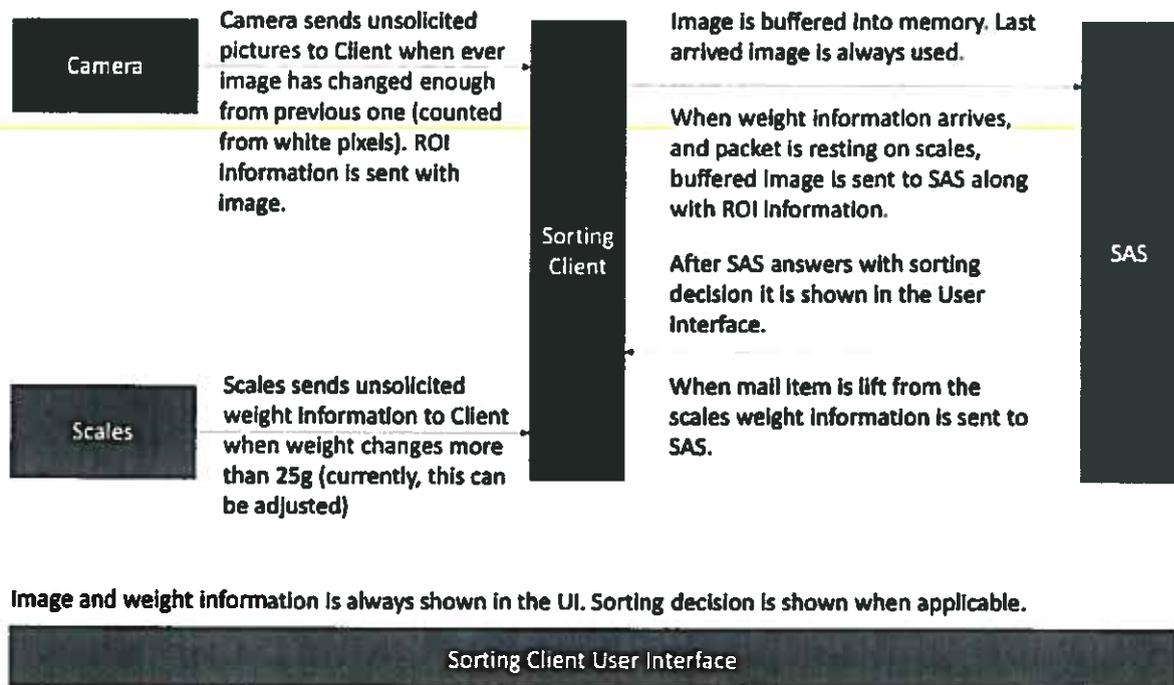| SUSITARIMAS PRIE RANKINĖS SKIRSTYMO ĮRANGOS IR JOS TECHNINĖS PRIEŽIŪROS PASLAUGŲ PIRKIMO SUTARTIES	AMENDMENT FOR THE PROCUREMENT ON THE MANUAL SORTING EQUIPMENT AND ITS TECHNICAL MAINTENANCE SERVICES
2020 m. rugpjūčio 4 d. Nr. *2019-P00167/00002* *2020 m. rugpjūčio 10 d.*	4 of August 2020, No. *2019-P00167/00002* *10 of August 2020*
Akcinė bendrovė Lietuvos paštas, pagal Lietuvos Respublikos įstatymus teisėtai įregistruota ir veikianti akcinė bendrovė, juridinio asmens kodas 121215587, PVM mokėtojo kodas LT212155811, registruotos buveinės adresas J. Jasinskio g. 16, LT-03500 Vilnius, Lietuvos Respublika, apie kurią duomenys kaupiami ir saugomi VĮ Registrų centras, atstovaujama ___, veikiančios pagal bendrovės įstatus (toliau – Pirkėjas), ir **Mailroom Solutions**, pagal Suomijos Respublikos įstatymus teisėtai įregistruota ir veikianti akcinė bendrovė, juridinio asmens kodas 2065249-5, PVM mokėtojo kodas FI20652495, registruotos buveinės adresas Matti Visannin kuja 15, 60100 Seinäjoki, Suomijos Respublika, atstovaujama ___ (toliau – Tiekėjas).	**Public limited liability company Lietuvos paštas**, a limited company legally registered and operating under the laws of the Republic of Lithuania, with legal entity code 121215587, VAT payer code LT212155811, registered address at J. Jasinskio str. 16, LT-03500 Vilnius, in the Republic of Lithuania, data of which are collected and stored by the SE Center of Registers, represented by ___ acting in accordance with the Articles of Association of the company (hereinafter referred to as the Buyer), and **Mailroom Solutions**, limited company legally registered and operating under the laws of the Republic of Finland, with legal entity code 2065249-5, VAT payer code FI20652495, registered address at Matti Visannin kuja 15, 60100 Seinäjoki, in the Republic of Finland, represented ___ (hereinafter referred to as the Supplier),
Pirkėjas ir Tiekėjas, kiekvienas atskirai toliau vadinamas Šalimi, bendrai vadinami Šalimis, atsižvelgdami į tai, kad: - pagal 2019 m. spalio 23 d. Rankinės skirstymo įrangos ir jos techninės priežiūros paslaugų pirkimo sutartį Nr. 2019 – P00167 (toliau – Sutartis) Pirkėjas įsigijo iš Tiekėjo Paruošimo darbo vietą, kuri perduoda siuntos nuotrauką kitoms IT sistemos be joje nurodytų siuntos gavėjo adreso koordinačių; - Atlikus pradines integracijas tarp Paruošimo darbo