	Vessel types	Data set	Specific data limits	Number of vessels in a message
SUB-VCD	FLUX Report Vessel Information	MS to Fleet	EU fishing	VCD	One event (add new or modify the latest)	1
SUB-VCD	FLUX Report Vessel Information	MS to Fleet	EU fishing	VCD	Full history (all events)	1
SUB-VCD-F	FLUX Report Vessel Information	MS to Fleet	EU fishing	VCD	Full history (all events)	1
SUB-VED	FLUX Report Vessel Information	MS to Fleet	EU fishing	VED	One new event	1
SUB	FLUX Report Vessel Information	MS to Fleet	EU non-fishing	VCD and VED	One new event	1
SNAP-F	FLUX Report Vessel Information	MS to Fleet	EU fishing	VCD	Full history (all events)	All vessels in national fleet
Q-NR	FLUX Vessel Query Message	MS to Fleet	EU fishing	VCD	-	-
Q-NEWS	FLUX Vessel Query Message	MS to Fleet	EU fishing	VCD	-	-
Q-SNAP-F	FLUX Vessel Query Message	Fleet to MS	EU fishing	VCD	-	-
SUB-Q	FLUX Report Vessel Information	Fleet to MS (result from MS query)	EU fishing	VCD	Depending on query parameters	Depending on query parameters
R	FLUXVesselResponseMessage_5p1.xsd	Receiver to sender	Depends on received message	Depends on received message	-	-

6.3. Vessel event validity period

This chapter describes how the validity period is calculated and consequently be taken into consideration in data validation when submitting data and in query reports when receiving data.

Information from a vessel event in the Vessel register is valid in a time range or validity period defined by an event start date and event end date. The start date is communicated by the Member state in submission messages (Vessel Event / Occurrence Datetime), while the **event end date** is computed automatically by the system when data is registered. It is done according to the following rules (see also chapter 8.1):

1. event end date is equal to event start date when the event is an exit from the fleet (event types DES, EXP, RET), except for a RET if it is followed by a DES or EXP. In such case, point 2 is applicable.

2. event end date is event start date minus one day of the next sequential declaration.
3. event end date is set by default at '2100/12/31' in other cases not described above.

6.4. Data availability

If the submission is successful (accepted), newly sent data is available in the Vessel Register immediately after the end of the data validation, data storage and other internal automated processes.

6.5. Business continuity plan

In case of any technical failure when messages could not be exchanged in a normal way, the document "FLUX Business Continuity Plan.docx", available on the Master Data Register page of the European Commission Fisheries website (folder 'P1000: Common Files'), must be followed.

7. DATA MODEL (XSD) IMPLEMENTATION

The implementation of the Vessel Data Model[6] should follow the following general constraints at the level of XSD Element attributes:

(1) For Code & Identifier DataType: *listID* or *schemeID* attribute must be provided respectively if it is not specifically defined in the definition of the element;

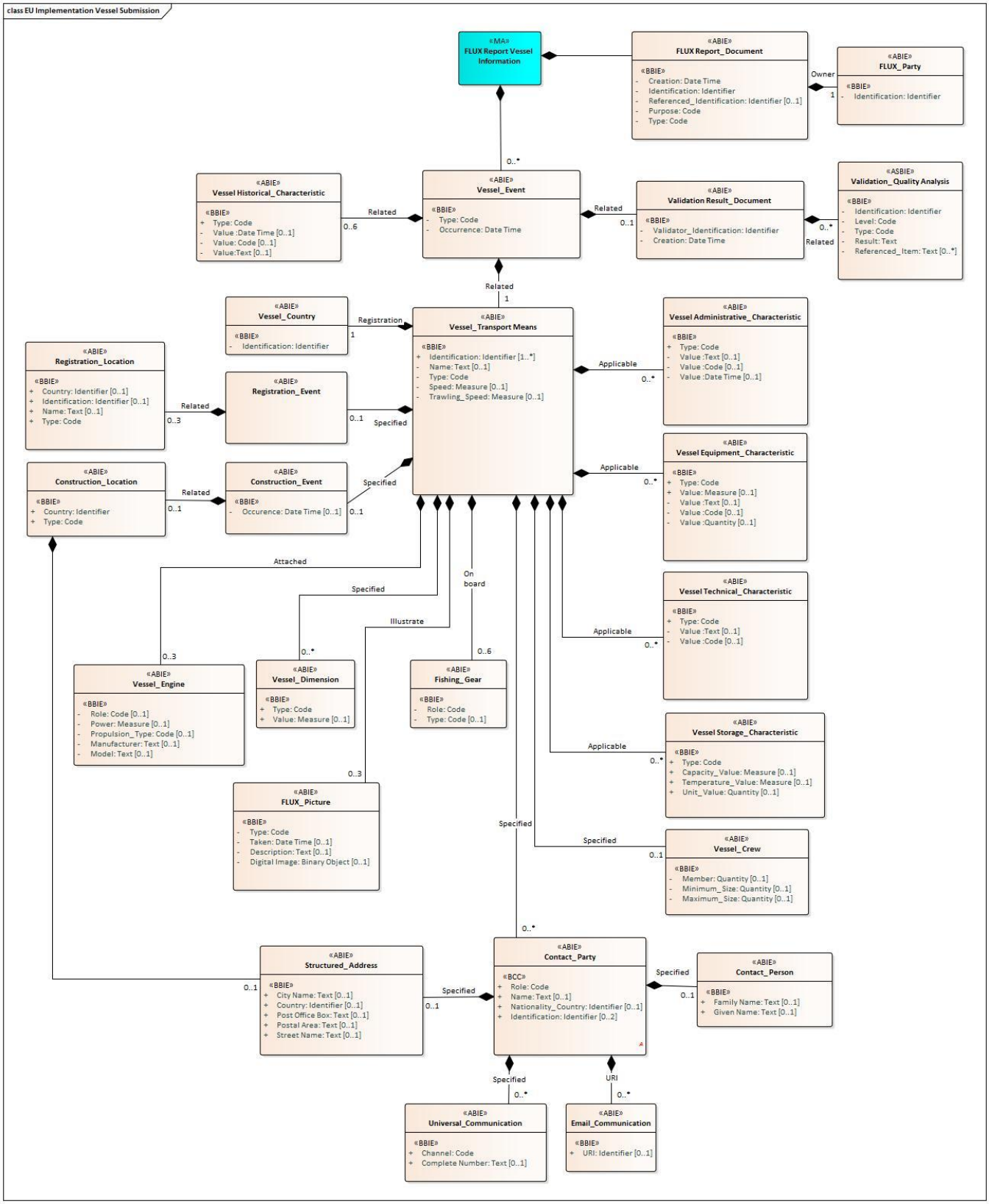
(2) For DateTime DataType: only xs:datetime choice is used and 'Z' character defining UTC time zone must be set;

(3) Measure DataType: the unitCode attribute shall be provided when not explained in the definition.

Only the entities and/or attributes listed in the Implementation Document must be considered by the receiving party.

[6] The data model presented in the document is a sub-set of the complete UN/CEFACT data model of the Vessel domain.

7.1. Submission



Class Diagram for a Submission message

7.1.1. FLUX Report Vessel Information

This is a message providing information on vessels.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
FLUX Report_ Document		Assoc.[7]	1	1	The document details for this FLUX Report Vessel Information Message.	See data elements and attributes in paragraph 7.1.2
Vessel_ Event		Assoc.[8]	0	n	The information about a vessel.	See data elements and attributes in paragraph 7.1.4

7.1.2. FLUX Report_ Document

The type of message which is used when reporting for vessel information.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Associated to FLUX Report Vessel Information message	
ID	Message identifier	Identifier	1	1	The Global Unique Identifier of the FLUX Message	Attribute *schemeID* = 'UUID' + Value A UUID as defined in the RFC 4122. Cf. http://www.guidgenerator.com to generate example of a valid identifier.
Type	Message type	Code	1	1	Report type.	Attribute listID = 'FLUX_VESSEL_REPORT_TYPE' + Value For the possible values, see table in paragraph 6.2.4
ReferencedID	Referenced message identifier	Identifier	0	1	The identifier of a referenced FLUX Message	Attribute schemeID = 'UUID' + Value. A UUID as defined in the RFC 4122. For snapshot report (SNAP-F) and report from

[7] Association between 2 entities.

[8] Association between 2 entities.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						a query (SUB-Q), it is the reference of the query message.
Creation	Message creation datetime	Datetime	1	1	Date/time when this message has been created.	A UTC date time according to ISO 8601 format. i.e., 2024-01-31T15:07:38Z (milliseconds can be provided optionally).
Purpose	Purpose code	Code	1	1	The code specifying the purpose of this FLUX message.	Attribute *listID* = 'FLUX_GP_PURPOSE' + Value. Value to be used = '9' (Original) to indicate of a new report being sent.
Owner FLUX_ Party			1	1	Party sending the report.	

7.1.3. FLUX_Party

Identification of the party sending the report.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Owner to FLUX Report_ Document entity	
ID	Reporting country	Identifier	1	1	The identifier of this FLUX FLAP domain party. Reporting country is considered as a Flag state of vessels included in the message.	Attribute *schemeID* = 'FLUX_GP_PARTY' + Value

7.1.4. Vessel_ Event Entity

Entity containing the general information about a vessel event.

Entity/Field Name	Business Name	Type	Cardinality	Description	Remarks

			min	max		
			0	n	Associated to FLUX Report Vessel Information message	
Type	Event code	Code	1	1	Code of vessel event.	Attribute listID = 'VESSEL_EVENT' + Value. For SUB-VED and SUB message types, the event code is always "MOD".
Occurrence	Event Start date	Datetime	1	1	Start date of the vessel event. Date/time when the event was registered in the national fleet register.	A UTC date time according to ISO 8601 format. i.e., 2024-01-31T15:07:38Z (milliseconds can be provided optionally).
Related vessel Historical_ Characteristic			0	6	Information about the vessel historical characteristics	
Related vessel_ Transport Means			1	1	Information about the vessel	
Related Validation Result Document			0	1	Validation document disseminated with data resulting from a query	

7.1.5. Vessel Historical_Characteristic Entity

Description: A prominent attribute or aspect of the history related to a particular vessel.

Information useful in the context of licences[9] when the 3rd party granting the licence requires historical data of a vessel.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	6	Related to Vessel_ Event entity	
Type		Code	1	1		Attribute *listID* = 'FLUX_VESSEL_HIST_

[9] Depending on the 3rd party requirements.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						CHAR' + Value
Value	Date of historical data	Datetime	0	1	Date when the provided information was valid.	VED data. Identified by the TypeCode = 'DATE'. A UTC date time according to ISO 8601 format. i.e., 2024-01-31T15:07:38Z (milliseconds can be provided optionally).
Value	Previous flag state	Code	0	1		VED data. Identified by the Type Code = 'FLAG'. Attribute *listID* = 'TERRITORY' + Value
Value	Previous IRCS	Text	0	1		VED data. Identified by the Type Code = 'IRCS'.
Value	Previous Vessel Name	Text	0	1		VED data. Identified by the Type Code = 'VESSEL_NAME'.
Value	Previous owner name	Text	0	1		VED data. Identified by the Type Code = 'OWNER_NAME'.
Value	Previous owner address	Text	0	1		VED data. Identified by the Type Code = 'OWNER_ADDRESS'.

7.1.6. Vessel_ Transport Means Entity

Entity containing information about the identification of a vessel.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Related to Vessel_ Event entity	

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
ID	Hash Key	Identifier	0	1	Unique technical identifier[10] of a vessel event.	Technical data Attribute *schemeID* = 'HASH_KEY' + Value
ID	CFR	Identifier	0	1	Community Fleet Register number according to the FIR regulation. It must be unique across all EU throughout history. Mandatory for all fishing vessels, optional for all other vessels.	VCD data. Attribute *schemeID* = 'CFR[11]' + Value
ID	UVI	Identifier	0	1	Unique Vessel identifier – IMO number. From 1 January 2016, UVI is mandatory for vessels above 100GT or longer than 12m LOA, except vessels with LOA 12-24m fishing exclusively in EU waters.	VCD data Attribute *schemeID* = 'UVI' + Value
ID	IRCS	Identifier	0	1	International Radio Call Sign Mandatory for vessels with LOA >= 24m	VCD data Attribute *schemeID* = 'IRCS' + Value
ID	National Registration number	Identifier	0	1		VCD data Attribute *schemeID* = 'REG_NBR' + Value
ID	External marking	Identifier	1	1		VCD data Attribute *schemeID* = 'EXT_MARK' + Value
ID	MMSI	Identifier	0	1		VCD data Attribute *schemeID* = 'MMSI + Value
ID	AIDCP vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'AIDCP' + Value

[10] Technical data **computed by the EU Vessel Register** after the reception of vessel event. This identifier identifies uniquely a vessel event based on the flag state, event start date and the first available vessel identifiers CFR > UVI > IRCS of a vessel.

[11] Each value in the attribute schemeID for vessel identifier type must be on FLUX_VESSEL_ID_TYPE list.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
ID	CCAMLR vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'CCAMLR' + Value
ID	CCBSP vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'CCBSP' + Value
ID	CCSBT vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'CCSBT' + Value
ID	FFA vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'FFA' + Value
ID	GFCM vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'GFCM' + Value
ID	IATTC vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'IATTC' + Value
ID	ICCAT vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'ICCAT' + Value
ID	IOTC vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'IOTC' + Value
ID	NAFO vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'NAFO' + Value
ID	NASCO vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'NASCO' + Value
ID	NEAFC vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'NEAFC' + Value
ID	SEAFO vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'SEAFO' + Value
ID	SIOFA vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'SIOFA' + Value
ID	SPRFMO vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'SPRFMO' + Value
ID	WCPFC vessel ID	Identifier	0	1		VED data Attribute *schemeID* =

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						'WCPFC' + Value
ID	NPFC vessel ID	Identifier	0	1		VED data Attribute *schemeID* = 'NPFC' + Value
Name	Name of vessel	Text	0	1	Name of the vessel as in the national register. Mandatory as part of VCD data submission.	VCD data
Type	Vessel Type	Code	1	1	Type of vessel. Mandatory always.	VCD data Attribute *listID* = 'VESSEL_TYPE' + Value
Speed	Vessel Speed	Measure	0	1	Vessel speed in knots.	VED data Use *UnitCode* 'KNT' from the listID 'FLUX_UNIT' + Value
Trawling_ Speed	Trawling Speed	Measure	0	1	Vessel trawling speed in knots.	VED data Use *UnitCode* 'KNT' from the listID 'FLUX_UNIT' + Value
Registration Vessel Country			1	1	Flag of the vessel	
Specified Registration event			0	3	Technical entity providing a link to the physical location of the vessel registration	
Specified Construction Event			0	1	Information on the vessel construction	
Attached Vessel Engine			0	3	Information on engines	
Specified Vessel Dimension			0	n	Information on dimensions	
Illustrate FLUX Picture			0	3	Picture of the vessel	
On board Fishing Gear			0	6	Information on gears	
Applicable Vessel Administrative Characteristic			0	n	Vessel administrative information	

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
Applicable Vessel Equipment Characteristic			0	n	Vessel equipment information	
Applicable Vessel technical Characteristic			0	n	Vessel technical information	
Applicable Vessel Storage Characteristic			0	n	Vessel storage information	
Specified Vessel Crew			0	1	Information on the crew	
Specified Contact Party			0	n	Fleet contacts	

7.1.7. Vessel_Country Entity

Entity used to provide information on the flag of the vessel.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Registration to Vessel transport Means entity	
ID	Country of registration	Identifier	1	1	The identifier of a country. Flag state of the vessel of this event.	VCD data. Attribute *schemeID* = 'FLEET_FLAG_STATE' + Value

7.1.8. Registration_ Event

In this context it is a technical entity used to have a link to the Registration Location entity.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	3	Specified to Vessel transport Means entity	
Related Registration Location			0	1	Information on the location of the vessel	

7.1.9. Registration_ Location Entity

Entity used to provide information on a physical location or place of registration.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	1	Related to Registration Event entity	
Type		Code	1	1	The code specifying the type of registration location.	Attribute *listID* = 'FLUX_VESSEL_REGSTR_TYPE' + Value.
Country	Country of import or export	Identifier	0	1	The identifier of a country. Mandatory in message types of IMP and EXP.	VCD data. Attribute *schemeID* = 'TERRITORY' + Value. Identified by the Type Code = 'MOVE'
ID	Place of registration	Identifier	0	1	Port where a vessel is registered, expressed as a code.	VCD data. Attribute *schemeID* = 'VESSEL_PORT' + Value. Identified by the Type Code = 'PORT'
Name	Place of registration[12]	Text	0	1	Port where a vessel is registered, expressed as a text.	VED data. Identified by the Type Code = 'PLACE'

7.1.10. Construction_ Event Entity

Entity used to provide information on a vessel construction date.

Entity/Field Name	Business Name	Type	Cardinality	Description	Remarks

[12] Used in the context of authorisations for non-EU vessels.

			min	max		
			0	1	Specified to Vessel transport Means entity	
Occurrence	Date of construction	Datetime	0	1	Date of the start of construction. If the national register contains only a year, choose 1 January as a default date. Before 01/01/2003, mandatory if Entry into Service date is not provided.	VCD data. A UTC date time according to ISO 8601 format. i.e., 1995-01-01T00:00:00Z (milliseconds can be provided optionally).
Related Construction Location			0	1	Location of the construction	

7.1.11. Construction_ Location Entity

Entity used to provide information on a vessel construction.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	1	Related to Construction event entity	
Type		Code	1	1	The code specifying the type of registration location.	Attribute *listID* = 'FLUX_VESSEL_CONSTR_TYPE' + Value.
Country	Country of construction	Identifier	1	1	The identifier of a construction country.	VED data. Attribute *schemeID* = 'TERRITORY' + Value. Identified by the Type Code = 'PLACE'.
Physical Structured Address			0	1	Construction company address	

7.1.12. Vessel_ Engine Entity

Entity used to provide information of an engine.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	3	Attached to vessel	

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
					Transport Means entity	
Role		Code	0	1	The code specifying the role of this vessel engine, such as main or auxiliary.	Attribute *listID* = 'FLUX_VESSEL_ENGINE_ROLE' + Value.
Power	Power of main engines	Measure	0	1	A measure of the total power produced by main engines. Expressed in kilowatts.	VCD data. Identified by the Role Code = 'MAIN'. Use UnitCode 'KWT' from the listID 'FLUX_UNIT' + Value.
Power	Power of auxiliary engines	Measure	0	1	A measure of the total power produced by auxiliary engines. Expressed in kilowatts.	VCD data. Identified by the Role Code = 'AUX'. Use UnitCode 'KWT' from the listID 'FLUX_UNIT' + Value.
Manufacturer	Engine mark	Text	0	1	Engine mark.	VED data.
Model	Engine model	Text	0	1	Model of the engine.	VED data.
Propulsion_ Type	Propeller type	Code	0	1	Propeller type.	VED data. Attribute *listID* = 'PROPELLER_TYPE' + Value.

7.1.13. Vessel_ Dimension Entity

Entity used to provide information on a vessel dimensions, like lengths & tonnages.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	Specified to Vessel Transport Means entity	
Type		Code	1	1	The code specifying a type of dimension of this vessel.	Attribute *listID* = 'FLUX_VESSEL_DIM_TYPE' + Value.
Value	LOA	Measure	0	1	Length overall, expressed in metres. Mandatory from 01/01/2003. Before 01/01/2003, mandatory if LBP is not	VCD data. Identified by the Type Code = 'LOA'. Use UnitCode 'MTR' from the listID 'FLUX_UNIT' + Value.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
					provided.	
Value	LBP	Measure	0	1	Length between perpendiculars, expressed in metres. Before 01/01/2003, mandatory if LOA is not provided.	VCD data. Identified by the Type Code = 'LBP'. Use UnitCode 'MTR' from the listID 'FLUX_UNIT' + Value.
Value	Registered Length	Measure	0	1	Registered length, expressed in metres.	VED data. Identified by the Type Code = 'LRE'. Use UnitCode 'MTR' from the listID 'FLUX_UNIT' + Value.
Value	Tonnage GT	Measure	0	1	Gross Tonnage, expressed in GT tons. Mandatory from 01/01/2004. Before 01/01/2004, mandatory if Other tonnage is not provided.	VCD data. Identified by the Type Code = 'GT'. Use UnitCode 'GT' from the listID 'FLUX_UNIT' + Value.
Value	Other tonnage	Measure	0	1	Other tonnage, i.e. GRT (tonnage according to Oslo convention), expressed in tons. Before 01/01/2004, mandatory if GT tonnage is not provided.	VCD data. Identified by the Type Code = 'TOTH'. Use UnitCode 'TNE' from the listID 'FLUX_UNIT' + Value.
Value	Safety tonnage	Measure	0	1	An increase in tonnage permitted on ground of safety (historical data).	VCD data. Identified by the Type Code = 'GTS'. Use UnitCode 'GT' from the listID 'FLUX_UNIT' + Value.
Value	Net Tonnage	Measure	0	1	Net tonnage, expressed in tons.	VED data. Identified by the Type Code = 'NT'. Use UnitCode 'TNE' from the listID 'FLUX_UNIT' + Value.
Value	Net Registered Tonnage	Measure	0	1	Net registered tonnage, expressed in tons.	VED data. Identified by the Type Code = 'NRT'. Use UnitCode 'TNE' from the listID 'FLUX_UNIT' + Value.
Value	Carrying capacity	Measure	0	1		VED data. Identified by the Type

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						Code = 'CART'. Use UnitCode 'TNE' from the listID 'FLUX_UNIT' + Value.
Value	Depth	Measure	0	1	Depth, expressed in metres.	VED data. Identified by the Type Code = 'DEPTH'. Use UnitCode 'MTR' from the listID 'FLUX_UNIT' + Value.
Value	Moulded Depth	Measure	0	1	Moulded depth, expressed in metres.	VED data. Identified by the Type Code = 'MDEPTH'. Use UnitCode 'MTR' from the listID 'FLUX_UNIT' + Value.
Value	Draught	Measure	0	1	Draught, expressed in metres.	VED data. Identified by the Type Code = 'DRAUGHT'. Use UnitCode 'MTR' from the listID 'FLUX_UNIT' + Value.
Value	Breadth	Measure	0	1	Breadth, expressed in metres. Could be used to report also Beam or Width measure of a vessel.	VED data Identified by the Type Code = 'BREADTH. Use UnitCode 'MTR' from the listID 'FLUX_UNIT' + Value.
Value	Deadweight	Measure	0	1	Deadweight, expressed in tons.	VED data Identified by the Type Code = 'DEADW'. Use UnitCode 'TNE' from the listID 'FLUX_UNIT' + Value.

7.1.14. Fishing_ Gear Entity

Entity used to provide information gears used by a vessel.

One entity can contain only one gear code – main or subsidiary. Main gear is mandatory and must be reported only once, subsidiary gears can be up to 5 different ones (one in each repetitive entity).

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	6	On Board to Vessel Transport Means entity	
Role	Gear Role	Code	1	1	Code indicating whether the Gear in main (MAIN) or subsidiary (AUX). No other codes on the list are allowed.	Attribute *listID* = 'FLUX_VESSEL_GEAR_ROLE' + Value.
Type	Main fishing gear	Code	0	1	The code specifying the type of fishing gear. 1 mandatory main gear must be reported.	VCD data. Attribute *listID* = 'GEAR_TYPE' + Value. Identified by the Role Code = 'MAIN'.
Type	Subsidiary fishing gear	Code	0	1	Code of the subsidiary gear used for a vessel. Up to 5 subsidiary gears can be reported.	VCD data. Attribute *listID* = 'GEAR_TYPE' + Value. Identified by the Role Code = 'AUX'.

7.1.15. Vessel Equipment Characteristic Entity

A prominent attribute or aspect of equipment related to a vessel.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	Applicable to Vessel Transport Means entity	
Type		Code	1	1	The code specifying a type of vessel equipment.	Attribute *listID* = 'FLUX_VESSEL_EQUIP_TYPE' + Value.
Value	IRCS indicator	Code	0	1	Indicator whether vessel has a radio call sign. Mandatory for vessels >= 24m LOA for events valid from 01/01/2003.	VCD data. Identified by the Type Code = 'IRCS_IND'. Attribute *listID* = 'BOOLEAN_TYPE' + Value.
Value	VMS indicator	Code	0	1	Indicator whether vessel has a VMS on board. Mandatory for events valid from 01/01/2003.	VCD data. Identified by the Type Code = 'VMS_IND'. Attribute *listID* = 'BOOLEAN_TYPE' + Value.
Value	ERS indicator	Code	0	1	Indicator whether vessel has e-logbook	VCD data. Identified by the Type

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
					onboard. Mandatory for events valid from 01/02/2018.	Code = 'ERS_IND'. Attribute *listID* = 'BOOLEAN_TYPE' + Value.
Value	ERS exemption indicator	Code	0	1	Indicator to tell whether a vessel is exempted ('Y') or not ('N') from requirement to have an electronic logbook onboard. Mandatory for events valid from 15/01/2023.	VCD data. Identified by the Type Code = 'ERS_EXEMPT_IND'. Attribnute *listID* = 'BOOLEAN_TYPE' + Value.
Value	AIS indicator	Code	0	1	Indicator whether vessel has an automatic identification system onboard. Mandatory for events valid from 01/02/2018.	VCD data. Identified by the Type Code = 'AIS_IND'. Attribute *listID* = 'BOOLEAN_TYPE' + Value.
Value	Navigation equipment details (code)	Code	0	1		VED data. Identified by the Type Code = 'NAVIG_EQ'. Attribute *listID* = 'NAVIG_EQUIP_TYPE' + Value.
Value	Communication equipment details (code)	Code	0	1		VED data. Identified by the Type Code = 'COMM_EQ'. Attribute *listID* = 'COMM_EQUIP_TYPE' + Value.
Value	Fish finder equipment details (code)	Code	0	1		VED data. Identified by the Type Code = 'FISHFINDER_EQ'. Attribute *listID* = 'FISHFINDER_EQUIP_TYPE' + Value.
Value	Deck machinery details	Code	0	1		VED data. Identified by the Type Code = 'DECK_MACHINERY'. Attribute *listID* = 'DECK_MACHINERY_TYPE' + Value.
Value	VMS satellite operator (code)	Code	0	1		VED data. Identified by the Type Code = 'VMS_SAT_OPER_C'.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						Attribute *listID* = 'VMS_SATELLITE_OPERATOR' + Value.
Value	Fish processing equipment details	Text	0	1		VED data. Identified by the Type Code = 'PROCESS_EQ' + Text
Value	Fish processing line type	Text	0	1		VED data. Identified by the Type Code = 'PROCESS_TYPE' + Text
Value	Freezer type	Text	0	1	Data element previously known as 'Refrigeration equipment details'.	VED data Identified by the Type Code = 'REFRIG_EQ' + Text
Value	Safety equipment details	Text	0	1		VED data. Identified by the Type Code = 'SAFETY_EQ' + Text
Value	Helicopter registration number	Text	0	1		VED data. Identified by the Type Code = 'HELICO_REG' + Text
Value	Aircraft registration number	Text	0	1		VED data. Identified by the Type Code = 'AIRC_REG' + Text
Value	VMS manufacturer name	Text	0	1		VED data. Identified by the Type Code = 'VMS_MAN' + Text
Value	VMS model name	Text	0	1		VED data. Identified by the Type Code = 'VMS_MODEL' + Text
Value	VMS satellite operator name	Text	0	1		VED data. Identified by the Type Code = 'VMS_SAT_OPER_T' + Text
Value	VMS serial number	Text	0	1		VED data. Identified by the Type Code = 'VMS_SERIAL_NBR' + Text
Value	VMS	Text	0	1		VED data.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
	software version					Identified by the Type Code = 'VMS_SOFT_VER' + Text
Value	VMS features	Text	0	1		VED data. Identified by the Type Code = 'VMS_FEATURE' + Text
Value	Navigation equipment details (text)	Text	0	1		VED data. Identified by the Type Code = 'NAVIG_EQ_T' + Text
Value	Fish finder equipment details (text)	Text	0	1		VED data. Identified by the Type Code = 'FISHFINDER_EQ_T' + Text
Value	Communication equipment details (text)	Text	0	1		VED data. Identified by the Type Code = 'COMM_EQ_T' + Text
Value	Support vessel skiff length	Measure	0	1	Measured in metres	VED data. Identified by the Type Code = 'SKIFF_LGTH'. Use UnitCode 'MTR' from the listID 'FLUX_UNIT' + Value
Value	Support vessel skiff engine power	Measure	0	1	Measured in kilowatts.	VED data. Identified by the Type Code = 'SKIFF_PWR'. Use UnitCode 'KWT' from the listID 'FLUX_UNIT' + Value
Value	Speed boat length	Measure	0	1	Measured in metres.	VED data. Identified by the Type Code = 'BOAT_LGTH'. Use UnitCode 'MTR' from the listID 'FLUX_UNIT' + Value
Value	Speed boat engine power	Measure	0	1	Measured in kilowatts.	VED data. Identified by the Type Code = 'BOAT_PWR'. Use UnitCode 'KWT' from the listID 'FLUX_UNIT' + Value
Value	Fuel tank	Measur	0	1	Measured in litres.	VED data.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
	capacity	e				Identified by the Type Code = 'FUEL_CAP'. Use UnitCode 'LTR' from the listID 'FLUX_UNIT' + Value
Value	Number of fishing lights	Quantity	0	1		VED data. Identified by the Type Code = 'LIGHTS_NBR'. Use UnitCode 'C62' from the listID 'FLUX_UNIT' + Value

7.1.16. Vessel Administrative Characteristic Entity

A prominent attribute or aspect of an administrative decision related to a vessel.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	Applicable to Vessel Transport Means entity	
Type		Code	1	1	The code specifying a type of vessel's administrative characteristic.	Attribute *listID* = 'FLUX_VESSEL_ADMIN_TYPE' + Value.
Value	Licence indicator	Code	0	1	Indicator whether a vessel has an active national fleet licence. Mandatory for events valid from 01/01/2003.	VCD data. Identified by the Type Code = 'LICENCE'. Attribute *listID* = 'BOOLEAN_TYPE' + Value.
Value	Segment	Code	0	1	Mandatory for events valid from 31/12/2002. Optional for earlier events.	VCD data. Identified by the Type Code = 'SEG'. Attribute *listID* = 'VESSEL_SEGMENT' + Value.
Value	Type of export	Code	0	1		VCD data. Identified by the Type Code = 'EXPORT'. Attribute *listID* = 'VESSEL_EXPORT_TYPE' + Value.
Value	Code for public aid	Code	0	1		VCD data. Identified by the Type

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						Code = ‘AID’. Attribute *listID* = ‘VESSEL_PUBLIC_AID_TYPE’ + Value.
Value	Date of entry into service	Datetime	0	1	Mandatory for events valid from 01/01/2004. For events before 01/01/2004, mandatory if Construction date is not provided.	VCD data. Identified by the Type Code = ‘EIS’ + Value. A UTC date time according to ISO 8601 format. i.e., 2010-08-15T00:00:00Z (milliseconds can be provided optionally).
Value	Vessel purchase year	Datetime	0	1		VED data. Identified by the Type Code = ‘PURCHASE_YEAR’ + Value. A UTC date time according to ISO 8601 format. i.e., 1995-01-01T00:00:00Z (milliseconds can be provided optionally).
Value	National authorisation name	Text	0	1		VED data. Identified by the Type Code = ‘AUTH_NAME’ + Value.

7.1.17. Vessel Technical Characteristic Entity

Entity used to provide technical information of a vessel.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	Applicable to Vessel Transport Means entity	
Type		Code	1	1	The code specifying a type of technical characteristic.	Attribute *listID* = ‘FLUX_VESSEL_TECH_TYPE’ + Value.
Value	Hull material	Code	0	1		VCD data. Identified by the Type Code = ‘HULL’.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						Attribute *listID* = 'VESSEL_HULL_TYPE' + Value.
Value	Processing Class	Text	0	1		VED data. Identified by the Type Code = 'PROCESS_CLASS' + Value.

7.1.18. Vessel Storage Characteristic Entity

Entity used to provide information on a prominent attribute or aspect related to the storage of a particular vessel.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	Applicable to Vessel Transport Means entity	
Type	Storage method	Code	1	1		VED data. Attribute *listID* = 'STORAGE_TYPE' + Value.
Capacity_ Value	General storage capacity	Measur e	0	1	Storage capacity expressed in cubic metres.	VED data. Identified by Type Code = 'STR_GEN' Use UnitCode 'MTQ' from the listID 'FLUX_UNIT' + Value.
Capacity_ Value	Fish hold capacity (cubic metres)	Measur e	0	1	Fish Hold capacity expressed in cubic metres.	VED data. Identified by Type Code = 'FISH_HOLD'. Use UnitCode 'MTQ' from the listID 'FLUX_UNIT' + Value.
Capacity_ Value	Fish hold capacity (tons)	Measur e	0	1	Fish Hold capacity expressed in tons.	VED data. Identified by Type Code = 'FISH_HOLD'. Use UnitCode 'TNE' from the listID 'FLUX_UNIT' + Value.
Capacity_ Value	Freezing capacity (cubic metres)	Measur e	0	1	Freezing capacity expressed in cubic metres	VED data. Identified by Type Code = 'FREEZ'. Use UnitCode 'MTQ' from the listID

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						'FLUX_UNIT' + Value.
Capacity_ Value	Freezing capacity (tons/day)	Measure	0	1	Freezing capacity expressed in tons per day.	VED data. Identified by Type Code = 'FREEZ'. Use UnitCode 'L71' from the listID 'FLUX_UNIT' + Value.
Capacity_ Value	Processing capacity (tons/day)	Measure	0	1	Processing capacity expressed in tons per day.	VED data. Identified by Type Code = 'PROCESS. Use UnitCode 'L71' from the listID 'FLUX_UNIT' + Value.
Temperature_ Value	General storage temperature	Measure	0	1		VED data. Identified by Type Code = 'STR_GEN'. Use UnitCode 'CEL' from the listID 'FLUX_UNIT' + Value.
Temperature_ Value	Fish hold temperature	Measure	0	1		VED data. Identified by Type Code = 'FISH_HOLD'. Use UnitCode 'CEL' from the listID 'FLUX_UNIT' + Value.
Temperature_ Value	Freezing temperature	Measure	0	1		VED data. Identified by Type Code = 'FREEZ'. Use UnitCode 'CEL' from the listID 'FLUX_UNIT' + Value.
Unit_ Value	Number of Storage units	Quantity	0	1		VED data. Identified by Type Code = 'STR_GEN'. Use UnitCode 'C62' from the listID 'FLUX_UNIT' + Value.
Unit_ Value	Number of Fish holds	Quantity	0	1		VED data. Identified by Type Code = 'FISH_HOLD'. Use UnitCode 'C62' from the listID 'FLUX_UNIT' + Value.
Unit_ Value	Number of Freezing units	Quantity	0	1		VED data. Identified by Type Code = 'FREEZ'. Use UnitCode 'C62' from

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						the listID ‘FLUX_UNIT’ + Value.

7.1.19. FLUX Picture Entity

Entity used to provide information about a picture, such as a digital photograph. Only .jpg, .png and .webp formats are allowed.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	3	Illustrate to Vessel Transport Means entity	
Type	Vessel photo type	Code	1	1	Code indicating the vessel photo type	VED data. Attribute listID = ‘VESSEL_PHOTO_TYPE’ + Value.
Digital Image	Starboard side photo	Binary Object	0	1	Starboard side photo of a vessel.	VED data. Identified by Type Code = ‘SIDE_SB’ + Binary Object.
Digital Image	Port side photo	Binary Object	0	1	Port side photo of a vessel.	VED data. Identified by Type Code = ‘SIDE_PT’ + Binary Object.
Digital Image	Stern photo	Binary Object	0	1	Stern photo of a vessel.	VED data. Identified by Type Code = ‘STERN’ + Binary Object.
Taken	Date of the vessel photo	Datetime	0	1	Date/time when this photo has been taken.	VED data. A UTC date time according to ISO 8601 format. i.e., 2024-01-31T00:00:00Z (milliseconds can be provided optionally).
Description	Description of the vessel photo	Text	0	1	Free text to describe the picture or the file name of the picture	VED data.

7.1.20. Vessel Crew

Entity used to provide information on a group of people who work on and operate a vessel.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	1	Specified to Vessel Transport Means entity	
Member	Crew size	Quantity	0	1	Regular crew size	VED data. Use UnitCode 'C62' from the listID 'FLUX_UNIT' + Value.
Maximum_Size	Maximum Crew size	Quantity	0	1		VED data. Use UnitCode 'C62' from the listID 'FLUX_UNIT' + Value.
Minimum_Size	Minimum Crew size	Quantity	0	1		VED data. Use UnitCode 'C62' from the listID 'FLUX_UNIT' + Value.

7.1.21. Contact_ Party Entity

Information on contact company's name, company's numbers (if it is a company) and contact person's nationality.

If a contact is a natural person, the Contact_ Person entity must be used to communicate a name and family name. If a name is provided in both Contact_ Party and Contact_ Person entity, the Contact_ Party entity (company name) takes precedence.

Up to 5 different owners, 5 operators, 5 beneficial owners[13], 1 master, 1 agent, 1 construction company, 1 registration authority can be reported for a vessel.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	Specified to Vessel Transport Means entity	
Role	Contact role code	Code	1	1	A code specifying the role of this contact party.	Attribute listID = 'FLUX_CONTACT_ROLE' + Value. Only role codes and in

[13] Definition based on Directive (EU) 2015/849 Art.3(6).

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						combination with the data fields defined in this document must be used. A role code for a vessel itself (VESSEL) is not used to communicate a name but only to link this entity with Email_ Communication and Universal_ Communication for info on communication channels available on board of a vessel.
Name	Owner name	Text	0	1	Name of a company owing a vessel.	VCD data. Identified by the Role Code = 'OWNER' + Name.
Name	Operator name	Text	0	1	Name of a company operating a vessel.	VCD data. Identified by the Role Code = 'OPERATOR' + Name.
Name	Beneficial owner name	Text	0	1	Name of a beneficial owner company of a vessel.	VED data. Identified by the Role Code = 'BENEFICIAL_OWNER' + Name.
Name	Agent name	Text	0	1	Name of a vessel's agent company	VED data. Identified by the Role Code = 'AGENT' + Name.
Name	Construction company name	Text	0	1	Name of vessel's construction company	VED data. Identified by the Role Code = 'CONSTRUCT' + Name.
Name	Registration authority name	Text	0	1	Name of vessel's registration authority	VED data. Identified by the Role Code = 'REG_AUTH' + Name.
Nationality_ Country	Owner nationality	Identifier	0	1		VCD data. Identified by the Role Code = 'OWNER'. Attribute schemeID = 'TERRITORY' + Value.
Nationality_ Country	Operator nationality	Identifier	0	1		VCD data. Identified by the Role Code = 'OPERATOR'. Attribute schemeID = 'TERRITORY' + Value.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
Nationality_ Country	Master nationality	Identifier	0	1		VED data. Identified by the Role Code = ‘MASTER’. Attribute schemeID = ‘TERRITORY’ + Value.
Nationality_ Country	Agent nationality	Identifier	0	1		VED data. Identified by the Role Code = ‘AGENT’. Attribute schemeID = ‘TERRITORY’ + Value.
Nationality_ Country	Beneficial owner nationality	Identifier	0	1		VED data. Identified by the Role Code = ‘BENEFICIAL_OWNER’. Attribte schemeID = ‘TERRITORY’ + Value.
ID	Owner company IMO number	Identifier	0	1		VCD data. Identified by the Role Code = ‘OWNER’. Attribute schemeID = ‘IMO’ + Value.
ID	Operator company IMO number	Identifier	0	1		VCD data. Identified by the Role Code = ‘OPERATOR’. Attribute schemeID = ‘IMO’ + Value.
ID	Agent company IMO number	Identifier	0	1		VED data. Identified by the Role Code = ‘AGENT’. Attribute schemeID = ‘IMO’ + Value.
ID	Construction company IMO number	Identifier	0	1		VED data. Identified by the Role Code = ‘CONSTRUCT’. Attribute schemeID = ‘IMO’ + Value.
ID	Registration authority IMO number	Identifier	0	1		VED data. Identified by the Role Code = ‘REG_AUTH’. Attribute schemeID = ‘IMO’ + Value.
ID	Beneficial owner company IMO number	Identifier	0	1		VED data. Identified by the Role Code = ‘BENEFICIAL_OWNER’. Attribute schemeID =

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						'IMO' + Value.
ID	Owner company national registration number	Identifier	0	1		VCD data. Identified by the Role Code = 'OWNER'. Attribute schemeID = 'OTH' + Value.
ID	Operator company national registration number	Identifier	0	1		VCD data. Identified by the Role Code = 'OPERATOR'. Attribute schemeID = 'OTH' + Value.
ID	Agent company national registration number	Identifier	0	1		VED data. Identified by the Role Code = 'AGENT'. Attribute schemeID = 'OTH' + Value.
ID	Construction company national registration number	Identifier	0	1		VED data. Identified by the Role Code = 'CONSTRUCT'. Attribute schemeID = 'OTH' + Value.
ID	Registration authority national registration number	Identifier	0	1		VED data. Identified by the Role Code = 'REG_AUTH'. Attribute schemeID = 'OTH' + Value.
ID	Beneficial owner national registration number	Identifier	0	1		VED data. Identified by the Role Code = 'BENEFICIAL_OWNER'. Attribute schemeID = 'OTH' + Value.
Specified Contact_ Person			0	1	Information on contact name if it is a person.	
Specified Structured_ Address			0	1	Address of a contact.	
Specified Universal_ Communication			0	n	Information on email.	
URI Email_ Communication			0	n	Information on contact's different communication numbers.	

7.1.22. Contact_Person Entity

Name and family name of a person. The entity is only used if the contact party is a natural person, not a company. Contact_Person information will be ignored, if the company name is provided in the Contact_Party entity.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	1	Specified to Contact Party entity	
Family Name	Owner family name	Text	0	1		VCD data. Identified by the Contact Party Role Code = 'OWNER' + Text.
Family Name	Operator family name	Text	0	1		VCD data. Identified by the Contact Party Role Code = 'OPERATOR' + Text.
Family Name	Master family name	Text	0	1		VED data. Identified the Contact Party Role Code = 'MASTER' + Text.
Family Name	Agent family name	Text	0	1		VED data. Identified by the Contact Party Role Code = 'AGENT' + Text.
Family Name	Beneficial owner family name	Text	0	1		VED data. Identified by the Contact Party Role Code = 'BENEFICIAL_OWNER' + Text.
Given Name	Owner first name	Text	0	1		VCD data. Identified by the Contact Party Role Code = 'OWNER' + Text.
Given Name	Operator first name	Text	0	1		VCD data. Identified by the Contact Party Role Code = 'OPERATOR' + Text.
Given Name	Master first name	Text	0	1		VED data. Identified the Contact Party Role Code = 'MASTER' + Text.
Given Name	Agent first name	Text	0	1		VED data. Identified by the Contact Party Role Code = 'AGENT' + Text.
Given	Beneficial	Text	0	1		VED data.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
Name	owner first name					Identified by the Contact Party Role Code = 'BENEFICIAL_OWNER' + Text.

7.1.23. Structured_Address Entity

Address of a contact.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	1	Specified to Contact party entity	Each data element described below can be communicated with the following Contact Party roles: OWNER (VCD data), OPERATOR (VCD data), MASTER (VED data), AGENT (VED data), REG_AUTH (VED data), BENEFICIAL_OWNER (VED data).
City name	City of the contact	Text	0	1	The name, expressed as text, of the city, town or village in the structured address.	
Country	Country of the contact	Identifier	0	1	The unique identifier of a country in the structured address.	Attribute schemeID = 'TERRITORY' + Value.
Post office Box	Post office box of the contact	Text	0	1	The unique identifier, expressed as text, of a container commonly referred to as a box, in a post office or other postal service location, where postal items may be kept for this structured address.	
Postal Area	Postcode of the contact	Text	0	1	The postcode in the structured address.	
Street Name	Street of the contact	Text	0	1	The name, expressed as text, of a street or thoroughfare in the structured address. The street number is included in.	