vietą palaikančios IT sistemos ir Pirkėjo pagal 2018 m. gruodžio 14 d. Skirstymo automatizavimo sistemos, jos diegimo ir palaikymo, adapdacijos ir plėtros paslaugų pirkimo sutartį Nr. 20018-P00104 su UAB „Bull Baltija" vystomos sistemos (toliau – SAS), pirmųjų testų metu paaiškėjo, kad perdavus siuntos nuotrauką be siuntos gavėjo adreso koordinačių, SAS siuntos gavėjo adreso ieško visoje nuotraukoje, kas užtrunka ilgai, taip pat maišo siuntos gavėjo adresą su siuntos siuntėjo adresu ar kita ant siuntos esančia informacija, o tai nulemia, kad SAS siuntų gavėjų adresų atpažinimo sistema veikia lėtai ir gavėjo adreso atpažinimo lygis žemas; - Būtina užtikrinti, kad SAS veiktų SAS techninėje specifikacijoje numatytu greičiu ir pasiektų numatytą adreso atpažinimo lygį, todėl reikalinga iš Tiekėjo įsigyti papildomą funkcionalumą – siuntos nuotraukoje nustatyti	Buyer and Supplier, each separately below hereinafter referred to as the Party, collectively referred to as the Parties, considering that: - according to 2019. October 23 Contract for the procurement on the manual sorting equipment and its technical maintenance services No. 2019 - P00167 (hereinafter referred to as the Contract) The Buyer has acquired the Presorting workplace from the Supplier, which transmits the photo of the parcel to other IT systems without the coordinates of the consignee's address indicated therein; - After the initial integrations between the IT system supporting the Presorting workplace and the Buyer according to the 2018. December 14 Procurement of Sorting automation system, its installation and maintenance, adaptation and development services contract no. 20018-P00104 with the systems being developed by UAB Bull Baltija (hereinafter - SAS), during the first tests it became clear that after transmitting the parcel photo without the consignee's address coordinates, SAS searches the consignee's address in the whole photo, which takes a long time with the consignor's address or other information on the parcel, which results in the slow operation of the SAS consignee address recognition system and the low level of consignee address recognition; - It is necessary to ensure that SAS operates at the speed specified in the SAS technical specification and reaches the intended level of address recognition, therefore it is necessary to purchase additional functionality from the Supplier - set the