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	1	Physical to Construction Location entity	Each data element described below can be communicated only with the Contact Party role CONSTRUCT (VED data).
City name	Construction company City	Text	0	1	The name, expressed as text, of the city, town or village in the structured address.	
Country	Construction company Country	Identifier	0	1	The unique identifier of a country in the structured address.	Attribute schemeID = 'TERRITORY' + Value.
Post office Box	Construction company Post office box	Text	0	1	The unique identifier, expressed as text, of a container commonly referred to as a box, in a post office or other postal service location, where postal items may be kept for this structured address.	
Postal Area	Construction company Postcode	Text	0	1	The postcode in the structured address.	
Street Name	Construction company Street	Text	0	1	The name, expressed as text, of a street or thoroughfare in the structured address. The street number is included in.	

7.1.24. Email_Communication Entity

Email address of a contact.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	URI to Contact Party entity	Email address can be communicated with the following Contact Party roles: OWNER (VCD data), OPERATOR (VCD data), MASTER (VED

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
						data), AGENT (VED data), CONSTRUCT (VED data), REG_AUTH (VED data), BENEFICIAL_OWNER (VED data).
URI	Email address of a contact	Identifier	0	1	The Uniform Resource Identifier (URI) for this email communication.	Attribute schemeID = 'URI' + Value. Cannot be communicated for a Party role 'VESSEL'.

7.1.25. Universal_Communication Entity

Phone and other numbers of a contact.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	Specified to Contact Party entity	Each data element described below can be communicated with the following Contact Party roles: OWNER (VCD data), OPERATOR (VCD data), MASTER (VED data), AGENT (VED data), CONSTRUCT (VED data), REG_AUTH (VED data), BENEFICIAL_OWNER (VED data), VESSEL (VED data).
Channel		Code	1	1	The code identifying the communication number reported.	There is no referenced listID, but the channel code specifying the use of this communication comes from the FLUX_TELECOM_USE list.
Complete Number	Phone number of the contact	Text	0	1	The text string of characters that make up the complete phone number for the contact.	Identified by the Channel code = 'TE' + Complete Number. Can be communicated for all Contact Party roles except 'VESSEL' role.
Complete Number	Fax number of the contact	Text	0	1	The text string of characters that make up the complete fax	Identified by the Channel code = 'FX' + Complete Number.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
					number for the contact.	Can be communicated for all Contact Party roles except 'VESSEL' role.
Complete Number	Radio frequency	Text	0	1	Radio frequency number of a vessel.	Identified by the Channel code = 'AP' + Complete Number. For 'VESSEL' role only.
Complete Number	Satellite phone number	Text	0	1	Satellite phone number of a vessel.	Identified by the Channel code = 'AV' + Complete Number. For 'VESSEL' role only.

7.1.26. Validation Result_ Document Entity

Entity containing information about the validation process. It is used only in SUB-Q messages sent by the Fleet system after the successful query by a MS.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	1	Related to vessel Event entity	
ValidatorID		Identifier	1	1	The identifier of the party who performed the validation.	Attribute schemeID = 'FLUX_GP_PARTY' + Value.
Creation		Datetime	1	1	Date/time when the validation process has been done.	A UTC date time according to ISO 8601 format. i.e., 2024-02-01T14:15:32Z (milliseconds can be provided optionally).
Related Validation_ Quality Analysis			0	n	Details of the validation report.	

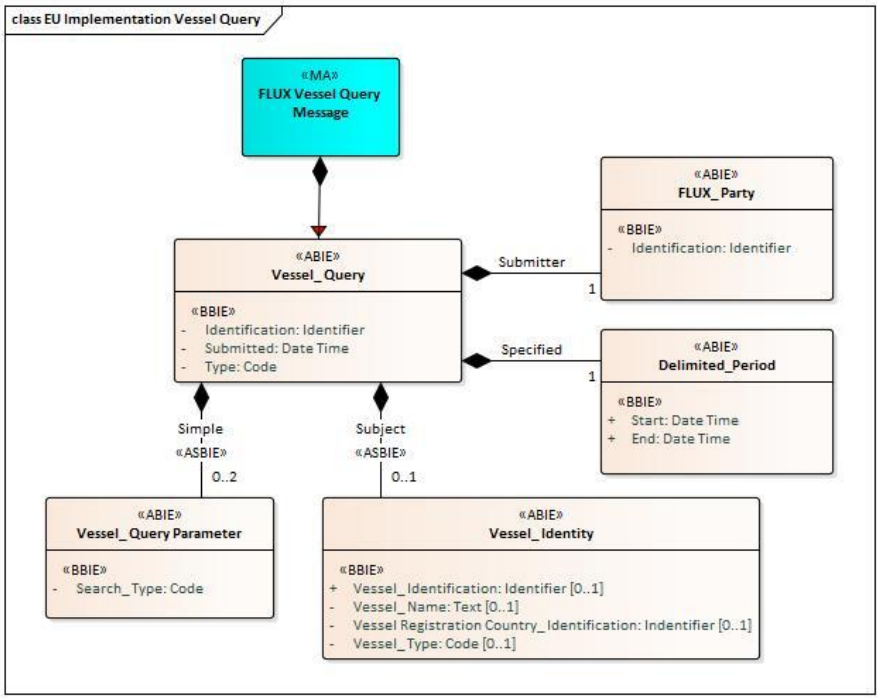
7.1.27. Validation_ Quality Analysis Entity

Entity containing the errors and/or warnings for data queried. It is used only in SUB-Q messages sent by the Fleet system after the successful query by a MS.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	Related to Validation Result_ Document Entity	
Identification	BR identifier	Identifier	1	1	Business rule identification.	Attribute schemeID = 'VESSEL_BR_DEF' + Value.
Level	BR validation level	Code	1	1	The code specifying the validation level of the business rule.	Attribute listID = 'FLUX_GP_VALIDATION_LEVEL' + Value.
Type	BR error severity level	Code	1	1	The code specifying the result of the business rule (error, warning).	Attribute listID = 'FLUX_GP_VALIDATION_TYPE' + Value.
Result	BR error message	Text	1	1	A text explaining the error triggered by a business rule.	
Referenced_item		Text	0	n	An information to locate the data causing the problem in the XML.	

7.2. Query

Description: queries are used by the MS to extract vessel core data of the EU fishing vessels from the Vessel Register. They are also used by the Commission to request a snapshot from a MS.



Class Diagram for a Query message

7.2.1. FLUX Vessel Query Message

This is a message to query information on vessels.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
Vessel_ Query		Assoc.	1	1		

7.2.2. Vessel_ Query Entity

Entity containing a formally raised question or request for information of vessels.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Associated to FLUX Vessel Query Message	

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
ID	Message identifier	Identifier	1	1	The Global Unique Identifier of the query message	Attribute *schemeID* = 'UUID' + Value A UUID as defined in the RFC 4122. Cf. http://www.guidgenerator.com to generate example of a valid identifier.
Submitted	Query submission datetime	Datetime	1	1	The datetime when this vessel query was submitted.	A UTC date time according to ISO 8601 format. i.e., 2024-02-01T14:15:32Z (milliseconds can be provided optionally).
Type	Query type	Code	1	1	The code specifying the type of a query.	Attribute listID = 'FLUX_VESSEL_QUERY_TYPE' + Value. Possible values for a query from a MS to Fleet: (1) **Q-NR**: normal query, (2) **Q-NEWS**: news query, (3) **Q-SNAP-F**: query from COM to a MS for the complete fleet of a MS.
Submitter FLUX_ Party			1	1	Identification of the requester.	
Simple Vessel_ Query Parameter			0	2	Additional parameters of the query.	
Subject vessel_ Identity			1	1	Vessel identification.	
Specified Delimited _ Period			1	1	Time period for selecting data.	

7.2.3. FLUX_Party Entity

Entity containing the identification of the requester.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Submitter to Vessel Query entity	
ID	Query submitter identifier	Identifier	1	1	The party identifier sending a query. 'XEU' is used when query is sent by COM.	Attribute schemeID = 'FLUX_GP_PARTY' + Value.

7.2.4. Vessel_ Query Parameter Entity

Entity containing information that limits or restricts the scope of a vessel query.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	2	Simple to Vessel Query entity	
Type	Query parameter code	Code	1	1	The code specifying the parameter of data queried.	Attribute listID = 'FLUX_VESSEL_QUERY_PARAM' + Value. Possible values for query type Q-NR. 1st instance: **HIST_YES** (all events corresponding to the history of the vessel in the Delimited_ Period) or **HIST_NO** (last event in the history of the vessel up to the End date of the Delimited_ Period). 2nd instance: **VESSEL_ACTIVE** (vessel active in the Delimited Period) or **VESSEL_ALL** (any vessel in the Delimited Period).

7.2.5. Vessel_ Identity Entity

Entity containing information used to select vessels in a query. If a country is specified, the search will be done on all the vessels of that country. If more than one criterion is given, a "AND" operation is done.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Subject to Vessel Query entity	
Vessel_ Identification	Vessel identifier	Identifier	0	1	A vessel identifier to be queried.	Attribute schemeID = ‘CFR’ or ‘UVI’ or ‘EXT_MARK’ or ‘IRCS’ or ‘MMSI’ + Value.
Vessel_ Name	Vessel name	Text	0	1	A vessel name to be queried.	
Vessel Registration Country_ Identification	Registration country	Identifier	0	1	A country code for which vessels to be queried	Attribute schemeID = ‘TERRITORY’ + Value. Mandatory, if Vessel Identification is not provided,
Vessel_ Type	Vessel type	Code	0	1	The code specifying the type of vessel for this vessel identity.	Attribute listID = ‘VESSEL_CATEGORY’ + Value.

7.2.6. Delimited_Period Entity

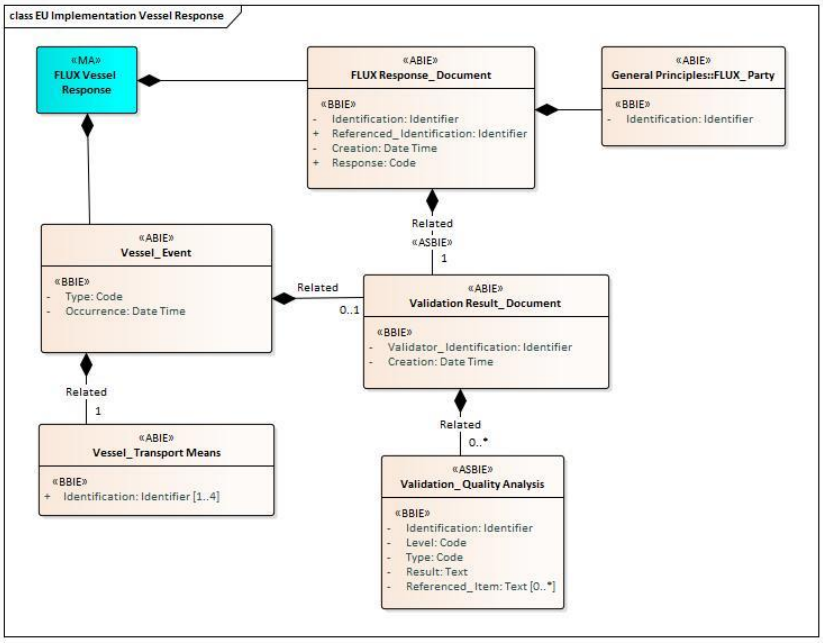
Description: Entity containing information that limits or restricts the scope of a vessel query.

In Q-NR, the query report will deliver all events completely or partially active in the queried period. In Q-NEWS, the query report will deliver all events of vessels starting in the queried period and till the latest event.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Specified to Vessel Query entity	
Start	Query period start date	Datetime	1	1	Date from which vessel data should be delivered.	A UTC date time according to ISO 8601 format. i.e., 2024-02-01T00:00:00Z (milliseconds can be provided optionally).
End	Query period end date	Datetime	1	1	Date until which vessel data should be delivered.	A UTC date time according to ISO 8601 format. i.e., 2024-02-101T00:00:00Z (milliseconds can be provided optionally).

7.3. Response

This message is used for replying to each Submission or Query message and providing the information whether submission or query message was accepted or rejected, as well as listing the validation results in the form of failed business rules (rule ID, level, severity, message) and the corresponding vessel event and vessel identification.



Class Diagram for a Vessel Response message

7.3.1. FLUX Vessel Response

This is a message to reply on a submission or query messages.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
FLUX Response_ Document		Assoc.	1	1		
Vessel_ Event		Assoc.	0	n		

7.3.2. FLUX Response_ Document Entity

The entity provides general information on that response message.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Associated to FLUX Vessel Response message	
Identification		Identifier	1	1	The Global Unique Identifier of the response message.	Attribute *schemeID* = 'UUID' + Value. A UUID as defined in the RFC 4122. Cf. http://www.guidgenerator.com to generate example of a valid identifier.
Creation		Datetime	1	1	Date/time that this report has been created.	A UTC date time according to ISO 8601 format. i.e., 2024-02-01T14:15:32Z (milliseconds can be provided optionally).
Referenced_identification		Identifier	1	1	The Global Unique Identifier of the submission or query message to which this response refers to.	Attribute schemeID = 'UUID' + Value. In case UUID number in submission or query message is missing or is wrong, use schemeID = 'FLUXTL_ON' + Value (ON number from the FLUX TL envelope of a submission or query msg).
Response		Code	1	1	Status code, possible values: OK – message accepted. WOK – message accepted but has warnings. NOK – message not accepted.	Attribute listID = 'FLUX_GP_RESPONSE' + Value.
Respondent FLUX Party			1	1	Information on a party owning the response.	
Validation Result_ Document			1	1	General validation report.	

7.3.3. FLUX_ Party entity

Entity to provide information on the party owning the response message.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Respondent to FLUX Response Document entity	
ID		Identifier	1	1	The identifier of the party who owns this response message.	Attribute *listID* = 'FLUX_GP_PARTY' + Value. XEU code is used for COM.

7.3.4. Validation Result_ Document Entity

Entity containing information about the validation results.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			1	1	Related to FLUX Response Document entity	
Validator_ Identification		Identifier	1	1	The identifier of the party who performed the validation.	Attribute schemeID = 'FLUX_GP_PARTY' + Value.
Creation		Datetime	1	1	Datetime when the validation process has been done.	A UTC date time according to ISO 8601 format. i.e., 2024-02-01T14:15:32Z (milliseconds can be provided optionally).
Validation_ Quality Analysis			0	n	Details of the validation report	

7.3.5. Validation_ Quality Analysis Entity

Description: Entity containing the results of the validation process.

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
			0	n	Related to Validation Result Document entity	
Identificati	BR	Identifi	1	1	Business rule	Attribute schemeID =

Entity/Field Name	Business Name	Type	Cardinality		Description	Remarks
			min	max		
on	identifier	er			identification.	'VESSEL_BR_DEF' + Value.
Level	BR validation level	Code	1	1	The code specifying the validation level of the business rule.	Attribute listID = 'FLUX_GP_VALIDATION_LEVEL' + Value.
Type	BR error severity level	Code	1	1	The code specifying the result of the business rule (error, warning).	Attribute listID = 'FLUX_GP_VALIDATION_TYPE' + Value.
Result	BR error message	Text	1	1	A text explaining the error triggered by a business rule.	
Referenced_item		Text	0	n	An information to locate the data causing the problem in the XML.	

7.3.6. Vessel_Event Entity

See details in chapter 7.1.4.

7.3.7. Vessel_Transport Means Entity

See details in chapter 7.1.6. Only the main vessel identifiers (CFR, UVI, IRCS, Registration number) will be delivered.

8. BUSINESS RULES

This chapter describes the validation principles and the business rules (BRs) applied to all messages sent to the Fleet system. Due to different legal basis and requirements on managing data in the EU Vessel Register, the validation takes into account distinction between EU fishing and non-fishing vessels, as well as VCD and VED data.

The aim of the business rules is to verify the incoming messages and data they contain, to detect and avoid incorrect data from being stored in the Vessel register and to communicate back this information to the message sender.

Business rules are applied by the receiver upon receipt of a message. Business rules of applied in batches based on levels. Level 0 (see below) rules are applied first. If they all are successful, the level 1 rules are applied. Level 2-4 rules are applied only if all level 1 rules are successful. If at least one rule fails in a certain level or level group, the validation stops and rules from the next level(s) are not run.

8.1. Definition

For a better understanding of the business rules the following terminology has been introduced.

- **Declaration (called also event)**: set of data communicated under a specific event code.
- **Event End Date**: for a vessel, the validity end date of an event is:
    1. the event start date of the declaration when it is an exit from the fleet, except for a RET if followed by a DES or EXP. In such case, point 2 is applicable (cfr Event Type Transition Diagram).
    2. the event start date minus one day of the next event (if any) considering all the events are sorted by ascending event start date.
    3. a default value '2100/12/31' if none of the above. Events with that end date is called an active event because data is valid at present time.
- **Event period**: the period of time covered between the event start date and end date.
- **Consolidated history**: the set of all events of a vessel.
- **Transmission date**: date when a message from the MS is received and registered in the Fleet system.
- **The current/active fleet**: the list of all vessels registered and not having an exit event as their latest event at current date.

8.2. Validation Principles

8.2.1. Business rules levels

The business rules are classified in 5 different levels:

- Level 0: Integrity Control: structure of the message, data types, …

- Level 1: Data Field Validation (one attribute).
- Level 2: Row Validation or control of the coherence between several fields in a message.
- Level 3: Full Content Validation or control of the coherence between data in a message and a complete national fleet.
- Level 4: Extended Validation or control of coherence between data in a message and the other fleets or external systems.

8.2.2. Business rules severity levels

Each business rule has a severity level. They can be:

1. **E**: **Error**: A problem has been detected, which does not allow the data to be accepted. The complete message is refused. In this case, the MS responsible for the message should correct and resubmit it as soon as possible.

2. **W**: **Warning**: The message is accepted, and data integrated into the EU Vessel Register, although some data needs to be verified by the MS according to the warning error notified.

The response message returned to the sender of the message will contain information on the acceptance or refusal of that message. The response message will also include the business rule numbers for which a rule was violated, an indication if this is an error or a warning, and a reference to the data field on which the business rule failed.

8.2.3. Business rules applicability period

Messages received must be validated according to the BRs active at that moment. In addition, each BR is applicable during a certain period, defined by its start and end dates. If a BR period matches the vessel event period[14] in a message, a rule is applied. Also, the severity code (error or warning) of a BR can be applied differently in different periods[15]. This information is part of BR definition and conditions, and available on the Master Data Register page of the European Commission Fisheries website.

A BR must be applied if the data used by the business rule is available in a message.

8.2.4. Overloaded data elements

An overloaded data element is defined as a data element communicated repetitively (based on the cardinality of the element defined in the data model) and exceeding the limit imposed by the implementation document or that is not mentioned in the

[14] Event period is defined from the event start date communicated in a submission message till its end date (computed by the system as explained in paragraph 6.3).

[15] For practical implementation of different severity levels, see paragraph 8.2.2.

implementation document but still compliant to the UN/FLUX standard. In this version of the document, there are no business rules[16] defined to detect overloaded data elements and therefore such issues are not reported to the sender. Such data elements are ignored by the validation process (i.e., multiple vessel identifiers in the XML message are allowed by the standard but limited to one in the implementation document).

8.2.5. Business rules identification

Each business rule is identified by a reference assigned to the BR according to the following methodology: VESSEL-Lxx-BB-CCCC:

- VESSEL: Referring to the Vessel domain
- Lxx: The level of the business rule (see paragraph 8.2.1)
- BB: optional sub-level. This part of the numbering is used to identify the sub-levels, if FLUX domain requires the split of the business rules levels. If the domain does not require sub-level, '00' must be used.
- CCCC: This part of BR identification represents the sequence number of the business rule in the level and sub-level group so it can be uniquely identified.

Example: *VESSEL-L02-01-0033*

8.2.6. Business rules parameters

Parameters are sometimes used in the definition of BRs. The value of each parameter is defined at run time. They have been introduced to facilitate the maintenance of the BRs by avoiding the need of any IT interventions if the value of the parameter is modified for business reasons.

[16] Additional business rules can be defined in a future version.

8.3. Rules for submission messages

The business rules listed in this chapter are validating data in submission messages (SUB-VCD, SUB-VCD-F, SUB-VED, SUB, SUB-Q, SNAP-F).

8.3.1. Generic rules

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types[17]
GEN-L00-00-0001	FLUX Report Vessel Information Message	The message must be a valid XML	E	An invalid XML message has been received	All
GEN-L00-00-0002	FLUX Report Vessel Information Message	The message must not be empty	E	The message content is empty	All
GEN-L00-00-0003	FLUX Report Vessel Information Message	The message must be UTF-8 compliant	E	The message is not UTF-8 compliant	All
GEN-L00-00-0004	FLUX Report Vessel Information Message	The message must comply with the relevant FLUX XSD standard. For submissions in the Vessel domain the FLUX Report Vessel Information 5p1 XSD is used.	E	The message is not XSD and implementation document compliant	All
GEN-L00-00-0005	Creation Datetime	Creation datetime must be mandatory	E	The Creation date is not provided	All
VESSEL-L00-00-9996	FLUX Report Vessel Information Message	Verifies if code lists can be retrieved from the MDR at the given reference date	E	No referential code lists can be retrieved from the MDR	All

8.3.2. Level 00 rules – integrity control

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L00-00-0001	FLUX Report Document / Identification	Mandatory	E	The report identification is not provided	All
VESSEL-L00-00-0002	FLUX Report Document / Identification	The identifier must be in a valid UUID format	E	The report identification is not in a valid format	All
VESSEL-L00-00-0003	FLUX Report Document / Identification	The UUID must be unique	E	The report identification is not unique	All
VESSEL-L00-00-0009	FLUX Report Document / Type Code	Mandatory	E	The Report Type is not provided	All
VESSEL-L00-00-0045	FLUX Report Document / Type Code	ListId = FLUX_VESSEL_REPORT_TYPE must be provided	E	The list referenced for the Report Type is not valid	All

[17] The column indicates the submission message types for which the rule is executed.

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L00-00-0008	FLUX Report Document / Type Code	Code must be on FLUX_VESSEL_REPORT_TYPE list	E	The Report Type code is not valid	All
VESSEL-L00-00-0007	FLUX Report Document / Creation Datetime	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally).	E	The report Creation date is not in a valid format	All
VESSEL-L00-00-0093	FLUX Report Document / Creation Datetime	Creation Datetime must not be the future	E	The Creation datetime of the report should not be in the future	All
VESSEL-L00-00-0011	FLUX Report Document / Purpose Code	Mandatory	E	The Purpose code is not provided	All
VESSEL-L00-00-0046	FLUX Report Document / Purpose Code	ListId = FLUX_GP_PURPOSE must be provided	E	The list referenced for the Purpose Code is not valid	All
VESSEL-L00-00-0010	FLUX Report Document / Purpose Code	Value=9 is the only valid	E	The Purpose code value is not valid	All
VESSEL-L00-00-0154	FLUX Report Document / Type Code FLUX Report Document / Referenced Identification FLUX Party / Identification	For snapshots, the referenced identification must refer to the query sent to the flag state or to the Fleet system and the types of messages (SNAP-F / Q-SNAP-F or Q-NR / SUB-Q or Q-NEWS / SUB-Q) must match	E	The snapshot report does not reference to a valid query message, or the type of message does not match with the query	SNAP-F SUB-Q
VESSEL-L00-00-0158	FLUX Report Document / Type Code FLUX Report Document / Referenced Identification	Another SNAP-F or SUB-Q report must be rejected, if it refers to a query, for which a report has already been received	E	The Message refers to a query, for which the report has already been received	SNAP-F SUB-Q
VESSEL-L00-00-0018	FLUX Report Document / Type Code Vessel Country / Identifier Vessel Transport Means / Type Code	SUB-VCD, SUB-VCD-F, SUB-VED, SNAP-F and SUB-Q reports must contain only EU fishing vessels. GBR is considered as a MS till 31/12/2020.	E	This report type must not contain non-fishing vessels	SUB-VCD SUB-VCD-F SUB-VED SNAP-F SUB-Q
VESSEL-L00-00-0019	FLUX Report Document / Type Code FLUX Report vessel Information message	SUB-VCD, SUB-VCD-F, SNAP-F and SUB-Q reports should not contain any VED data	E	This report type must not contain vessel extended data	SUB-VCD SUB-VCD-F SNAP-F SUB-Q
VESSEL-L00-00-0210	FLUX Report Document / Type Code FLUX Report vessel Information message	SUB-VED report must contain only VED data	E	SUB-VED message type cannot contain VCD (vessel core) data	SUB-VED
VESSEL-L00-00-0147	FLUX Report Document / Type Code Message Reception time	SNAP-F or SUB-Q reports must be received by Fleet within 3 hours after sending of the referenced	W	The report has been received late	SNAP-F SUB-Q

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Referenced Query Sending time	query			
VESSEL-L00-00-0013	FLUX Party / Identification	Mandatory	E	The sender identification of the report is not provided	All
VESSEL-L00-00-0047	FLUX Party / Identification	SchemeID = FLUX_GP_PARTY must be provided	E	The list referenced for the Party identifier is not valid	All
VESSEL-L00-00-0012	FLUX Party / Identification	Code must be on FLUX_GP_PARTY list	E	The sender identification code is not valid	All
VESSEL-L00-00-0014	FLUX Party / Identification The sender from the Transportation Layer (FR value)	The party sending the message must be the same as the one from the FR value of the FLUX TL envelope. Only the part before the first colon is to be considered: Eg. ABC:something => only ABC refer to the party for the purpose of this rule.	E	The sender of the message is not the same as a Flag state mentioned in the message.	All
VESSEL-L00-00-0020	FLUX Party / Identification FLUX Report Document / Type Code Indicator in the Fleet system.	For any message, the blocking indicator for the flag state in the Fleet system is set to 'Y'	E	No submission is allowed for the sending country. Please contact the European Commission.	SUB-VCD SUB-VCD-F SUB-VED SUB SUB-Q SNAP-F
VESSEL-L00-00-0024	Vessel Event / Occurrence Date Time FLUX Report Document / Type Code Vessel Transport Means / Identification	Any submission message, if it contains only one event, must have the Occurrence date equal or later than the last recorded Occurrence date for that vessel in the Fleet system	E	The submission contains only one event, but it is not the newest nor the latest event of the vessel	SUB-VCD SUB-VCD-F SUB-VED SUB SUB-Q
VESSEL-L00-00-0048	Vessel Event / Type Code	SchemeID = VESSEL_EVENT must be provided	E	The list referenced for the vessel Event is not valid	All
VESSEL-L00-00-0096	Vessel Historical Characteristic / Type Code	ListID = FLUX_VESSEL_HIST_CHAR must be provided	E	The list referenced for the Historical Characteristic Type is not valid	SUB-VED SUB
VESSEL-L00-00-0073	Vessel Historical Characteristic / Value Datetime Vessel Historical Characteristic / Type Code = DATE	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally).	E	The Date of Historical Data is not in a valid format	SUB-VED SUB
VESSEL-L00-00-0097	Vessel Historical Characteristic / Value Code Vessel Historical Characteristic / Type Code = FLAG	ListID = TERRITORY must be provided	E	The list referenced for the Previous Flag State is not valid	SUB-VED SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L00-00-0160	Vessel Historical Characteristic / Value Text Vessel Historical Characteristic / Type Code = VESSEL_NAME	Length <= 40 characters max	E	The Previous Vessel Name must have a maximum of 40 characters	SUB-VED SUB
VESSEL-L00-00-0161	Vessel Historical Characteristic / Value Text Vessel Historical Characteristic / Type Code = OWNER_NAME	Length <= 100 characters max	E	The Previous Owner Name must have a maximum of 100 characters	SUB-VED SUB
VESSEL-L00-00-0162	Vessel Historical Characteristic / Value Text Vessel Historical Characteristic / Type Code = OWNER_ADDRESS	Length <= 256 characters max	E	The Previous Owner Address must have a maximum of 256 characters	SUB-VED SUB
VESSEL-L00-00-0148	FLUX Report Document / Type Code Vessel Transport Means / Identification Vessel Country / Identification	In SUB-VED messages, the vessel referenced in the message must exist in the Vessel Register and the flag and vessel identification must correspond to the last vessel event in the Vessel Register	E	The vessel does not exist in the Vessel Register or it has changed flag	SUB-VED
VESSEL-L00-00-0149	FLUX Report Document / Type Code Vessel Transport Means / Type Code Vessel Country / Identification	SUB message must not contain data about EU fishing vessels (based on vessel type and flag state values)	E	This type of submission cannot contain data on EU fishing vessels	SUB
VESSEL-L00-00-0150	Vessel Event / Type Code	Only code ‘MOD’ or ‘RET’ is allowed in SUB-VED and SUB messages	E	The Event Type must be MOD or RET for this submission	SUB-VED SUB
VESSEL-L00-00-0156	Vessel Event / Occurrence Datetime	Mandatory value	E	The Date of Event is not provided	All
VESSEL-L00-00-0068	Vessel Event / Occurrence Datetime	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally).	E	The Event Start date is not in a valid format	All
VESSEL-L00-00-0021	Vessel Transport Means / Identification FLUX Report Document / Type Code	A submission message can contain only one vessel	E	The submission should not contain more than one vessel	SUB-VCD SUB-VCD-F SUB-VED SUB
VESSEL-L00-00-0022	FLUX Report Document / Type Code	In SUB and SUB-VED messages only one event	E	SUB and SUB-VED messages can contain	SUB-VED SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Vessel Event / Occurrence Datetime	must be present		only one event	
VESSEL-L00-00-0157	Vessel Transport Means / Identification	Mandatory value	E	Vessel identification is not provided	All
VESSEL-L00-00-0027	Vessel Transport Means / Identification	SchemeID = FLUX_VESSEL_ID_TYPE must be provided and the values must come from that list	E	The Vessel identification is referencing to a wrong list or is not a valid code	All
VESSEL-L00-00-0146	Vessel Transport Means / Type Code	Mandatory value	E	The Vessel Type is not provided	All
VESSEL-L00-00-0050	Vessel Transport Means / Type Code	ListId = VESSEL_TYPE must be provided	E	The list referenced for the vessel type is not valid	All
VESSEL-L00-00-0025	Vessel Transport Means / Type	Code must be on VESSEL_TYPE list	E	The Vessel Type code is not valid	All
VESSEL-L00-00-0069	Vessel Transport Means / Identification SchemeID=UVI	Numerical value	E	The UVI number is not numerical	All
VESSEL-L00-00-0070	Vessel Transport Means / Identification SchemeID=MMSI	Numerical value	E	The MMSI number is not numerical	All
VESSEL-L00-00-0163	Vessel Transport Means / Identification SchemeID = REG_NBR	Length <=14 characters max	E	The Registration Number must have a maximum of 14 characters	All
VESSEL-L00-00-0164	Vessel Transport Means / Identification SchemeID = EXT_MARK	Length <= 14 characters max	E	The External Marking must have a maximum of 14 characters	All
VESSEL-L00-00-0165	Vessel Transport Means / Name Text	Length <= 40 characters max	E	The Vessel Name must have a maximum of 40 characters	All
VESSEL-L00-00-0071	Vessel Transport Means / Speed	Numerical value	E	The Vessel Speed is not numerical	SUB SUB-VED
VESSEL-L00-00-0072	Vessel Transport Means / Trawling speed	Numerical value	E	The vessel Trawling Speed is not numerical	SUB SUB-VED
VESSEL-L00-00-0094	Vessel Transport Means / Speed	For vessel speed, the default unit must be KNT	E	The Unit code is wrong for Vessel speed	SUB SUB-VED
VESSEL-L00-00-0095	Vessel Transport Means / Trawling speed	For trawling speed, the default unit must be KNT	E	The Unit code is wrong for Trawling speed	SUB SUB-VED
VESSEL-L00-00-0145	Vessel Country / Identification	SchemeID = FLEET_FLAG_STATE must be provided	E	The list referenced for the Flag state is not valid	All
VESSEL-L00-00-0051	Registration Location /	ListID = FLUX_VESSEL_REGST	E	The list referenced for the registration location	All

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Type Code	R_TYPE must be provided		type is not valid	
VESSEL-L00-00-0026	Registration Location / Type Code	Code must be on FLUX_VESSEL_REGSTR_TYPE list	E	The Registration Location Type code is not valid	All
VESSEL-L00-00-0052	Registration Location / Country Registration Location / Type Code = MOVE	SchemeID = TERRITORY must be provided	E	The list referenced for the Country of Import or Export is not valid	All
VESSEL-L00-00-0053	Registration Location / Identification Registration Location / Type Code = PORT Vessel Country / Identification	SchemeID = VESSEL_PORT must be provided Rule applies to EU vessels	E	The list referenced for the vessel Registration Place is not valid	All
VESSEL-L00-00-0166	Registration Location / Name Text Registration Location / Type Code = PLACE Vessel Country / Identification	Length <= 80 characters max Rule applies to non-EU vessels	E	The Place of Registration must have a maximum of 80 characters	SUB
VESSEL-L00-00-0074	Construction Event / Occurrence Datetime	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally).	E	The Construction date is not in a valid format	All
VESSEL-L00-00-0054	Construction Location / Type Code	ListID = FLUX_VESSEL_CONSTR_TYPE must be provided	E	The list referenced for the Construction Type is not valid	SUB SUB-VED
VESSEL-L00-00-0034	Construction Location / Type Code	Code must be on FLUX_VESSEL_CONSTR_TYPE list	E	The Construction Type code is not valid	SUB SUB-VED
VESSEL-L00-00-0055	Construction Location / Country Identifier	SchemeID = TERRITORY must be provided	E	The list referenced for the country of construction is not valid	SUB SUB-VED
VESSEL-L00-00-0056	Vessel Engine / Role Code	ListID = FLUX_VESSEL_ENGINE_ROLE must be provided	E	The list referenced for Engine Role is not valid	All
VESSEL-L00-00-0033	Vessel Engine / Role Code	Code must be on FLUX_VESSEL_ENGINE_ROLE list	E	The Engine Role code is not valid	All
VESSEL-L00-00-0041	Vessel Engine / Power Measure	The unit must be ‘KWT’	E	The Unit code is wrong for Engine power	All
VESSEL-L00-00-0075	Vessel Engine / Power Measure	Engine Power must be a numerical value	E	The Engine power is not a numerical value	All
VESSEL-L00-00-0098	Vessel Engine / Propulsion Type Code	ListID = PROPELLER_TYPE must be provided	E	The list referenced for Propulsion Type is not valid	SUB SUB-VED
VESSEL-L00-00-0167	Vessel Engine /	Length <= 50 characters	E	The Engine Mark must	SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Manufacturer Text	max		have a maximum of 50 characters	SUB-VED
VESSEL-L00-00-0168	Vessel Engine / Model Text	Length <= 50 characters max	E	The Engine Model must have a maximum of 50 characters	SUB SUB-VED
VESSEL-L00-00-0057	Vessel Dimension / Type Code	ListID = FLUX_VESSEL_DIM_TYPE must be provided	E	The list referenced for the Vessel Dimension Type is not valid	All
VESSEL-L00-00-0032	Vessel Dimension / Type Code	Code must be on FLUX_VESSEL_DIM_TYPE list	E	The Dimension Type code is not valid	All
VESSEL-L00-00-0039	Vessel Dimension / Type Code Vessel Dimension / Value Measure	Depending on the Type provided, the correct unit must be used	E	The Unit code is wrong for the reported vessel dimension	All
VESSEL-L00-00-0076	Vessel Dimension / Value Measure	Vessel dimension value must be numeric	E	The Vessel dimension value is not numeric	All
VESSEL-L00-00-0058	Fishing Gear / Type Code	ListID = GEAR_TYPE must be provided	E	The list referenced for the Gear Type is not valid	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0059	Fishing Gear / Role Code	ListID = FLUX_VESSEL_GEAR_ROLE must be provided	E	The list referenced for the Gear Role is not valid	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0031	Fishing Gear / Role Code	Code must be on FLUX_VESSEL_GEAR_ROLE list	E	The Gear Role code is not valid	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0038	Fishing Gear / Role Code Fishing Gear / Type Code	In one event, no repetitive gear codes are allowed across all reported Main and Subsidiary gear codes	W	Same Fishing Gear code cannot be used more than once across all reported Main and Subsidiary gears	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0060	Vessel Equipment Characteristic / Type Code	ListID = FLUX_VESSEL_EQUIP_TYPE must be provided	E	The list referenced for the Vessel Equipment Characteristic Type is not valid	All
VESSEL-L00-00-0028	Vessel Equipment Characteristic / Type Code	Code must be on FLUX_VESSEL_EQUIP_TYPE list	E	The Equipment Characteristic Type code is not valid	All
VESSEL-L00-00-0113	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = IRCS_IND,	ListID = BOOLEAN_TYPE must be provided	E	The list referenced for the indicators in the vessel equipment characteristic is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	VMS_IND, ERS_IND, ERS_EXEMPT_IND, AIS_IND				
VESSEL-L00-00-0114	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = NAVIG_EQ	ListID = NAVIG_EQUIP_TYPE must be provided	E	The list referenced for the Navigation Equipment is not valid	SUB SUB-VED
VESSEL-L00-00-0115	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = COMM_EQ	ListID = COMM_EQUIP_TYPE must be provided	E	The list referenced for the Communication Equipment is not valid	SUB SUB-VED
VESSEL-L00-00-0116	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = FISHFINDER_EQ	ListID = FISHFINDER_EQUIP_TYPE must be provided	E	The list referenced for the Fish Finder Equipment is not valid	SUB SUB-VED
VESSEL-L00-00-0117	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = DECK_MACHINERY	ListID = DECK_MACHINERY_TYPE must be provided	E	The list referenced for the Deck Machinery is not valid	SUB SUB-VED
VESSEL-L00-00-0118	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = VMS_SAT_OPER_C	ListID = VMS_SATELLITE_OPERATOR must be provided	E	The list referenced for the VMS Satellite Operator Code is not valid	SUB SUB-VED
VESSEL-L00-00-0119	Vessel Equipment / Value Measure Vessel Equipment Characteristic / Type Code = SKIFF_LGTH, SKIFF_PWR, BOAT_LGTH, BOAT_PWR, FUEL_CAP, LIGHTS_NBR	The value must be numerical for Skiff Length, Skiff Power, Boat Length, Speed Boat power, Fuel Tank Capacity, Number of Fishing Lights.	E	The vessel equipment measurement value is not numerical	SUB SUB-VED
VESSEL-L00-00-0120	Vessel Equipment / Value Measure Vessel Equipment Characteristic / Type Code = SKIFF_LGTH	The unit must be MTR	E	The Unit code is wrong for Skiff Length	SUB SUB-VED
VESSEL-L00-00-0122	Vessel Equipment / Value Measure Vessel Equipment Characteristic / Type	The unit must be KWT	E	The Unit code is wrong for Skiff Power	SUB SUB-VED

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Code = SKIFF_PWR				
VESSEL-L00-00-0124	Vessel Equipment / Value Measure Vessel Equipment Characteristic / Type Code = BOAT_LGTH	The unit must be MTR	E	The Unit code is wrong for Speed Boat Length	SUB SUB-VED
VESSEL-L00-00-0126	Vessel Equipment / Value Measure Vessel Equipment Characteristic / Type Code = BOAT_PWR	The unit must be KWT	E	The Unit code is wrong for Speed Boat power	SUB SUB-VED
VESSEL-L00-00-0127	Vessel Equipment / Value Measure Vessel Equipment Characteristic / Type Code = FUEL_CAP	The unit must be LTR	E	The Unit code is wrong for Fuel Tank Capacity	SUB SUB-VED
VESSEL-L00-00-0129	Vessel Equipment / Value Measure Vessel Equipment Characteristic / Type Code = LIGHTS_NBR	The unit must be C62	E	The Unit code is wrong for Number of Fishing Lights	SUB SUB-VED
VESSEL-L00-00-0061	Vessel Administrative Characteristic / Type Code	ListID = FLUX_VESSEL_ADMIN_TYPE must be provided	E	The list referenced for Administrative Characteristic Type is not valid	All
VESSEL-L00-00-0029	Vessel Administrative Characteristic / Type Code	Code must be on FLUX_VESSEL_ADMIN_TYPE list	E	The Administrative Characteristic Type code is not valid	All
VESSEL-L00-00-0130	Vessel Administrative Characteristic / Value Code Vessel Administrative Characteristic / Type Code = LICENCE	ListID = BOOLEAN_TYPE must be provided	E	The list referenced for License Indicator is not valid	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0169	Vessel Administrative Characteristic / Value Code Vessel Administrative Characteristic / Type Code = LICENCE Vessel Equipment Characteristic / Type Code = IRCS_IND, VMS_IND	Licence, IRCS and VMS indicators code must have length of 1 character	E	The Licence, IRCS and VMS indicators code must have only one character	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0172	Fishing Gear / Type Code Fishing Gear / Role Code = MAIN, AUX	Main and Subsidiary fishing gear codes must have length of 2 or 3 characters	E	The Main and Subsidiary Fishing Gear code must have 2 or 3 characters	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0174	Vessel Administrative Characteristic / Value Code	Length = 3 characters	E	The Segment must have 3 characters	SUB-VCD SUB-VCD-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Vessel Administrative Characteristic / Type Code = SEG				SNAP-F SUB
VESSEL-L00-00-0175	Contact Party / Name Text	Length <= 100 characters	E	The Contact Name value must have a maximum of 100 characters	All
VESSEL-L00-00-0176	Contact Party / Contact Person / Family Name	Length <= 100 characters	E	The Contact Person Family Name value must have a maximum of 100 characters	All
VESSEL-L00-00-0177	Contact Party / Contact Person / Given Name	Length <= 100 characters	E	The Contact Person Given Name value must have a maximum of 100 characters	All
VESSEL-L00-00-0178	Contact Party / Structured Address / Street Name Text	Length <= 256 characters	E	The Contact Street must have a maximum of 256 characters	All
VESSEL-L00-00-0179	Contact Party / Structured Address / Port Office Box Text	Length <= 25 characters	E	The Contact Post Office Box must have a maximum of 25 characters	All
VESSEL-L00-00-0180	Contact Party / Structured Address / City Name Text	Length <= 100 characters	E	The Contact City must have a maximum of 100 characters	All
VESSEL-L00-00-0181	Contact Party / Structured Address / Postal Area Text	Length <= 25 characters	E	The Contact Postal Code must have a maximum of 25 characters	All
VESSEL-L00-00-0182	Contact Party / Universal Communication / Complete Number Text Contact Party / Universal Communication / Channel Code = TE, FX	Contact phone and fax numbers must have maximum 30 characters	E	The Contact Phone and Fax number must have a maximum of 30 characters	All
VESSEL-L00-00-0184	Contact Party / Email Communication / URI Identifier	Length <= 50 characters	E	The Contact Email address must have a maximum of 50 characters	All
VESSEL-L00-00-0185	Contact Party / Identifier (attribute schemeID = IMO)	Length = 7 characters	E	The Contact IMO Company Number must have 7 characters	All
VESSEL-L00-00-0186	Contact Party / Identifier (attribute schemeID = OTH)	Length <= 30 characters	E	The Contact National Company Registration Number must have 30 characters	All
VESSEL-L00-00-0187	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = ERS_IND, ERS_EXEMPT_IND, AIS_IND	ERS, ERS exemption and AIS indicators must have length of 1 character	E	The AIS, ERS and ERS Exemption indicator value must have only one character	SUB-VCD SUB-VCD-F SNAP-F SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L00-00-0190	Vessel Transport Means / Identifier (attribute schemeID = MMSI)	Length = 9 digits	E	The MMSI value must have 9 characters	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0131	Vessel Administrative Characteristic / Value Code Vessel Administrative Characteristic / Type Code = SEG	ListID = VESSEL_SEGMENT must be provided	E	The list referenced for Segment is not valid	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0132	Vessel Administrative Characteristic / Value Code Vessel Administrative Characteristic / Type Code = EXPORT	ListID = VESSEL_EXPORT_TYPE must be provided	E	The list referenced for Export type is not valid	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0133	Vessel Administrative Characteristic / Value Code Vessel Administrative Characteristic / Type Code = AID	ListID = VESSEL_PUBLIC_AID_TYPE must be provided	E	The list referenced for Public Aid is not valid	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0082	Vessel Administrative Characteristic / Value Datetime Vessel Administrative Characteristic / Type Code = EIS	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally)	E	The Entry into Service date is not in a correct format	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0083	Vessel Administrative Characteristic / Value Datetime Vessel Administrative Characteristic / Type Code = PURCHASE_YEAR	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally)	E	The Year of Purchase is not in a correct format	SUB-VED SUB
VESSEL-L00-00-0062	Vessel Technical Characteristic / Type Code	ListID = FLUX_VESSEL_TECH_TYPE must be provided	E	The list referenced for the Technical Characteristic Type is not valid	All
VESSEL-L00-00-0030	Vessel Technical Characteristic / Type Code	Code must be on FLUX_VESSEL_TECH_TYPE list	E	The Technical Characteristic Type code is not valid	All
VESSEL-L00-00-0134	Vessel Technical Characteristic / Value Code Vessel Technical Characteristic / Type Code = HULL	ListID = VESSEL_HULL_TYPE must be provided	E	The list referenced for Hull Material is not valid	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L00-00-0135	Vessel Storage Characteristic / Type Code	ListID = STORAGE_TYPE must be provided	E	The list referenced for Storage Type is not valid	SUB SUB-VED