gavėjo adreso koordinates ir jas papildomai kartu su nuotrauka nusiųsti į SAS; Taip pat vadovaudamiesi Lietuvos Respublikos pirkimų, atliekamų vandentvarkos, energetikos, transporto ar pašto paslaugų srities perkančiųjų subjektų, įstatymo 97 str. 2 d., sudarė šį susitarimą (toliau – Susitarimas) prie Sutarties, kuriuo susitarė: 1. Tiekėjas pagal Sutartį papildomai suteiks Pirkėjui tokias paslaugas – įdiegs papildomą paruošimo darbo vietos funkcionalumą, apimantį gavėjo adreso koordinačių siuntos nuotraukoje nustatymą ir jų nusiuntimą į SAS. Paslaugų detalizacija pateikiama Susitarimo priede Nr.1 2. Susitarimo 1 punkte nurodomų paslaugų kaina – 18 760,00 Eur (aštuoniolika tūkstančių septyni šimtai šešiasdešimt eurų) + PVM. 3. Už Susitarimo 1 punkte nurodomas paslaugas Pirkėjas sumokės Tiekėjui Sutarties 2.8.2 punkte nustatytu terminu.	consignee address coordinates in the parcel photo and send them to SAS together with the photo; Also, according to Article 97 (2) of the Law of the Republic of Lithuania on Procurement by Contracting Entities in the Field of Water Management, Energy, Transport or Postal Services have concluded this amendment (hereinafter referred to as the Amendment) to the Contract and agreed: 1. Pursuant to the Contract, the Supplier will additionally provide the Buyer with the following services - will install additional functionality of the preparation workplace, which includes setting the coordinates of the recipient's address in the parcel photo and sending them to SAS. Details of the services are provided in the Annex 1 to the Amendment. 2. The price of the services referred to in Clause 1 of the Amendment is EUR 18,760.00 (eighteen thousand seven hundred and sixty euros) + VAT. 3. For the services specified in Clause 1 of the Amendment, the Buyer shall pay the Supplier within the term specified in Clause 2.8.2 of the Agreement.
4. Kitos Sutarties sąlygos nesikeičia ir lieka galioti. 5. Susitarimas sudaroma 2 (dviem) vienodą juridinę galią turinčiais egzemplioriais, po vieną kiekvienai Šaliai.	4. The other terms of the Contract remain unchanged and remain in force 5. The Amendment is drawn up in two copies each having equal legal force, one to each of the Parties.
Pirkėjas/ Buer **AB Lietuvos paštas** Registruotas buveinės adresas J. Jasinskio g. 16, LT-03500 Vilnius, Lietuvos Respublika Įmonės kodas 121215587 PVM mokėtojo kodas LT212155811 Tel. +370 700 55 400 Faks. (+370 5) 216 3204 El. p. info@post.lt A. s. LT71 7044 0600 0018 7388 AB SEB bankas Banko kodas 7044	**Tiekėjas/The Supplier** **Mailroom Solutions** Registered office address Matti Visannin kuja 15, 60100 Seinäjoki, Finland Legal entity code 2065249-5 VAT payer code FI20652495 Tel. No. +358 207871300 Email: Sales@mailroomsolutions.com Account number FI37 5077 0220 0399 00