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L00-00-0155	Vessel Storage Characteristic / Capacity Value Measure	Unit code from FLUX_UNIT list	E	The Unit code for the Storage Capacity value is not valid	SUB SUB-VED
VESSEL-L00-00-0084	Vessel Storage Characteristic / Capacity Value Measure	Numerical value	E	The Storage Capacity value is not numerical	SUB SUB-VED
VESSEL-L00-00-0136	Vessel Storage Characteristic / Capacity Value Measure Vessel Storage Characteristic / Type Code = STR_GEN	The unit must be MTQ (Cubic meter)	E	The Unit code for General Storage capacity is incorrect	SUB SUB-VED
VESSEL-L00-00-0152	Vessel Storage Characteristic / Capacity Value Measure Vessel Storage Characteristic / Type Code = FISH_HOLD	The unit must be MTQ (Cubic meter) or TNE (Metric Ton)	E	The Unit code for Fish Hold capacity is incorrect	SUB SUB-VED
VESSEL-L00-00-0153	Vessel Storage Characteristic / Capacity Value Measure Vessel Storage Characteristic / Type Code = FREEZ	The unit must be MTQ (Cubic meter) or L71 (ton/day)	E	The Unit code for Freezing capacity is incorrect	SUB SUB-VED
VESSEL-L00-00-0085	Vessel Storage Characteristic / Temperature Value Measure	Numerical value	E	The Temperature value is not numerical	SUB SUB-VED
VESSEL-L00-00-0138	Vessel Storage Characteristic / Temperature Value Measure	The unit must be CEL	E	The Unit code for Temperature is incorrect	SUB SUB-VED
VESSEL-L00-00-0086	Vessel Storage Characteristic / Unit Value Quantity	Numerical value	E	The Number of unit value is not numerical	SUB SUB-VED
VESSEL-L00-00-0139	Vessel Storage Characteristic / Unit Value Quantity	The unit must be C62 (number)	E	The Unit code for Number of Units is incorrect	SUB SUB-VED
VESSEL-L00-00-0140	FLUX Picture / Type Code	ListID = VESSEL_PHOTO_TYPE must be provided	E	The list referenced for Vessel Photo Type is not valid	SUB SUB-VED
VESSEL-L00-00-0087	Vessel Crew / Member Quantity	Numerical value	E	The Crew Size number value is not numerical	SUB SUB-VED
VESSEL-L00-00-0141	Vessel Crew / Member Quantity	The unit code = ‘C62’ (number)	E	The Unit code for Crew Size is incorrect	SUB SUB-VED
VESSEL-L00-00-0088	Vessel Crew / Maximum Size Quantity	Numerical value	E	The Maximum Crew Size number value is not numerical	SUB SUB-VED
VESSEL-L00-00-0142	Vessel Crew / Maximum Size Quantity	The unit must be C62 (number)	E	The Unit code for Maximum Crew Size is	SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
				incorrect	SUB-VED
VESSEL-L00-00-0089	Vessel Crew / Minimum Size Quantity	Numerical value	E	The Minimum Crew Size number value is not numerical	SUB SUB-VED
VESSEL-L00-00-0143	Vessel Crew / Minimum Size Quantity	The unit must be C62 (number)	E	The Unit code for Minimum Crew Size is incorrect	SUB SUB-VED
VESSEL-L00-00-0063	Contact Party / Role Code	ListID = FLUX_CONTACT_ROLE must be provided	E	The list referenced for the Party Role is not valid	All
VESSEL-L00-00-0035	Contact Party / Role Code	Code must be on FLUX_CONTACT_ROLE list	E	The Party Role code is not valid	All
VESSEL-L00-00-0064	Contact Party / Nationality Country Identifier	SchemeID = TERRITORY must be provided	E	The list referenced for the Nationality of the Party is not valid	All
VESSEL-L00-00-0144	Contact Party / Identification	Company identification number must be numeric	E	The Company Number is not a numerical value	All
VESSEL-L00-00-0036	Universal Communication / Channel Code	Code must be on FLUX_TELECOM_USE list	E	The Communication Use code is not valid	All
VESSEL-L00-00-0067	Structured Address / Country Identifier	SchemeID = TERRITORY must be provided	E	The list referenced for Country in the address is not valid	All
VESSEL-L00-00-0191	Vessel Transport Means / Identification (attribute schemeID = FFA)	Length <= 12 characters max	E	The FFA Identifier value must have a maximum of 12 characters	SUB SUB-VED
VESSEL-L00-00-0192	Vessel Equipment / Characteristic / Value Text Vessel Equipment / Characteristic / Type Code = NAVIG_EQ_T, COMM_EQ_T, FISHFINDER_EQ_T, PROCESS_EQ, PROCESS_TYPE, REFRIG_EQ, SAFETY_EQ, VMS_FEATURE	Navigation Equipment, Communication Equipment, Fish Finder Equipment, Fish Processing Equipment, Fish Processing Line Type, Freezer Type, Safety Equipment, VMS features details must not be longer than 300 characters	E	The Vessel Equipment details must have a maximum of 300 characters	SUB SUB-VED
VESSEL-L00-00-0199	Vessel Equipment / Characteristic / Value Text Vessel Equipment / Characteristic / Type Code = HELICO_REG, AIRC_REG, VMS_MAN, VMS_MODEL, VMS_SAT_OPER_T, VMS_SERIAL_NBR, VMS_SOFT_VER	Aircraft Registration Number, VMS Manufacturer Name, VMS Model Name, VMS Satellite Operator (text), VMS Serial Number and VMS Software Version must not be longer than 50 characters	E	The Vessel equipment characteristics must have a maximum of 50 characters	SUB SUB-VED
VESSEL-L00-00-0207	Vessel Administrative Characteristic / Value	Length <= 300 characters	E	The National Authorisation Name	SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Text Type Code = AUTH_NAME	max		must have a maximum of 300 characters	SUB-VED
VESSEL-L00-00-0208	Vessel Technical Characteristic / Value Text Vessel Technical Characteristic / Type Code = PROCESS_CLASS	Length <= 300 characters max	E	The Processing Class must have a maximum of 300 characters	SUB SUB-VED
VESSEL-L00-00-0209	FLUX Picture / Digital Image Binary Object	Size <= 10MB	E	The Vessel photo size should not exceed 10MB	SUB SUB-VED
VESSEL-L00-00-0211	FLUX Picture / Digital Image Binary Object	Allowed formats for the binary object are .jpg, .png, .webp	E	The Vessel photo is not provided in the allowed digital format	SUB SUB-VED

8.3.3. Level 01 rules – data field validation

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L01-01-0001	Vessel Country / Identifier	Country of Registration is mandatory value	E	The Country of Registration is mandatory	All
VESSEL-L01-01-0002	Vessel Country / Identifier	Code must be on FLEET_FLAG_STATE list and marked as EU Member State	E	The Country of Registration code is not a valid code of the EU Member State	SUB-VCD SUB-VCD-F SUB-VED SNAP-F
VESSEL-L01-02-0002	Vessel Country / Identifier	Code must be on FLEET_FLAG_STATE list	E	The Country of Registration is not a valid code, or it is not on the list of allowed countries to submit data	SUB
VESSEL-L01-01-0003	Vessel Country / Identifier FLUX Party / Identifier	Country of Registration should be the same country sending the FLUX message	E	The Country of Registration is different from the country sending the message	All
VESSEL-L01-01-0004	Vessel Transport Means / Identifier (attribute = ‘CFR’)	CFR number length must be 12 characters	E	The CFR is not 12 characters long	SUB-VCD SUB-VCD-F SUB-VED SNAP-F
VESSEL-L01-01-0005	Vessel Transport Means / Identifier (attribute = ‘CFR’)	Mandatory value	E	The CFR number is mandatory	SUB-VCD SUB-VCD-F SUB-VED SNAP-F
VESSEL-L01-01-0006	Vessel Transport Means / Identifier (attribute =	The 3 first characters should be an ISO-3 code of	E	The first 3 characters of the CFR is not an ISO-3	SUB-VCD

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	'CFR')	a Member State (code from FLEET_FLAG_STATE list and marked as MS). For Romania both 'ROM' and 'ROU' codes are valid.		code of a MS	SUB-VCD-F SUB-VED SNAP-F
VESSEL-L01-01-0007	Vessel Transport Means / Identifier (attribute = 'CFR')	Should contain only A-Z and 0-9 characters	E	Only A-Z and 0-9 characters are allowed in the CFR	SUB-VCD SUB-VCD-F SUB-VED SNAP-F
VESSEL-L01-01-0008	Vessel Event / Type Code	Mandatory value	E	The Vessel Event code is mandatory	All
VESSEL-L01-01-0009	Vessel Event / Type Code	Code must be on VESSEL_EVENT list	E	The Event Code is not valid	All
VESSEL-L01-02-0044	Vessel Event / Occurrence Datetime	Not in the future	E	The Event Start Datetime cannot be in the future	All
VESSEL-L01-01-0011	Vessel Event / Occurrence Datetime	Mandatory value	E	The Event Start Date is mandatory	All
VESSEL-L01-01-0013	Vessel Administrative Characteristic / Value Code Vessel Administrative Characteristic / Type Code = LICENCE	Code must be on BOOLEAN_TYPE list	E	The License Indicator code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0015	Vessel Transport Means / Identification SchemeID = REG_NBR	Should be provided. Rule applies for events valid from 01/01/2003	W	The National Registration Number should be provided	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0017	Vessel Transport Means / Identification SchemeID = EXT_MARK	Should be provided. Rule applies for events valid from 01/01/2003	W	The External Marking should be provided	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0019	Vessel Transport Means / Name Text	Should be provided. Rule applies for events valid from 01/01/2003	W	The Vessel Name should be provided	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0021	Registration Location / Identifier	Must be provided. Rule applies for events valid from 01/01/2003	E	The Place of Registration should be provided	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L01-01-0079	Registration Location / Identifier Registration Location / Type Code = PORT Vessel Country /	Code must be on VESSEL_PORT list and linked with the flag state.	E	The Place of Registration is not a valid code	SUB-VCD SUB-VCD-F SNAP-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Identifier Event End Date				SUB
VESSEL-L01-01-0111	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = IRCS_IND	Mandatory value	E	The IRCS indicator is mandatory	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L01-01-0023	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = IRCS_IND	Code must be on BOOLEAN_TYPE list	E	The IRCS Indicator code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0112	Vessel Transport Means / Identifier (attribute = IRCS)	Check format as defined for IRCS in the FLUX_VESSEL_ID_TYPE list Rule applies for events valid from 01/01/2003	E	The IRCS value provided is not in a correct format	All
VESSEL-L01-01-0026	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = VMS_IND	Code must be on BOOLEAN_TYPE list	E	The VMS Indicator code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0028	Fishing Gear / Type Code Fishing Gear / Role Code = MAIN	Mandatory value Error applies for events valid from 01/01/2017, warning applies for earlier events.	E / W	The Main Fishing Gear is mandatory	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L01-01-0029	Fishing Gear / Type Code Fishing Gear / Role Code = MAIN	Code must be on GEAR_TYPE list	E	The Main Fishing Gear code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0032	Fishing Gear / Type Code Fishing Gear / Role Code = AUX	Mandatory value (at least one) Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	The Subsidiary Fishing Gear is mandatory	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L01-01-0033	Fishing Gear / Type Code Fishing Gear / Role Code = AUX	Code must be on GEAR_TYPE list	E	The Subsidiary Fishing Gear code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0035	Vessel Dimension / Value Measure Vessel Dimension / Type Code = LOA	Format: XXXX.YY with 2 optional decimals	E	The Length Overall value should have a maximum of 4 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VCD SUB-VCD-F SUB SNAP-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L01-01-0036	Vessel Dimension / Value Measure Vessel Dimension / Type Code = LOA	Value must be within the limits (parameters LEN_LOW and LEN_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 1 & <= upper limit = 200	W	The Length Overall value is out of the defined range	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0038	Vessel Dimension / Value Measure Vessel Dimension / Type Code = LBP	Format: XXX.YY with 2 optional decimals	E	The Length Between Perpendiculars should have a maximum of 3 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0039	Vessel Dimension / Value Measure Vessel Dimension / Type Code = LBP	Value must be within the limits (parameters LEN_LOW and LEN_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 1 & <= upper limit = 200	W	The Length Between Perpendiculars value is out of the defined range	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0041	Vessel Dimension / Value Measure Vessel Dimension / Type Code = GT, TOTH, GTS	Format: XXXXX.YY with 2 optional decimals	E	The GT tonnage, Other tonnage and Safety tonnage should have a maximum of 5 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0042	Vessel Dimension / Value Measure Vessel Dimension / Type Code = GT	Value must be within the limits (parameters TON_LOW and TON_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 0 & <= upper limit = 2000	W	The GT Tonnage value is out of the defined range	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0045	Vessel Dimension / Value Measure Vessel Dimension / Type Code = TOTH	Value must be within the limits (parameters TON_LOW and TON_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 0 & <= upper limit = 2000	W	The Other Tonnage value is out of the defined range	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0048	Vessel Dimension / Value Measure Vessel Dimension / Type Code = GTS	Value must be within the limits (parameters TON_LOW and TON_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 0 & <= upper limit = 2000	W	The GTS Tonnage value is out of the defined range	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0114	Vessel Dimension / Value Measure Vessel Dimension / Type	Net tonnage and Net registered tonnage Format must be XXXXX.YY with 2 optional decimals	E	The Net Tonnage and Net Registered Tonnage should have a maximum of 5 digits, optionally 2	SUB-VED SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Code = NT, NRT			decimals can be provided with a dot as decimal separator	
VESSEL-L01-01-0115	Vessel Dimension / Value Measure Vessel Dimension / Type Code = NT	Value must be within the limits (parameters TON_LOW and TON_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 0 & <= upper limit = 2000	E	The Net Tonnage value is out of the defined range	SUB-VED SUB
VESSEL-L01-01-0117	Vessel Dimension / Value Measure Vessel Dimension / Type Code = NRT	Value must be within the limits (parameters TON_LOW and TON_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 0 & <= upper limit = 2000	E	The Net Registered Tonnage value is out of the defined range	SUB-VED SUB
VESSEL-L01-01-0050	Vessel Engine / Power Measure Vessel Engine / Role Code = MAIN	Format: XXXXX.YY with 2 optional decimals	E	The Main Engine Power should have a maximum of 5 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0051	Vessel Engine / Power Measure Vessel Engine / Role Code = MAIN	Should be provided. Error applies for events valid from 01/01/2003, warning applies for earlier events..	E / W	The Main Power should be provided	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L01-01-0052	Vessel Engine / Power Measure Vessel Engine / Role Code = MAIN	Value must be within the limits (parameters PWR_LOW and PWR_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 0 & <= upper limit = 20000	W	The Main Engine Power value is out of the defined range	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0054	Vessel Engine / Power Measure Vessel Engine / Role Code = AUX	Format: XXXXX.YY with 2 optional decimals	E	The Auxiliary Engine Power should have a maximum of 5 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0055	Vessel Engine / Power Measure Vessel Engine / Role Code = AUX	Should be provided. Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	The Auxiliary Engine Power should be provided	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L01-01-0056	Vessel Engine / Power Measure Vessel Engine / Role Code = AUX	Value must be within the limits (parameters PWR_LOW and PWR_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 0 &	W	The Auxiliary Engine Power value is out of the defined range	SUB-VCD SUB-VCD-F SUB SNAP-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
		<= upper limit = 20000			
VESSEL-L01-01-0057	Vessel Technical Characteristic / Value Code Vessel Technical Characteristic / Type Code = HULL	Code must be on VESSEL_HULL_TYPE list	E	The Hull Material code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0059	Vessel Administrative Characteristic / Value Datetime Vessel Administrative Characteristic / Type Code = EIS	Value (datetime) must be higher than the limit set in parameter YEAR_LOW defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 1850	W	The Entry into Service Year might be too early in the past	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0061	Vessel Administrative Characteristic / Value Code Vessel Administrative Characteristic / Type Code = SEG	Should be provided. Warning applies for events earlier than 31/12/2002, Error applies for events valid from 01/01/2003.	E / W	The Fleet Segment should be provided	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L01-01-0062	Registration Location / Country Identifier Registration Location / Type Code = MOVE	Code must be on TERRITORY list	E	The Country of Export / Import code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0063	Vessel Administrative Characteristic / Value Code Vessel Administrative Characteristic / Type Code = EXPORT	Code must be on VESSEL_EXPORT_TYPE list	E	The Export Type code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0064	Vessel Administrative Characteristic / Value Code Vessel Administrative Characteristic / Type Code = AID	Code must be on VESSEL_PUBLIC_AID_TYPE list	E	The Public Aid Code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-00-0644	Construction Location / Country Identifier	Code must be on TERRITORY list	E	The Construction Country code is not valid	SUB SUB-VED
VESSEL-L01-01-0066	Construction Event / Occurrence Datetime	Value (datetime) must be higher than the limit set in parameter YEAR_LOW defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 1850	W	The Date of Construction might be too early in the past	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0074	Contact Party / Structured Address / Country Identifier	Code must be on TERRITORY list	E	The Contact Country code is not valid	All
VESSEL-L01-01-0078	Contact Party / Nationality Identifier	Code must be on TERRITORY list	E	The Contact Nationality code is not valid	All

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L01-01-0104	Vessel Equipment Characteristic / Value Code Vessel Equipment Characteristic / Type Code = ERS_IND, ERS_EXEMPT_IND, AIS_IND	Code for ERS, ERS exemption and AIS indicator must be on BOOLEAN_TYPE list	E	The ERS, ERS Exemption and AIS Indicator code is not valid	SUB-VCD SUB-VCD-F SUB SNAP-F
VESSEL-L01-01-0113	Vessel Transport Means / Identifier (attribute schemeID = UVI)	Check format. Digits 1-6 are successively (individually) multiplied by 7,6,5,4,3,2. The products of these six calculations are then totalled, and the RIGHTMOST digit of this total is the check digit[18]	E	The format of the UVI number is wrong	All
VESSEL-L01-02-0007	Vessel Transport Means / Identifier (attribute schemeID = UVI) Vessel Transport Means / Identifier (attribute schemeID = IRCS) Vessel Transport Means / Identifier (attribute schemeID =REG_NBR)	One of identifiers UVI, IRCS, National Registration number is mandatory for non-fishing or non-EU vessels	E	At least one of the vessel identifiers (UVI or IRCS or National Registration Number) is mandatory	SUB
VESSEL-L01-02-0008	Vessel Transport Means / Identifier (attribute schemeID = IRCS) Vessel Country / Identifier	IRCS is mandatory for non-EU vessels	E	The IRCS is mandatory for non-EU vessels	SUB
VESSEL-L01-00-0691	Vessel Dimension / Value Measure Vessel Dimension / Type Code = LRE	Format: XXX.YY with 2 optional decimals	E	The Registered Length value should have a maximum of 3 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VED SUB
VESSEL-L01-00-0692	Vessel Dimension / Value Measure	Value must be within the limits (parameters	W	The Registered Length value is out of the	SUB-VED

[18] Example

IMO	IMO No digits	Multiply by	Product	Check digit =	Complete IMO No. =
222222	2	7	14	4	2222224
	2	6	12		
	2	5	10		
	2	4	8		
	2	3	6		
	2	2	4		
		SUM	54		
		Check digit =Rightmost	4		

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Vessel Dimension / Type Code = LRE	LEN_LOW and LEN_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 1 & <= upper limit = 200		defined range	SUB
VESSEL-L01-00-0703	Vessel Dimension / Value Measure Vessel Dimension / Type Code = CART	Format: XXXXX.YY with 2 optional decimals	E	The Other Length value should have a maximum of 5 digits, optionally 2 decimals can be provided with a dot as decimal separator	All
VESSEL-L01-00-0704	Vessel Dimension / Value Measure Vessel Dimension / Type Code = CART	Value must be within the limits (parameters TON_LOW and TON_UP) defined in VESSEL_BR_PARAMETER list i.e., >= lower limit = 0 & <= upper limit = 20000	E	The Carrying capacity value is out of range [X, Y]	All
VESSEL-L01-00-0502	Vessel Transport Means / Speed	No negative value	E	The Vessel Speed value must be a positive number	SUB-VED SUB
VESSEL-L01-00-0636	Vessel Transport Means / Speed	Format: XXXXX.YY with 2 optional decimals	E	The Vessel Speed value should have a maximum of 5 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VED SUB
VESSEL-L01-00-0505	Vessel Transport Means / Trawling speed	No negative value	E	The Vessel Trawling Speed value must be a positive number	SUB-VED SUB
VESSEL-L01-00-0637	Vessel Transport Means / Trawling speed	Format: XXXXX.YY with 2 optional decimals	E	The Vessel Trawling Speed value should have a maximum of 5 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VED SUB
VESSEL-L01-00-0639	Vessel Historical Characteristic / Value Code Vessel Historical Characteristic / Type Code = FLAG	Code must be on TERRITORY list	E	The Previous Flag State code is not valid	SUB-VED SUB
VESSEL-L01-00-0707	Vessel Historical Characteristic / Value Code Vessel Historical Characteristic / Type Code = IRCS	Check format as defined for IRCS in the FLUX_VESSEL_ID_TYPE list	E	The IRCS value provided is not in a correct format	SUB-VED SUB
VESSEL-L01-00-0522	Vessel Engine / Propulsion_ Type Code	Code must be on PROPELLER_TYPE list	E	The Propeller Type code is not valid	SUB-VED SUB
VESSEL-L01-00-0524	Vessel Dimension / Value Measure	No negative value must be reported for Depth, Moulded Depth, Draught,	E	The Depth, Moulded Depth, Draught, Breadth and Deadweight must be	SUB-VED SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Vessel Dimension / Type Code = DEPTH, MDEPTH, DRAUGTH, BREADTH, DEADW	Breadth and Deadweight		a positive number	
VESSEL-L01-00-0645	Vessel Dimension / Value Measure Vessel Dimension / Type Code = DEPTH, MDEPTH, DRAUGTH, BREADTH, DEADW	Format: XXX.YY with 2 optional decimals	E	The Depth, Moulded Depth, Draught, Breadth and Deadweight value should have a maximum of 3 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VED SUB
VESSEL-L01-00-0547	Vessel Equipment / Characteristic / Value Code Vessel Equipment / Characteristic / Type Code = NAVIG_EQ	Code must be on NAVIG_EQUIP_TYPE list	E	The Navigation Equipment Code is not valid	SUB-VED SUB
VESSEL-L01-00-0548	Vessel Equipment / Characteristic / Value Code Vessel Equipment / Characteristic / Type Code = COMM_EQ	Code must be on COMM_EQUIP_TYPE list	E	The Communication Equipment code is not valid	SUB-VED SUB
VESSEL-L01-00-0663	Vessel Equipment / Characteristic / Value Code Vessel Equipment / Characteristic / Type Code = FISHFINDER_EQ	Code must be on FISHIFINDER_EQUIP_TYPE list	E	The Fish finder equipment code is not valid	SUB-VED SUB
VESSEL-L01-00-0549	Vessel Equipment / Characteristic / Value Code Vessel Equipment / Characteristic / Type Code = DECK_MACHINERY	Code must be on DECK_MACHINERY_TYPE list	E	The Deck Machinery code is not valid	SUB-VED SUB
VESSEL-L01-00-0664	Vessel Equipment / Characteristic / Value Code Vessel Equipment / Characteristic / Type Code = VMS_SAT_OPER_C	Code must be on VMS_SATELLITE_OPERATOR list	E	The VMS Satellite Operator code is not valid	SUB-VED SUB
VESSEL-L01-00-0569	Vessel Equipment / Characteristic / Value Measure Vessel Equipment / Characteristic / Type Code = SKIFF_LGTH, SKIFF_PWR, BOAT_LGTH, BOAT_PWR, FUEL_CAP, LIGTHS_NBR	No negative value must be provided for Support Vessel Skiff Length, Support Vessel Skiff Engine Power, Speed Boat Length, Speed Boat Engine Power, Fuel Tank Capacity and Number of Fishing Lights	E	The Support Vessel Skiff Length, Support Vessel Skiff Engine Power, Speed Boat Length, Speed Boat Engine Power, Fuel Tank Capacity and Number of Fishing Lights must be a positive number	SUB-VED SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L01-00-0668	Vessel Equipment / Characteristic / Value Measure Vessel Equipment / Characteristic / Type Code = SKIFF_LGTH, SKIFF_PWR, BOAT_LGTH, BOAT_PWR	Format: XXXXX.YY with 2 optional decimals	E	The Support Vessel Skiff Length, Support Vessel Skiff Engine Power, Speed Boat Length, Speed Boat Engine Power value should have a maximum of 5 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VED SUB
VESSEL-L01-00-0673	Vessel Equipment / Characteristic / Value Measure Vessel Equipment / Characteristic / Type Code = FUEL_CAP	Format: XXXXXX.YY with 2 optional decimals	E	The Fuel Tank Capacity value should have a maximum of 6 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VED SUB
VESSEL-L01-00-0675	Vessel Equipment / Characteristic / Value Measure Vessel Equipment / Characteristic / Type Code = LIGTHS_NBR	Format: XXXXX without decimals	E	The Number of Fishing Lights value should have a maximum of 5 digits, no decimals	SUB-VED SUB
VESSEL-L01-00-0578	Vessel Administrative Characteristic / Value Datetime Vessel Administrative Characteristic / Type Code = PURCHASE_YEAR	Not in future.	E	The Vessel Purchase Year cannot be in the future.	SUB-VED SUB
VESSEL-L01-00-0512	Vessel Storage Characteristic / Type Code	Code must be on STORAGE_TYPE list	E	The Storage Method code is not valid	SUB-VED SUB
VESSEL-L01-00-0510	Vessel Storage Characteristic / Capacity Value Measure Vessel Storage Characteristic / Type Code = STR_GEN Vessel Storage Characteristic / Type Code = FISH_HOLD Vessel Storage Characteristic / Type Code = FREEZ	No negative value is allowed for General storage, Fish hold and Freezing capacity	E	The General Storage, Fish Hold and Freezing Capacity value must be a positive number	SUB-VED SUB
VESSEL-L01-00-0676	Vessel Storage Characteristic / Capacity Value Measure Vessel Storage Characteristic / Type Code = STR_GEN Vessel Storage Characteristic / Type Code = FISH_HOLD Vessel Storage Characteristic / Type Code = FREEZ	General storage, Fish hold and Freezing capacity format must be max 5 digits with 2 optional decimals (XXXXX.YY)	E	The General Storage, Fish Hold and Freezing Capacity value should have a maximum of 5 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VED SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L01-00-0679	Vessel Storage Characteristic / Temperature Value Measure Vessel Storage Characteristic / Type Code = STR_GEN Vessel Storage Characteristic / Type Code = FREEZ	General Storage and Freezing temperature must follow the format of maximum 3 digits and 2 optional decimals (XXX.YY)	E	The General Storage and Freezing Temperature value should have a maximum of 3 digits, optionally 2 decimals can be provided with a dot as decimal separator	SUB-VED SUB
VESSEL-L01-00-0518	Vessel Storage Characteristic / Unit Value Quantity Vessel Storage Characteristic / Type Code = STR_GEN	No negative value	E	The Number of Storage Units value must be a positive number	SUB-VED SUB
VESSEL-L01-00-0680	Vessel Storage Characteristic / Unit Value Quantity Vessel Storage Characteristic / Type Code = STR_GEN, FISH_HOLD	Number of General storage units and Fish hold units must follow the format of maximum 5 digits (XXXXX) without decimals	E	The General Storage units and Fish Hold units value should have a maximum of 5 digits without decimals	SUB-VED SUB
VESSEL-L01-00-0681	FLUX Picture / Type Code	Code must be on VESSEL_PHOTO_TYPE list	E	The Vessel Photo Type code is not valid	SUB-VED SUB
VESSEL-L01-00-0536	Vessel Crew / Member Quantity	No negative value	E	The Crew Size value must be a positive number	SUB-VED SUB
VESSEL-L01-00-0682	Vessel Crew / Member Quantity	Format: XXX without decimals	E	The Crew Size value should have a maximum of 3 digits without decimals	SUB-VED SUB
VESSEL-L01-00-0538	Vessel Crew / Maximum Size Quantity	No negative value	E	The Maximum Crew Size value must be a positive number	SUB-VED SUB
VESSEL-L01-00-0683	Vessel Crew / Maximum Size Quantity	Format: XXX without decimals	E	The Maximum Crew Size value should have a maximum of 3 digits without decimals	SUB-VED SUB
VESSEL-L01-00-0540	Vessel Crew / Minimum Size Quantity	No negative value	E	The Minimum Crew Size value must be a positive number	SUB-VED SUB
VESSEL-L01-00-0684	Vessel Crew / Minimum Size Quantity	Format: XXX without decimals	E	The Minimum Crew Size value should have a maximum of 3 digits without decimals	SUB-VED SUB

8.3.4. Level 02 rules -row validation

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L02-01-0002	Vessel Event / Occurrence Datetime Vessel Country / ID Identifier Vessel Event / Type Code = CEN Vessel Administrative Characteristic / Value Code (segment)	If a census is declared, the event start date should be set to the official census date[19] of the MS except for France and for the segment of Mayotte	E	The date of the census event is not the official date	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0066	Vessel Event / Occurrence Datetime Vessel Country / ID Identifier = FRA Vessel Event / Type Code = CEN Vessel Administrative Characteristic / Value Code (segment) - from Mayotte	If a census is declared for a vessel in a segment of Mayotte, the event start date should be equal or after the census date of Mayotte	E	The date of the census for the vessel from Mayotte is not correct	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0073	Vessel Event / Occurrence Datetime Vessel Country / ID Identifier = GBR	For GBR vessels, the event start date should be equal or after 01/01/2021	E	Events earlier than 01/01/2021 are not allowed	All
VESSEL-L02-01-0003	Vessel Event / Occurrence Datetime Vessel Country / ID Identifier Vessel Administrative Characteristic / Value Code (segment)	The event start date should be equal to or greater than the census date of the declaring MS for that segment	E	The Event Start Date should be equal to or greater than the census date of the declaring MS and segment	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0006	Vessel Administrative Characteristic / Value Code (license indicator) Vessel Event / Occurrence Datetime	Licence indicator is mandatory for an event period including 01/01/2003 or beyond Rule applies for events valid from 01/01/2003	E	The License Indicator is mandatory from 01/01/2003	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0067	Vessel Administrative Characteristic / Value Code (license indicator) Vessel Event / Type Code	The license indicator must be 'N' for an exit from the fleet. Rule applies for events valid from 01/01/2003	E	The fishing license must be withdrawn for an exit from the fleet. (License indicator = 'N')	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0007	Vessel Equipment Characteristic / Value Code (IRCS indicator) Vessel Transport Means	If indicator is 'N', no value in IRCS	E	A radio call sign is given in contradiction with the IRCS Indicator	SUB-VCD SUB-VCD-F SNAP-F

[19] Date of census fixed for each country is listed in the Annex II of the Commission implementing regulation (EU) 2017/218 on the Union fishing fleet register.

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	/ ID Identifier (IRCS)				
VESSEL-L02-01-0008	Vessel Equipment Characteristic / Value Code (IRCS indicator) Vessel Transport Means / ID Identifier (IRCS)	If indicator is 'Y', value in IRCS	E	The radio call sign is missing	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0010	Vessel Transport Means / ID Identifier (IRCS) Vessel Dimension / Value Measure (LOA)	Mandatory for vessels >= 24m LOA Rule applies for events valid from 01/01/2003	E	The radio call sign is mandatory for vessels equal to or above 24m LOA	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0011	Vessel Equipment Characteristic / Value Code (VMS indicator) Vessel Event / Occurrence Datetime	VMS indicator is mandatory. Rule applies for events valid from 01/01/2003	E	The VMS Indicator is mandatory from date 01/01/2003	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0012	Main Gear Code & Event Date Vessel Event / Occurrence Datetime	Code 'NK (Gear not known) cannot be reported. Rule applies for events valid from 01/01/2003	E	The Main Gear code ''NK' (Gear not known) cannot be used from 01/01/2003	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0013	Vessel Dimension / Value Measure (LOA) Vessel Event / Occurrence Datetime	LOA is mandatory. Rule applies for events valid from 01/01/2003	E	The LOA is mandatory from 01/01/2003	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0014	Vessel Dimension / Value Measure (LOA) Vessel Dimension / Value Measure (LBP) Vessel Event / Occurrence Datetime	One length must be reported. Rule applies for events valid before 01/01/2003	W	One length (LOA or LBP) is mandatory before 01/01/2003	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0015	Vessel Dimension / Value Measure (LOA) Vessel Dimension / Value Measure (LBP)	LBP <= LOA	E	The LBP should be equal or lower than LOA	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0016	Vessel Dimension / Value Measure (GT Tonnage) Vessel Dimension / Value Measure (Other Tonnage) Vessel Event / Occurrence Datetime	GT or Other tonnage should be given and at least one of them must be >0, for events valid before 01/01/2004	W	The GT Tonnage or other tonnages must be given before 01/01/2004	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0017	Vessel Dimension / Value Measure (GT Tonnage) Vessel Event / Occurrence Datetime	GT tonnage is mandatory and must be >0 in events valid from 01/01/2004	E	The GT Tonnage is mandatory from 01/01/2004 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0018	Vessel Dimension / Value Measure (GT Tonnage) Vessel Dimension /	For LOA >= 15m, GT > Other Tonnage. Rule is not run if Other Tonnage is not provided.	W	For vessels with LOA equal or greater than 15m, the GT Tonnage should be greater than	SUB-VCD SUB-VCD-F SNAP-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Value Measure (Other Tonnage) Vessel Dimension / Value Measure (LOA)			the Other tonnage	
VESSEL-L02-01-0019	Vessel Dimension / Value Measure (GTs Tonnage) Vessel Dimension / Value Measure (GT Tonnage)	GTs < GT Tonnage	W	The safety tonnage should be lower than the GT tonnage	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0020	Vessel Dimension / Value Measure (GTs Tonnage) Vessel Dimension / Value Measure (GT Tonnage)	GTs <= 30 % GT Tonnage (Parameter SAF_PCT from the VESSEL_BR_PARAMETER code list)	W	The safety tonnage should be X% lower than the GT Tonnage	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0021	Vessel Dimension / Value Measure (GTs Tonnage) Vessel Dimension / Value Measure (LOA) Vessel Event / Occurrence Datetime	If GTs, LOA >= 15m Only relevant from 01/1997	W	The safety tonnage is only relevant for vessels with LOA >= 15m	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0068	Vessel Dimension / Value Measure (GTs Tonnage) Vessel Dimension / Value Measure (LOA) Vessel Event / Occurrence Datetime	If GTs, LOA < 24m Only relevant for events valid from 01/07/2021 to 31/12/2027	W	The safety tonnage is only relevant for vessels with LOA < 24m	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0023	Vessel Dimension / Value Measure (LOA) Vessel Dimension / Value Measure (LBP) Vessel Dimension / Value Measure (GT Tonnage) Vessel Dimension / Value Measure (Other Tonnage)	Each length (if available) is compared with each tonnage (if available). See table below	W	Ratio between lengths and tonnages are not respected	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0024	Vessel Dimension / Value Measure (LOA) Vessel Dimension /	Each length (if available) is compared with the main engine power (if available). See table[20]	W	Ratio between lengths and the Main Power are not respected	SUB-VCD SUB-VCD-F

[20] Lower and upper limits in length/tonnage/power comparisons. Information from that table is stored in the Vessel_BR_Limit code list.

LOA or LBP (m)	[1,10[	[10,15[	[15,24[	[24,36[	[36,60[	[60,100[	[100,200]
Minimum value for Tonnage or Power	Ton :0,01 kW: 0	Ton: 1 kW : 0	4	9	90	360	720

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Value Measure (LBP) Vessel Engine / Power Measure (Main Power)				SNAP-F
VESSEL-L02-01-0025	Vessel Engine / Power Measure (Main Power) Vessel Engine / Power Measure (Auxiliary Power)	Auxiliary power < Main power if main power ≠ 0	W	The Auxiliary Power should be less than the Main power	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0026	Vessel Technical Characteristic / Value Code (Hull Material) Vessel Event / Occurrence Datetime	No code '5' (Unknown) can be used for events from 01/01/2003	W	An Unknown Hull Material is not allowed after 01/01/2003	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0027	Vessel Administrative Characteristic / Value Datetime (Entry into Service) Vessel Event / Occurrence Datetime	Entry into Service <= Event Start Date	E	The date of Entry into Service should be before or equal to the Event Start Date	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0028	Construction Event / Occurrence Datetime Vessel Event / Occurrence Datetime	Year of Construction <= Event Start Date	E	The Year of Construction should be before or equal to the Event Start Date	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0029	Construction Event / Occurrence Datetime Vessel Administrative Characteristic / Value Datetime (Entry into Service)	Year of Construction <= Entry into Service year	E	The Year of Construction should be before or equal to the Entry into Service	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0030	Vessel Event / Occurrence Datetime Construction Event / Occurrence Datetime Vessel Administrative Characteristic / Value Datetime (Entry into Service)	Year of Construction or Entry into Service should be given for events valid before 01/01/2003	W	For an event start date prior to 01/01/2003, the date of Entry into Service or the Year of Construction should be given	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0031	Vessel Event / Occurrence Datetime Vessel Administrative Characteristic / Value Datetime (Entry into Service)	Entry into Service is mandatory for events valid from 01/01/2003	E	The Entry into Service date is mandatory from the 01/01/2003 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0032	Construction Event / Occurrence Datetime Vessel Event /	For a CST event, the Year of Construction should be limited to 3 years before the year of the event start	W	For a construction, the Year of Construction should be limited to X years before the year of	SUB-VCD SUB-VCD-F

Maximum value for Tonnage or Power	500	1000	2500	5000	10000	15000	20000

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Occurrence Datetime Vessel Event / Type Code	date (Parameter YEAR_NBR_CST from the VESSEL_BR_PARAMETER code list)		the declaration (event start date)	SNAP-F
VESSEL-L02-01-0033	Vessel Administrative Characteristic / Value Code (Segment) Vessel Event / Occurrence Datetime Vessel Country / Identifier	Segment code should be coherent with MAGP periods or RES regime in function of the event start date and the MS & Code from a list of reference: "VESSEL_SEGMENT" code list. Warning applies for events earlier than 31/12/2002, Error applies for events valid from 01/01/2003	E / W	The segment Code is not valid considering the MS, the Event Start Date and the MAGP/RES regimes	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0034	Vessel Administrative Characteristic / Value Code (Segment) Registration Location / Identifier (Place of Registration) Vessel Event / Occurrence Datetime	For segments referring to the EU Outermost Regions, the place code should identify a port in that region. Rule applies for events valid from 01/01/2003	W	The Place Code is not a valid place in an outermost region (RUP)	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0035	Vessel Administrative Characteristic / Value Code (Public Aid) Vessel Event / Type Code Registration Location / Country Identifier Vessel Event / Occurrence Datetime	For transfer within EU (IMP/EXP), no aid allowed. Aid code should be set to No Aid (PA). Rule applies for events valid from 01/01/2003	W	No aid should be allowed for a transfer withing EU	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0036	Vessel Administrative Characteristic / Value Code (Public Aid) Vessel Dimension / Value Measure (GT Tonnage) Vessel Event / Type Code Vessel Event / Occurrence Datetime	If tonnage >= 400GT and Event Code=CST and event start date ≥ 31/12/2004, aid code should be set to No Aid (PA)	W	The Public Aid Code should be "No Aid"	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0037	Vessel Administrative Characteristic / Value Code (Public Aid) Vessel Dimension / Value Measure (GTs Tonnage) Vessel Event / Type Code Vessel Event / Occurrence Datetime	If aid code is set (not null and different from PA, EI and EG) and event code ='MOD', the GTs should have a value. Rule applies for events valid from 01/01/2003	W	The Safety Tonnage should have a value	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0038	Registration Location /	For import/export (IMP, EXP), a country (ISO-3)	E	The Import/Export	SUB-VCD