Proposal and description of new functionality

1. Current functionality

Camera	Camera sends unsolicited pictures to Client when ever image has changed enough from previous one (counted from white pixels). ROI information is sent with image.

	Image is buffered into memory. Last arrived image is always used.
Sorting Client	When weight information arrives, and packet is resting on scales, buffered image is sent to SAS along with ROI information.
	After SAS answers with sorting decision it is shown in the User interface.
SAS	

Scales	Scales sends unsolicited weight information to Client when weight changes more than 25g (currently, this can be adjusted)

	When mail item is lift from the scales weight information is sent to SAS.

Image and weight information is always shown in the UI. Sorting decision is shown when applicable.

Sorting Client User Interface

There are two processes running simultaneously and asynchronously, meaning that every action in the process will not block other actions so they can run at the same time.

Camera

Imaging Device sends images to Sorting Client every time it detects a new image. New image is deduced from counting delta from the previous picture and using a certain threshold which must be exceeded. This threshold can be changed in the configuration file. There is also a threshold setting to filter totally black or nearly black images in the configuration file.

This means that Sorting Client does not ask images from Imaging Device and has no control over it.

Imaging Device also recognizes the ROI area where the recipient's address probably is. Probability to find the correct ROI area approaches 100 percent but never reaches it. If the ROI area is not found, Sorting Client sets the whole image as ROI area.

After the Sorting Client has received the image it stores it into memory. Only the latest image is in the memory so any other image will be overwritten.

In practice the latest image is in a high probability 'good' one. When the operator places shipment under the camera, the camera can accidentally take a picture where operator hands are visible. But when the operator removes his hands from the view, camera takes another picture overwriting the 'bad' one.

Scales

Scales also work in a way that it sends weight information whenever it detects change in the measurement. There are certain algorithms in Sorting Client to detect what is actual change and

what should be discarded as faulty one, for example external vibration. This is controlled by adjusting the threshold value in the settings file.

When the Sorting Client algorithm detects that a mail item is placed on the scale (weight value goes up over the threshold) and scales have stabilized (there is no movement in a certain amount of time) it starts a 25ms interval timer. Timer is used because scale value can arrive before the image.

Timer checks if the Sorting Client has an image in store that is not already sent to SAS. If one is found, it is sent to SAS. Timer is killed and a certain flag is raised that this image has been sent. If for some reason the timer is restarted and the image has not changed, the flag is used to prevent resending the same image.

When Sorting Client detects that the mail item has been lifted from scales it sends weight information to SAS. Flag preventing resend is lowered.

There are possible pitfalls:

-    operator accidentally presses the scales with thumb etc. and triggers sending the image; the flag should prevent this but
-    operator accidentally presses the scales with thumb and lifts his thumb; scales inform Sorting Client that weight value has decreased and Sorting Client triggers sending the weight information to SAS prematurely

Operators must be trained so that he does not touch the scales with anything but the actual mail item. Operator must always wait for the sorting decision to be displayed on screen before he lifts the mail item from scales. No other mail item or any other object can be near the scales so they could touch the scales accidentally.

If the operator changes the position of the mail item in the scales to better align the address horizontally this will cause the image to be sent to SAS. This is because the image changes whenever a shipment is repositioned and the system thinks that it is a new mail item. This repositioning is highly not recommended.
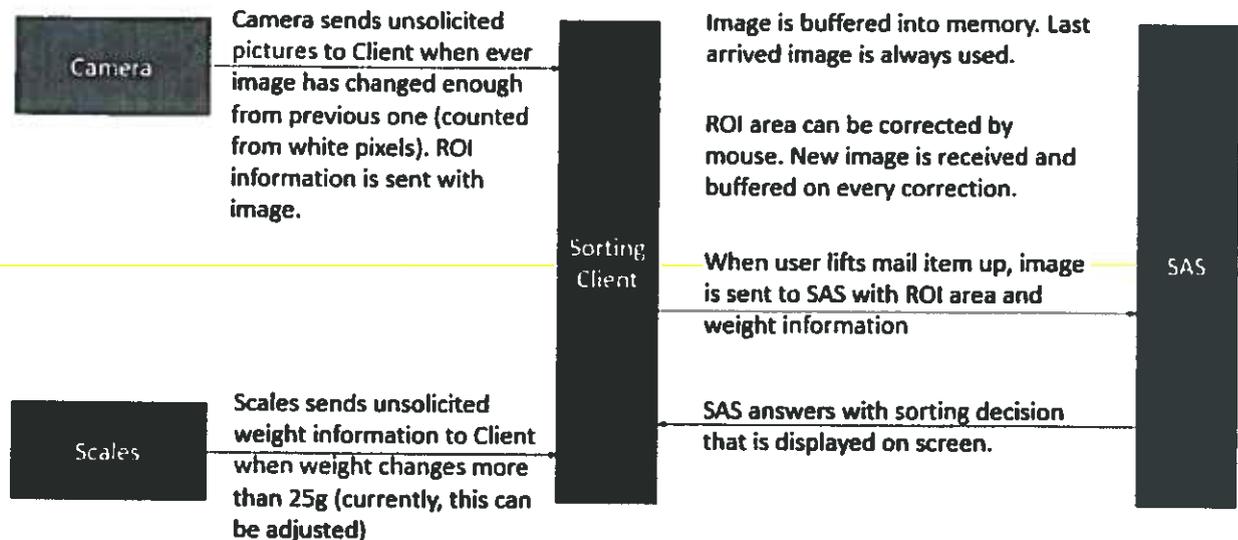
2. Changed functionality