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Country Identifier Vessel Event / Type Code	should be mentioned		Country is missing	SUB-VCD-F SNAP-F
VESSEL-L02-01-0039	Registration Location / Country Identifier Vessel Event / Type Code Vessel Event / Occurrence Datetime	For import/export (IMP, EXP), the country should not be in the black list. Rule applies for events valid from 01/01/2003	W	The country of import/export is black listed	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0040	Registration Location / Country Identifier Vessel Event / Type Code	Imp/Exp country should be empty if it is not an importation/exportation (IMP/EXP)	W	The Import/Export Country should be empty	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0041	Registration Location / Country Identifier Country of registration	Should be different	E	The Import/Export Country should not be the Country of Registration	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0042	Vessel Administrative Characteristic / Value Code (Type of Export) Vessel Event / Type Code	Type of Export should be empty if it is not an export	E	The Type of Export should be empty	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0043	Vessel Administrative Characteristic / Value Code (Type of Export) Vessel Event / Type Code Vessel Event / Occurrence Datetime	Type of Export should be provided for an export (EXP) Rule applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	The Type of Export should be provided for an export	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0044	Contact Party / Name Text (Operator) or Contact Person / Family Name + Given Name (Operator) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (LOA) Vessel Dimension / Value Measure (LBP)	For an event period including 01/01/2003 or beyond, an Operator Name is mandatory for vessels above or equal to 15m LOA or 12m LBP Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	An Operator Name is mandatory for vessels above or equal to 15m LOA or 12m LBP from 01/01/2003 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0045	Contact Party / Name Text (Operator) or Contact Person / Family Name Text + Given Name Text (Operator) Vessel Event / Occurrence Datetime	For an event period including 01/01/2004 or beyond an Operator Name is mandatory Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	An Operator Name is mandatory from 01/01/2004 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0046	Structured Address / Street Name text (Operator) Vessel Event /	For an event period including 01/01/2004 or beyond an Operator Street is mandatory Error applies for events	E / W	The Street of an Operator is mandatory from 01/01/2004 onwards	SUB-VCD SUB-VCD-F SNAP-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Occurrence Datetime	valid from 01/01/2025, warning applies for earlier events.			
VESSEL-L02-01-0070	Structured Address / Street Name text (Operator) Structured Address / City Name Text (Operator) Structured Address / Country Identifier (Operator) Vessel Event / Occurrence Datetime	For an active event, information of the operator address must be split in the street, city and country fields. Rule applies for events valid from 01/01/2003	W	For an active event, the street, city and country of the operator address must be filled in	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0047	Contact Party / Name Text (Owner) or Contact Person / Family Name + Given Name (Owner) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (LOA) Vessel Dimension / Value Measure (LBP)	For an event period including 01/01/2003 or beyond, the Owner Name is mandatory for vessels above or equal to 27m LOA or 24m LBP Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	The Owner Name is mandatory for vessels for vessels above or equal to 27m LOA or 24m LBP from 01/01/2003 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0048	Contact Party / Name Text (Owner) or Contact Person / Family Name Text + Given Name Text (Owner) Vessel Event / Occurrence Datetime	For an event period including 01/01/2004 or beyond the Owner Name is mandatory Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	The Owner Name is mandatory from 01/01/2004 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0049	Structured Address / Street Name text (Owner) Vessel Event / Occurrence Datetime	For an event period including 01/01/2004 or beyond the Owner Street is mandatory Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	The Street of the Owner is mandatory from 01/01/2004 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0069	Structured Address / Street Name text (Operator) Structured Address / City Name Text (Operator) Structured Address / Country Identifier (Operator) Vessel Event / Occurrence Datetime	For an active event, information of the owner address must be split in the street, city and country fields. Rule applies for events valid from 01/01/2003	W	For an active event, the street, city and country of the owner address must be filled in	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0052	Vessel Transport Means / ID Identifier (CFR) Vessel Event / Type Code	For a construction (CST) event the Country code in CFR should be the country of registration	E	For a construction, the country code into the CFR is not the country of registration	SUB-VCD SUB-VCD-F SNAP-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Vessel Country / ID Identifier				
VESSEL-L02-01-0054	Vessel Equipment Characteristic / Value Code (VMS indicator) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (LOA) Vessel Administrative Characteristic / Value Code (Segment) Vessel Equipment Characteristic / Value Code (Licence indicator)	VMS indicator = Y for an event valid from 01/01/2004, for vessels > 18 m LOA and Licence Indicator = Y and Segment Code <> AQU	W	VMS indicator should be present ('Y') for vessels above 18m LOA from 01/01/2004 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0055	Vessel Equipment Characteristic / Value Code (VMS indicator) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (LOA) Vessel Administrative Characteristic / Value Code (Segment) Vessel Equipment Characteristic / Value Code (Licence indicator)	VMS Indicator = Y for events valid from 01/01/2005, for vessels > 15 m LOA and Licence Indicator = Y and segment code <> AQU	W	VMS should be present ('Y') for vessels above 15m LOA from 01/01/2005 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0056	Vessel Event / Type Code Vessel Administrative Characteristic / Value Code (Public Aid Code)	If Event Code = DES, EXP or RET then Public Aid Code should be filled in Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	The Public Aid Code should be filled in for any exit from the fleet	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0057	Vessel Event / Occurrence Datetime Transmission Date	Event Start Date should be communicated to Fleet less than 3 months in advance (Parameter EVENT_NBR_MONTH from the VESSEL_BR_PARAMETER code list)	E	No events are allowed, which go more than 3 months into the future.	All
VESSEL-L02-01-0058	Vessel Dimension / Value Measure (GT Tonnage) Event End Date	GT Tonnage is mandatory for events valid from 01/01/2003	E	GT Tonnage is mandatory for vessels after 01/01/2003	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0059	Vessel Dimension / Value Measure (LOA) Vessel Engine / Power Measure (Auxiliary engine)	If LOA > 30m then Auxiliary Power should be greater than 0 (Parameter LEN_PWR from the VESSEL_BR_PARAMETER code list)	W	Auxiliary Power should be greater than zero for a vessel length (LOA) above X m	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0060	Vessel Administrative Characteristic / Value	If Event Code = MOD AND (Public Aid Code = EI or EG) then : Event	W	Invalid use of the public aid "EI" or "EG"	SUB-VCD SUB-VCD-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Code (Public Aid) Vessel Event / Type Code Vessel Event / Occurrence Datetime Construction Event / Occurrence Datetime Vessel Dimension / Value Measure (LOA) Fishing Gear / Type Code (Main gear)	Start Date >= 01/01/2007 & Age >= 5 years & - (LOA >= 12m or LOA < 12m AND Main Gear is a towed gear)			SNAP-F
VESSEL-L02-01-0061	Vessel Transport Means / Identifier (UVI) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (GT) Vessel Dimension / Value Measure (LOA)	UVI is mandatory for events from 01/01/2016 and for vessels with GT tonnage equal or above to 100GT or with LOA more than 24m. Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	UVI is mandatory from 01/01/2016 and for vessels above or equal to 100GT or with LOA equal or longer that 24m	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0074	Vessel Transport Means / Identifier (UVI) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (GT) Vessel Dimension / Value Measure (LOA)	From 01/01/2016, UVI is required for vessels above or equal to 100GT or with LOA between 12-24m. Vessels fishing exclusively in the EU waters are exempted from this requirement.	W	UVI is mandatory from 01/01/2016 and for vessels above or equal to 100GT or with LOA between 12-24m, except if a vessel is fishing exclusively in the EU waters.	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0062	Vessel Equipment Characteristic / Value Code (ERS indicator) Vessel Event / Occurrence Datetime	ERS Indicator is mandatory for events valid from 01/02/2018[21]	E	ERS Indicator is mandatory from 01/02/2018 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0071	Vessel Equipment Characteristic / Value Code (ERS Exemption Indicator) Vessel Event / Occurrence Datetime	ERS Exemption Indicator is mandatory for events of 15/01/2023[22] or beyond Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	ERS Exemption Indicator is mandatory from 15/01/2023 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0072	Vessel Equipment Characteristic / Value Code (ERS Exemption Indicator) Vessel Dimension / Value Measure (LOA)	ERS Exemption indicator should be: 'Y' for vessels less than 12m LOA, 'N' for vessels larger than 15m LOA, 'Y' or 'N' for vessels	E / W	ERS Exemption Indicator is incorrect for the vessel due to its overall length.	SUB-VCD SUB-VCD-F SNAP-F

[21] The application date of Fleet Implementing regulation.

[22] The application date from IFDM Recommendation 139.

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
		between 12-15m LOA[23] Rule applies for events from 15/01/2023[24]: Error applies for events valid from 01/01/2025, warning applies for earlier events.			
VESSEL-L02-01-0063	Vessel Equipment Characteristic / Value Code (AIS indicator) Vessel Event / Occurrence Datetime	AIS indicator is mandatory from and for an event period including 01/02/2018[25] or beyond Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	AIS Indicator is mandatory from 01/02/2018 onwards	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0064	Vessel Equipment Characteristic / Value Code (AIS indicator) Vessel Transport Means / Identifier (MMSI)	If the AIS Indicator is set to 'Y', the MMSI must be provided Error applies for events valid from 01/01/2025, warning applies for earlier events.	E / W	MMSI is not available	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0065	Vessel Equipment Characteristic / Value Code (AIS indicator) Vessel Transport Means / Identifier (MMSI)	If the AIS Indicator is set to 'N', the MMSI should not be provided	W	MMSI is available while the AIS indicator is set to 'N'. Please check data correspondence.	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L02-01-0075	Structured Address / Street Name text (Master) Structured Address / City Name Text (Master, Agent, Registration authority, Beneficial owner) Structured Address / Country Identifier (Master, Agent, Registration authority, Beneficial owner)	Information of the Master, Agent, Registration authority, Beneficial owner address must be split in the street, city and country fields.	W	Street, city and country of the Master, Agent, Registration authority, Beneficial owner address must be filled in	SUB-VED

8.3.5. Level 03 rules – full content validation

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L03-01-0001	Vessel Transport Means	If a full history of a vessel is provided in the message,	E	The vessel history has no event for an entry into	SUB-VCD

[23] See Article 15(4) of Control Regulation No 1224/2009.

[24] The application date from IFDM Recommendation 139.

[25] The application date of Fleet Implementing regulation.

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	/ Identifier (CFR) Vessel Event / Type Code	the history should start with an entry into the fleet		the fleet	SUB-VCD-F SNAP-F
VESSEL-L03-01-0003	Vessel Transport Means / Identifier (CFR) Vessel Event / Occurrence Datetime	If multiple events of the same event type exist at the same date (time ignored), only the last one (time included) is registered	W	This event has replaced a previous event registered at the same date	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0018	Vessel Transport Means / Identifier (CFR) Vessel Event / Type Code Vessel Event / Occurrence Datetime	Multiple events on the same date (time ignored) but with different event types are not allowed	E	Two events of different types exist at the same date	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0005	Vessel Transport Means / Identifier (CFR) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (GT) Vessel Dimension / Value Measure (Other tonnage) Vessel Dimension / Value Measure (GTs)	Values for tonnages should not decrease in comparison with data from the previous event	W	At least one tonnage has decreased compared to the previous event	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0006	Vessel Transport Means / Identifier (CFR) Vessel Event / Occurrence Datetime Vessel Engine / Power Measure (Main) Vessel Engine / Power Measure (Aux) Vessel Event / Type Code Vessel Administrative Characteristic / Value Code (Public Aid Code)	Values for powers should not decrease in comparison with data from the previous event, except if "MOD" declaration with Public Aid Code "EI" and "EG".	W	The main or auxiliary power has decreased compared to the previous event	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0007	Vessel Transport Means / Identifier (CFR) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (LOA) Vessel Dimension / Value Measure (LBP)	Values for lengths should not decrease in comparison with data from the previous event	W	The vessel length (LOA/LBP) has decreased compared to the previous event	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0008	Vessel Transport Means / Identifier (CFR) Vessel Event / Occurrence Datetime Vessel Dimension /	Values for tonnages (GTs excluded) should not increase more than a threshold (>= 10%) in comparison with data from the previous event (Parameter _TON_PCT	W	At least one tonnage has increased more than X % compared to the previous event	SUB-VCD SUB-VCD-F SNAP-F

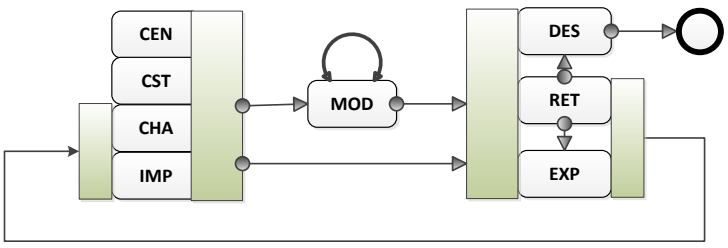
BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Value Measure (GT) Vessel Dimension / Value Measure (Other tonnage)	from the VESSEL_BR_PARAMETER code list)			
VESSEL-L03-01-0009	Vessel Transport Means / Identifier (CFR) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (GTS)	Values for GTS (safety tonnage) should not increase in comparison with data from the previous event	W	The safety tonnage should not increase compared to the previous event	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0010	Vessel Transport Means / Identifier (CFR) Vessel Event / Occurrence Datetime Vessel Engine / Power Measure (Main) Vessel Engine / Power Measure (Aux)	Values for powers should not increase more than a threshold (>= 10%) in comparison with data from the previous event (Parameter _PWR_PCT from the VESSEL_BR_PARAMETER code list)	W	The main or auxiliary power has been increased more than X% compared to the previous event	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0011	Vessel Transport Means / Identifier (CFR) Vessel Event / Occurrence Datetime Vessel Dimension / Value Measure (LOA) Vessel Dimension / Value Measure (LBP)	Values for lengths should not increase more than a threshold (>= 10%) in comparison with data from the previous event (Parameter _LEN_PCT from the VESSEL_BR_PARAMETER code list)	W	The vessel length (LOA/LBP) has been increased more than X % compared to the previous event	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0013	Vessel Transport Means / Identifier (CFR) Vessel Event / Type Code Occurrence Datetime Vessel Engine / Power Measure (Main) Vessel Administrative Characteristic / Value Code (Public Aid Code)	Engine power reduction for an Event " MOD" with Public Aid Code = "EI" should be at least 20% of the previous value (Parameter _PWR_AID_PCT from the VESSEL_BR_PARAMETER code list)	W	The main power should have been reduced by X % due to public aid since the last event	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0014	Vessel Transport Means / Identifier (CFR) Vessel Event / Type Code Vessel Event / Occurrence Datetime Vessel Administrative Characteristic / Value Code (Public Aid Code)	Aid for engine replacement ("MOD" event with Public Aid Code = "EI" or "EG") shouldn't be granted more than once	W	Aid for engine replacement has been granted more than once	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0015	Vessel Transport Means / Identifier (CFR) Vessel Event / Type Code Vessel Event / Occurrence Datetime	Main engine power should not increase after an Individual Aid (EI) for engine replacement	W	The main power has been increased after having received aid for the engine replacement	SUB-VCD SUB-VCD-F SNAP-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Vessel Administrative Characteristic / Value Code (Public Aid Code) Vessel Engine / Power Measure (Main)				
VESSEL-L03-01-0016	Vessel Transport Means / Identifier (UVI) Vessel Event / Occurrence Datetime	May not be changed in the national history of the vessel	E	The UVI cannot be changed in the vessel's history	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L03-01-0017	Vessel Transport Means / Identifier (UVI) Vessel Event / Occurrence Datetime	The same UVI may not be given for vessels with different CFR	E	The reported UVI belongs to another vessel	All
VESSEL-L03-01-0019	Vessel Transport Means / Identification FLUX Report Document / Type Code	When a fishing vessel is still active in the fleet (no RET/DES/EXP is the last event), a SUB event (Support/Foreign Vessels/Non fishing) for that vessel cannot be submitted in case to change the type of vessel from fishing into non-fishing	E	SUB event changing a fishing vessel into a non-fishing type without an exit event is not allowed. Please send a RET event for a fishing vessel before changing the vessel type into a non-fishing one	SUB

8.3.6. Level 04 rules – extended validation

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L04-00-0001	Vessel Event / Type Code Vessel Transport Means / Identification Data in Fleet	Event type 'RET' is allowed only if it refers to an active vessel at the moment when this message is sent	E	The message is not referring to an active vessel	SUB-VCD SUB
VESSEL-L04-01-0001	Vessel Event / Type Code Vessel Event / Occurrence Datetime Vessel Transport Means	The sequence of events of the consolidated history of the vessel through all MS should be compliant with the event type transition diagram[26]	W	The sequence of events for that vessel does not respect the transition rules. The message can be ignored if this event has replaced a previous	SUB-VCD SUB-VCD-F SNAP-F

[26] Events transition diagram for a vessel.



BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	/ Identifier (CFR)			event registered at the same date.	
VESSEL-L04-01-0002	Vessel Transport Means / Identifier (CFR) Vessel Event / Type Code Vessel Event / Occurrence Datetime Registration Location / Country Identifier	When an import (IMP) from a MS is declared, an export (EXP) or a withdrawal (RET) should exist for the same CFR and for a date prior or equal to the date of the IMP event.	W	For an import inside EU, there is no export or withdrawal previously declared	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L04-01-0003	Vessel Transport Means / Identifier (CFR) Vessel Event / Type Code Registration Location / Country Identifier Vessel Country / Identifier Vessel Dimension / Value Measure (GT) Vessel Dimension / Value Measure (Other tonnage) Vessel Engine / Power Measure (Main) Vessel Engine / Power Measure (Aux) Vessel Dimension / Value Measure (LOA) Vessel Dimension / Value Measure (LBP) Vessel Technical Characteristic / Value Code (Hull) Construction Event / Occurrence Datetime	For an import (IMP) from a MS, values for lengths, tonnages, powers, hull, YoC should be equal to values from the previous declaration of the vessel consolidated history. For tonnages, engine powers and lengths: warning will be issued only if values changed by more than 10%. (Parameter _DIFF_PCT from the VESSEL_BR_PARAMETER code list)	W	Values for tonnages/lengths/powers, hull or year of construction have changed compared to the previous event	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L04-01-0004	Vessel Event / Type Code Vessel Event / Occurrence Datetime Vessel Administrative Characteristic Value Code (Export type) Vessel Transport Means / Identifier (CFR)	A vessel previously exported for a joint enterprise (SM) should not come back into the EU fleet (CFR is definitively lost)	W	The vessel has been exported for a joint enterprise and cannot be later on active in the EU fleet	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L04-01-0005	Vessel Transport Means / Identifier (CFR)	Should be unique across all vessels in the Vessel Register	E	The CFR is not unique in the Vessel Register and is already assigned to another vessel	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L04-01-0006	Vessel Transport Means / Identifier (IRCS)	Should be unique for vessels in the Vessel Register at the date of the	W	The radio call sign is not unique in the Vessel register during the	SUB-VCD SUB-VCD-F

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Vessel Event / Occurrence Datetime	validation process and for the period of the vessel event.		reported vessel event period	SNAP-F SUB
VESSEL-L04-01-0016	Vessel Country / Identifier Vessel Transport Means / Identifier (External Marking)	External marking should be unique for vessels in the national fleet at the date of the validation	W	The external marking is not unique for vessels present in the national fleet	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L04-01-0009	Vessel Transport Means / Identifier (UVI)	Should be unique across all vessels in the Vessel Register	E	The UVI is not unique in the Vessel Register and is already assigned to another vessel	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L04-01-0010	Vessel Transport Means / Identifier (CFR)	CFR and UVI numbers should not be changed in the consolidated history of the vessel	E	The CFR and UVI numbers has changed in the history of the vessel, which is not allowed	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L04-01-0011	Vessel Transport Means / Identifier (MMSI)	Should be unique for vessels in the fleet at the date of the validation process	W	The MMSI is not unique for vessels in the current EU fleet	SUB-VCD SUB-VCD-F SNAP-F SUB
VESSEL-L04-01-0012	Vessel Event / Type Code Vessel Event / Occurrence Datetime Vessel Transport Means / Identifier (CFR)	After a destruction (event = DES), the CFR cannot be reused for any further events	E	The CFR has been reused for another vessel	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L04-01-0013	Vessel Transport Means / Identifier (CFR) Vessel Event / Type Code Vessel Event / Occurrence Datetime Vessel Country / Identifier Construction Event / Occurrence Datetime Vessel Dimension / Value Measure (GT) Vessel Engine / Power Measure (Main) Vessel Dimension / Value Measure (LOA)	When a vessel has left the fleet, if it reappears in another MS, the CFR cannot be changed. The matching for comparison is done on the YoC, and the rounded main power, reference tonnage and LOA.	W	A new CFR has been perhaps given for an existing vessel entering again in the EU fleet	SUB-VCD SUB-VCD-F SNAP-F
VESSEL-L04-01-0014	Vessel Transport Means / Identifier (CFR, UVI, IRCS) Data in LICENCE system	Vessel must not exit the Vessel Register if it has active authorisation in the Licence system	W	The vessel should not exit Fleet register while having active authorisations in the Licence system	SUB-VCD SNAP-F SUB

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L04-01-0018	Vessel Transport Means / Identifier (UVI)	UVI cannot be null if a previous value for UVI is present for the vessel reported	E	UVI was reported previously for the vessel. Please provide it in any further submission	SUB-VCD SNAP-F
VESSEL-L04-00-0002	Number of <Vessel event> instances in SNAP-F Number of unique vessel CFR numbers in SNAP-F	Rule checks the number of vessels and events reported in SNAP-F and compares it with data in Fleet before. Rule fails if the difference is bigger than X (e.g. 30) number of vessels or Y (e.g. 100) number of events. Values X and Y are defined in VESSEL_BR_PARAMETER code list as DIFF_SNAP_VSL and DIFF_SNAP_EVE	E	The content of submitted SNAP-F message is missing a considerable number of vessels and their events in comparison with previously received data. Please check if you submitted the complete data on your fleet	SNAP-F

8.4. Rules for query messages

The business rules listed in this chapter are validating data in query messages (Q-NR, Q-NEWS, Q-SNAP-F).

8.4.1. Generic rules

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types[27]
GEN-L00-00-0001	FLUX Vessel Query Message	The message must be a valid XML	E	An invalid XML message has been received	All
GEN-L00-00-0002	FLUX Vessel Query Message	The message must not be empty	E	The message content is empty	All
GEN-L00-00-0003	FLUX Vessel Query Message	The message must be UTF-8 compliant	E	The message is not UTF-8 compliant	All
GEN-L00-00-0004	FLUX Vessel Query Message	The message must comply with the relevant FLUX XSD standard. For queries in the Vessel domain the FLUX Vessel Query Message 5p1 XSD is used.	E	The message is not XSD compliant	All

[27] The column indicates the query message types for which the rule is executed.

8.4.2. Level 00 rules – integrity control

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L00-03-0100	Vessel Query / ID	Message identifier is mandatory	E	The query message identifier is not provided	All
VESSEL-L00-03-0101	Vessel Query / ID	The message identifier must be in a valid UUID format	E	The query message identifier format is not valid	All
VESSEL-L00-03-0102	Vessel Query / ID	The message identifier must be unique in Fleet	E	The query message identifier is not unique	All
VESSEL-L00-03-0103	Vessel Query / Submitted Datetime	Query submission date is mandatory	E	The query submission date is not provided	All
VESSEL-L00-03-0104	Vessel Query / Submitted Datetime	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally).	E	The query submission datetime format is not valid	All
VESSEL-L00-03-0117	Vessel Query / Submitted Datetime	Query submission datetime must not be in the future	E	The submission date should not be in the future	All
VESSEL-L00-03-0105	Vessel Query / Type Code	Query type is mandatory	E	The query type is not provided	All
VESSEL-L00-03-0106	Vessel Query / Type Code Vessel Query / Submitter FLUX Party	MS can submit only query types Q-NR and Q-NEWS	E	The Query Type is not valid for the submitter	All
VESSEL-L00-03-0118	Vessel Query / Submitter FLUX Party / ID	SchemeID = FLUX_GP_PARTY must be provided	E	The list referenced for the query submitter party is not valid	All
VESSEL-L00-03-0108	Vessel Query / Submitter FLUX Party / ID	Code provided must be on FLUX_GP_PARTY list	E	The query submitter identification code is not valid	All
VESSEL-L00-03-0109	Vessel Query / Submitter FLUX Party / ID	Query sender identification is mandatory	E	The query sender identification is not provided	All
VESSEL-L00-03-0110	Vessel Query / Submitter FLUX Party / ID Sender from the Transportation Layer (FR value)	The party sending the message must be the same as the one from the FR value of the FLUX TL envelope. Only the part before the first colon is to be considered: Eg. ABC:something => only ABC refers to the party for the purpose of this rule.	E	The query sender identifier is not the same MS sending the message	All
VESSEL-L00-03-0111	Vessel Query / Submitter FLUX Party / ID Indicator in the Fleet system.	For queries, the blocking indicator for the flag state in the Fleet system is set to 'Y'	E	The query is not allowed for the sending country. Please contact the European Commission.	All
VESSEL-L00-03-0121	Vessel Query / Delimited Period / Start	Query period start date is mandatory	E	The query period start date is not provided	All

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Datetime				
VESSEL-L00-03-0122	Vessel Query / Delimited Period / End Datetime	Query period end date is mandatory	E	The query period end date is not provided	All
VESSEL-L00-03-0119	Vessel Query / Delimited Period / Start Datetime	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally).	E	The query period start date format is not valid	All
VESSEL-L00-03-0120	Vessel Query / Delimited Period / End Datetime	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally).	E	The query period end date format is not valid	All
VESSEL-L00-03-0114	Vessel Query / Vessel Identity / Vessel ID	SchemeID must contain the code form the FLUX_VESSEL_ID_TYPE list	E	The code for vessel identifier type is not valid	All
VESSEL-L00-03-0115	Vessel Query / Vessel Identity / Vessel Registration Country ID	SchemeID = TERRITORY must be provided	E	The list referenced for the queried vessel flag country is not valid	All
VESSEL-L00-03-0116	Vessel Query / Vessel Identity / Vessel Type Code	ListID = VESSEL_CATEGORY must be provided	E	The list referenced for the vessel type is not valid	All

8.4.3. Level 01 rules – data field validation

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L01-03-0102	Vessel Query / Type Code Vessel Query / Delimited Period / End Datetime	For Q-SNAP-F, end date must be 2100/12/31	E	The queried end date for Q-SNAP-F is wrong	Q-SNAP-F
VESSEL-L01-03-0104	Vessel Query / Type Code Vessel Query / Vessel Identity / Vessel Registration Country ID	For Q-NR and Q-NEWS queries, code must exist on TERRITORY list	E	The queried Country of Registration is not a valid code	Q-NR Q-NEWS
VESSEL-L01-03-0105	Vessel Query / Type Code Vessel Query / Vessel Identity / Vessel Type Code	For Q-NR and Q-NEWS queries, code must exist on VESSEL_CATEGORY list	E	The vessel category type code is not valid	Q-NR Q-NEWS
VESSEL-L01-03-0108	Vessel Query / Type Code Vessel Query / Vessel Query Parameter /	For Q-NR and Q-NEWS queries, at least one value amongst the VESSEL* parameters must be present	E	Criteria to identify the type of vessel must be present in query	Q-NR Q-NEWS

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Search Type Code				

8.4.4. Level 02 rules -row validation

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L02-03-0100	Vessel Query / Delimited Period / Start Datetime Vessel Query / Delimited Period / End Datetime	For Q-NR and Q-NEWS queries, start date must be equal or earlier than End date of the queried period	E	The query period is defined wrongly.	Q-NR Q-NEWS
VESSEL-L02-03-0101	Vessel Query / Type Code Vessel Query / Vessel Identity: all fields	For Q-NR and Q-NEWS queries, a value should be present for at least one criteria	E	Criteria to identify vessels in the query must be present	Q-NR Q-NEWS

8.5. Rules for response messages

The business rules listed in this chapter are validating data in response messages (R).

8.5.1. Generic rules

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types[28]
GEN-L00-00-0001	FLUX Vessel Response Message	The message must be a valid XML	E	An invalid XML message has been received	R
GEN-L00-00-0002	FLUX Vessel Response Message	The message must not be empty	E	The message content is empty	R
GEN-L00-00-0003	FLUX Vessel Response Message	The message must be UTF-8 compliant	E	The message is not UTF-8 compliant	R
GEN-L00-00-0004	FLUX Vessel Response Message	The message must comply with the relevant FLUX XSD standard. For responses in the Vessel domain, the FLUX Vessel Response Message 5p1 XSD standard is used.	E	The message is not XSD compliant	R
GEN-L00-00-0005	Creation Datetime	Creation datetime must be mandatory	E	The Creation date is not provided	R

[28] The column indicates the response message type for which the rule is executed.

8.5.2. Level 00 rules – integrity control

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L00-04-0001	FLUX Response Document / ID	Message identifier is mandatory	E	The response message identifier is not provided	R
VESSEL-L00-04-0002	FLUX Response Document / ID	Message identifier must be a valid UUID format	E	The response message identifier is not a valid format	R
VESSEL-L00-04-0003	FLUX Response Document / ID	Message identifier must be unique in Fleet	E	The response message identifier is not unique	R
VESSEL-L00-04-0004	FLUX Response Document / Creation Datetime	Creation datetime is mandatory	E	The date of the response is not provided	R
VESSEL-L00-04-0005	FLUX Response Document / Creation Datetime	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z (milliseconds can be provided optionally).	E	The response creation datetime format is not valid	R
VESSEL-L00-04-0006	FLUX Response Document / Creation Datetime	Response creation datetime must not be in the future	E	The response creation date should not be in the future	R
VESSEL-L00-04-0007	FLUX Response Document / Referenced ID	Referenced identifier is mandatory	E	The response referenced identifier is not provided	R
VESSEL-L00-04-0017	FLUX Response Document / Referenced ID	Provided schemeID attribute value must be on the FLUX_GP_MSG_ID list	E	The code for identifying the response referenced identifier type is not valid	R
VESSEL-L00-04-0008	FLUX Response Document / Referenced ID	Referenced identifier must be according to the specified schemeID value	E	The referenced identifier is not in a valid format	R
VESSEL-L00-04-0009	FLUX Response Document / Referenced ID	The referenced identifier must exist on the list of previously sent identifiers of submission or query messages.	E	The referenced identifier does not refer to a message sent previously	R
VESSEL-L00-04-0010	FLUX Response Document / Response Code	listID = FLUX_GP_RESPONSE must be provided	E	The list referenced for the response code is not valid	R
VESSEL-L00-04-0011	FLUX Response Document / Response Code	Response code must be on FLUX_GP_RESPONSE list	E	The response code is not valid	R
VESSEL-L00-04-0012	FLUX Response Document / Validation Result Document / Validator ID	SchemeID = FLUX_GP_PARTY must be provided	E	The list referenced for the validator identifier is not valid	R
VESSEL-L00-04-0013	FLUX Response Document / Validation Result Document /	Datetime format must be according to UTC ISO 8601 format. i.e.,2024-01-31T15:07:38Z	E	The creation date format of the validation report is not valid	R

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
	Creation Datetime	(milliseconds can be provided optionally).			
VESSEL-L00-04-0014	FLUX Response Document / Validation Result Document / Validation Quality Analysis / ID	SchemeID = VESSEL_BR_DEF must be provided	E	The list referenced for the identification of the business rule is not valid	R
VESSEL-L00-04-0015	FLUX Response Document / Validation Result Document / Validation Quality Analysis / Level Code	ListID = FLUX_GP_VALIDATION_LEVEL must be provided	E	The list referenced for the level of the business rule is not valid	R
VESSEL-L00-04-0016	FLUX Response Document / Validation Result Document / Validation Quality Analysis / Type Code	ListID = FLUX_GP_VALIDATION_TYPE must be provided	E	The list referenced for the type of validation of the business rule is not valid	R

8.5.3. Level 01 rules – data field validation

BR-ID	Entity/Attribute	BR description	E/W	Error message	Message types
VESSEL-L01-04-0001	FLUX Response Document / Validation Result Document / Validation Quality Analysis / ID	Identifier must exist on VESSEL_BR_DEF list	E	The business rule identifier is not valid	R
VESSEL-L01-04-0002	FLUX Response Document / Validation Result Document / Validation Quality Analysis / Result	Error message text length should be less than 300 characters	E	The BR message must be less than 300 characters	R
VESSEL-L01-04-0003	FLUX Response Document / Validation Result Document / Validation Quality Analysis / Level Code	Code must exist on FLUX_GP_VALIDATION_LEVEL list	E	The code for the business rule level is not valid	R
VESSEL-L01-04-0004	FLUX Response Document / Validation Result Document / Validation Quality Analysis / Type Code	Code must exist on FLUX_GP_VALIDATION_TYPE list	E	The code for the business rule type is not valid	R

9. CODE LISTS

All XSDs and code lists are listed in the Master Data Register of DG MARE of European Commission. The values mentioned in above tables for the listID attribute refer to a code list alias in the table below. This table maps the code list alias to the code list name in

MDR and can be used to retrieve the code values using the FLUX Master Data Management specifications[29].

Code list alias (ListID in the XSD)		
BOOLEAN_TYPE	FLUX_VESSEL_DIM_TYPE	VESSEL_OS_BR
COMM_EQUIP_TYPE	FLUX_VESSEL_ENGINE_ROLE	VESSEL_OS_BR_DEF
DECK_MACHINERY_TYPE	FLUX_VESSEL_EQUIP_ TYPE	VESSEL_OS_BR_LIMIT
FISHFINDER_EQUIP_TYPE	FLUX_VESSEL_GEAR_ROLE	VESSEL_OS_BR_PARAMETER
FLEET_FLAG_STATE	FLUX_VESSEL_HIST_CHAR	VESSEL_CATEGORY
FLUX_CONTACT_ROLE	FLUX_VESSEL_ID_TYPE	VESSEL_EXPORT_TYPE
FLUX_GP_MSG_ID	FLUX_VESSEL_QUERY_TYPE	VESSEL_EVENT
FLUX_GP_PARTY	FLUX_VESSEL_QUERY_PARAM	VESSEL_HULL_TYPE
FLUX_GP_PURPOSE	FLUX_VESSEL_REGSTR_TYPE	VESSEL_PHOTO_TYPE
FLUX_GP_RESPONSE	FLUX_VESSEL_REPORT_TYPE	VESSEL_PORT
FLUX_GP_VALIDATION_LEVEL	FLUX_VESSEL_TECH_ TYPE	VESSEL_PUBLIC_AID_TYPE
FLUX_GP_VALIDATION_TYPE	GEAR_TYPE	VESSEL_SEGMENT
FLUX_TELECOM_USE	NAVIG_EQUIP_TYPE	VESSEL_TYPE
FLUX_UNIT	PROPELLER_TYPE	VMS_SATELLITE_OPERATOR
FLUX_VESSEL_ADMIN_ TYPE	TERRITORY	
FLUX_VESSEL_CONSTR_TYPE	STORAGE_TYPE	

[29] FLUX P1000 – 10; MDM domain.

10. LIST OF VESSEL DATA

10.1. Vessel Core Data (VCD)

List of vessel core data and their location in the data model.

Business Name	Location in the data model
Country of registration	Vessel Country / Identification
CFR	Vessel Transport Means / Identification
UVI	Vessel Transport Means / Identification
Event	Vessel Event / Type Code
Event Start date	Vessel Event / Occurrence Datetime
National Registration number	Vessel Transport Means / Identification
External marking	Vessel Transport Means / Identification
Name of vessel	Vessel Transport Means / Name Text
Place of registration	Registration_Location / Identification
IRCS	Vessel Transport Means / Identification
Licence indicator	Vessel Administrative Characteristic / Value Code
IRCS indicator	Vessel Equipment Characteristic / Value Code
VMS indicator	Vessel Equipment Characteristic / Value Code
ERS indicator	Vessel Equipment Characteristic / Value Code
ERS exemption indicator	Vessel Equipment Characteristic / Value Code
AIS indicator	Vessel Equipment Characteristic / Value Code
MMSI	Vessel Transport Means / Identification
Vessel Type	Vessel Transport Means / Type Code
Main fishing gear	Fishing Gear / Type Code
Subsidiary fishing gear	Fishing Gear / Type Code
LOA	Vessel Dimension / Value Measure
LBP	Vessel Dimension / Value Measure
Tonnage GT	Vessel Dimension / Value Measure
Other tonnage	Vessel Dimension / Value Measure
Safety tonnage (GTs)	Vessel Dimension / Value Measure
Power of main engine	Vessel Engine / Power Measure
Power of auxiliary engine	Vessel Engine / Power Measure

Hull material	Vessel Technical Characteristic / Value Code
Date of entry into service	Vessel Administrative Characteristic / Value Datetime
Segment	Vessel Administrative Characteristic / Value Code
Country of import or export	Registration Location / Country Identifier
Type of export	Vessel Administrative Characteristic / Value Code
Public Aid code	Vessel Administrative Characteristic / Value Code
Year of construction	Construction Event / Occurrence Datetime
Contacts: Owner and Operator	Contact Party / Role Code
Company Name	Contact Party / Name Text
Contact Person nationality	Contact Party / Nationality Country Identifier
Contact Company IMO number	Contact Party / Identification Identifier
Contact Company National Registration number	Contact Party / Identification Identifier
Person Name	Contact Person / Given Name
Person family Name	Contact Person / Family Name
Contact City Name	Structured Address / City name Text
Contact Country	Structured Address / Country Identifier
Contact Post office box	Structured Address / Port office Box Text
Contact Postcode	Structured Address / Postal Area Text
Contact Street	Structured Address / Street Name text
Contact Email address	Email Communication / URI Identifier
Contact Phone number	Universal Communication / Complete Number Text
Contact Fax number	Universal Communication / Complete Number Text

10.2. Vessel Extended Data (VED)

List of vessel extended data and their location in the data model.

Business Name	Location in the data model
Identification numbers (all third-party identifiers)	Vessel Transport Means / Identification Identifier
Vessel speed	Vessel Transport Means / Speed Measure
Trawling speed	Vessel Transport Means / Trawling Speed Measure
Date of historical data	Vessel Historical Characteristic / Value Datetime
Previous flag state	Vessel Historical Characteristic / Value Code
Previous IRCS	Vessel Historical Characteristic / Value Text
Previous vessel name	Vessel Historical Characteristic / Value Text
Previous owner name	Vessel Historical Characteristic / Value Text
Previous owner address	Vessel Historical Characteristic / Value Text
Country of construction	Construction Location / Country Identifier
Engine mark	Vessel Engine / Manufacturer Text
Engine model	Vessel Engine / Model Text
Propeller type	Vessel Engine / Propulsion Type Code
Registered length	Vessel Dimension / Value Measure
Carrying capacity	Vessel Dimension / Value Measure
Net Tonnage	Vessel Dimension / Value Measure
Net Registered Tonnage	Vessel Dimension / Value Measure
Depth	Vessel Dimension / Value Measure
Moulded depth	Vessel Dimension / Value Measure
Draught	Vessel Dimension / Value Measure
Breadth	Vessel Dimension / Value Measure
Deadweight	Vessel Dimension / Value Measure
Navigation equipment details (code)	Vessel Equipment Characteristic / Value Code
Navigation equipment details (text)	Vessel Equipment Characteristic / Value Text
Communication equipment details (code)	Vessel Equipment Characteristic / Value Code
Communication equipment details (text)	Vessel Equipment Characteristic / Value Text
Fish finder equipment details (code)	Vessel Equipment Characteristic / Value Code
Fish finder equipment details (text)	Vessel Equipment Characteristic / Value Text

Deck machinery type	Vessel Equipment Characteristic / Value Code
VMS satellite operator code	Vessel Equipment Characteristic / Value Code
VMS satellite operator name	Vessel Equipment Characteristic / Value Text
Fish processing equipment details	Vessel Equipment Characteristic / Value Text
Fish processing line type	Vessel Equipment Characteristic / Value Text
Freezer type	Vessel Equipment Characteristic / Value Text
Safety equipment details	Vessel Equipment Characteristic / Value Text
Helicopter registration number	Vessel Equipment Characteristic / Value Text
Aircraft registration number	Vessel Equipment Characteristic / Value Text
VMS manufacturer	Vessel Equipment Characteristic / Value Text
VMS model name	Vessel Equipment Characteristic / Value Text
VMS serial number	Vessel Equipment Characteristic / Value Text
VMS software version	Vessel Equipment Characteristic / Value Text
VMS features	Vessel Equipment Characteristic / Value Text
Speed boat engine power	Vessel Equipment Characteristic / Value Measure
Speed boat length	Vessel Equipment Characteristic / Value Measure
Support vessel skiff length	Vessel Equipment Characteristic / Value Measure
Support vessel skiff engine power	Vessel Equipment Characteristic / Value Measure
Fuel tank capacity	Vessel Equipment Characteristic / Value Measure
Number of fishing lights	Vessel Equipment Characteristic / Value Measure
Vessel purchase year	Vessel Administrative Characteristic / Value Datetime
National authorisation name	Vessel Administrative Characteristic / Value Text
Processing class	Vessel Technical Characteristic / Value Text
Storage method	Vessel Storage Characteristic / Type Code
General storage capacity	Vessel Storage Characteristic / Capacity Value Measure
Fish hold capacity	Vessel Storage Characteristic / Capacity Value Measure
Freezing capacity	Vessel Storage Characteristic / Capacity Value Measure
Processing capacity	Vessel Storage Characteristic / Capacity Value Measure
General storage temperature	Vessel Storage Characteristic / Temperature Value Measure
Freezing temperature	Vessel Storage Characteristic / Temperature Value Measure
Fish hold temperature	Vessel Storage Characteristic / Temperature Value Measure
Number of general storage units	Vessel Storage Characteristic / Unit Value Quantity

Number of fish hold units	Vessel Storage Characteristic / Unit Value Quantity
Number of freezing units	Vessel Storage Characteristic / Unit Value Quantity
Vessel photo type	FLUX Picture / Type Code
Starboard side photo	FLUX Picture / Digital Image Binary Object
Port side photo	FLUX Picture / Digital Image Binary Object
Stern photo	FLUX Picture / Digital Image Binary Object
Vessel photo date	FLUX Picture / Taken Datetime
Vessel photo description	FLUX Picture / Description Text
Crew size	Vessel Crew / Member Quantity
Maximum Crew size	Vessel Crew / Member Size Quantity
Minimum Crew size	Vessel Crew / Member Size Quantity
Contacts: Agent, Master[30], Beneficial Owner, Construction company[31], Registration authority[32] Contact Company Name Contact Person nationality Contact Company IMO number Contact Company National Registration number Contact Person Name Contact Person family Name Contact City Name Contact Country Contact Post office box Contact Postcode Contact Street Contact Email address Contact Phone number Contact Fax number	Contact Party / Role Code Contact Party / Name Text Contact Party / Nationality Country Identifier Contact Party / Identification Identifier Contact Party / Identification Identifier Contact Person / Given Name Contact Person / Family Name Structured Address / City name Text Structured Address / Country Identifier Structured Address / Port office Box Text Structured Address / Postal Area Text Structured Address / Street Name text Email Communication / URI Identifier Universal Communication / Complete Number Text Universal Communication / Complete Number Text
Contact: Vessel Radio frequency Satellite phone number	Contact Party / Role Code Universal Communication / Complete Number Text Universal Communication / Complete Number Text

[30] Only data elements about a Person apply to Master.

[31] Only data elements about a Company apply to Construction company.

[32] Only data elements about a Company apply to Registration authority.

11. FLUX TL ENVELOPE PARAMETERS

The following FLUX TL parameters must be used.

Common name	FLUX TL Envelope Tag name	Value	Remark
Dataflow name	DF	urn:un:unece:uncefact:fisheries:FLUX:VESSEL:EU:2	According to format: urn:un:unece:uncefact:fisheries:FLUX:[domain]:[context]:[version]
Timeout DateTime	TODT	Current DateTime (in UTC) + 60 minutes	Value expressed as XSD DateTime in UTC
Acknowledge of Receipt	AR	True	This parameter indicates that FLUX TL will always return an acknowledgement of receipt when the message has been received by the FLUX TL destination node. Note: a non-delivery message is always sent when the recipient cannot be reached, or timeout (TODT) time has been expired.

12. VERSIONING

Version	Changes	Date
3.0.0	Full review according to the discussions with MS on the new Fleet system during 2024-02-22 and 2024-05-22 meetings.	22/05/2024
3.0.1	Review of L02, L03 and L04 business rules. BR IDs assigned for all L00 and L01 rules. Document prepared for discussions with MS on 2024-09-19 meeting.	16/09/2024
3.1	Review according to the discussions with MS during 2024-09-19 meeting, including written comments received: - L00-00-0159 rule ID changed to L00-00-0210 due to duplicated IDs. - Data element 'Refrigeration equipment details' renamed into 'Freezer type' to align with terminology used in authorisations. - For many rules, the error level is applied differently for historical data. - Several rules removed. Additional changes: - new SUB-VCD-F submission procedure and type added for full history. - Business rules checking the same data field and having the same logic for different business data merged into one rule. - Rules for query and response messages added.	28/10/2024
3.1.1	Workflow and data model diagrams updated. Chapter on MAGP periods removed, the applicable periods are described directly in in the business rules. List of business rules acronyms added to the glossary chapter.	15/11/2024
3.2	CFR can be submitted also for other than EU fishing vessels. New MDM listID 'FLEET_FLAG_STATE' created and is replacing the code list to report Flag states. Relevant BRs changed. New BR VESSEL-L00-00-0211 introduced to control vessel photo formats (.jpg, .png, .webp). Several BRs changed to cover the gaps in possible data errors.	06/03/2025

	Several BRs removed. Text made more clear and editorial errors corrected.	
3.3	- Q-NR and Q-NEWS queries, query parameters and query period described more clearly. - Rules VESSEL-L03-03-0001 and VESSEL-L03-03-0002 removed. - Rules VESSEL-L01-01-0115 and VESSEL-L01-01-0117 apply to the report types where VED data is communicated. - Description and error messages of several other rules improved.	11/06/2025