Camera	Camera sends unsolicited pictures to Client when ever image has changed enough from previous one (counted from white pixels). ROI information is sent with image.		Image is buffered into memory. Last arrived image is always used. ROI area can be corrected by mouse. New image is received and buffered on every correction.	
		Sorting Client	When user lifts mail item up, image is sent to SAS with ROI area and weight information	SAS
Scales	Scales sends unsolicited weight information to Client when weight changes more than 25g (currently, this can be adjusted)		SAS answers with sorting decision that is displayed on screen.	

Image and weight information is always shown in the UI. Sorting decision is shown when applicable.

Sorting Client User Interface

Changed is almost the same as original with few changes to enable ROI correction.

Camera

Camera sends images and auto detected ROI areas. User is now able to select another ROI area by using the mouse. When another ROI area is selected, the camera sends another image with new ROI information which is buffered into memory. The latest image and ROI information is always used.

It must be understood that auto ROI is still used. Auto ROI tries to automatically detect the correct ROI area, so the operator does not have to select ROI every time.

Scales

Scales send weight information but instead of using the scales to stabilize as a trigger of sending the image to SAS, image sending is moved to when the operator lifts shipment from the scales. This enabled the possibility to correct the ROI.

Same pitfalls apply here:

- operator accidentally presses the scales with thumb and lifts his thumb; image is sent to SAS since the system thinks that mail item has been lifted. ROI correction is not possible anymore.

In this case the operator can realign the mail item to even the address area horizontally. The operator must be very careful though not to alter the weight too much or else the system might think that the shipment is lifted.

3. Scope of supply

The described changes in this document consists of enabling ROI correction by the operator. The ROI correction means all the functionalities that are needed for the operator to change the ROI that

is detected by the auto_ROI or if one is not found to select the ROI from the image by using the mouse.

Any other functionality is out of the scope of these changes.

4. Process changes' impact on shipment handling time

The described process changes will result in an increase in the shipment handling time. The shipment handling time will increase no more than 1.5 s / shipment.

5. Prices

Price calculation	amount	Unit price	Total
Sorting Client engine to accommodate the new process model	52		
Changes in the customer centric code	24		
Imaging device changes	24		
Internal api changes	18		
Testing	16		
Total one time investment excl. VAT and all other taxes			18 760,00 €

Please note: All prices excluding VAT and all other taxes

Duties, Taxes, etc.

All costs (without the exception of and not limited to duties, taxes, commissions, harbour duties, import duties, costs of customs clearance, wharfage costs, income tax, fees and charges payable in the country of destination) in connection with the importation, final assembly of the equipment as well as any other costs, levies, commissions or duties to be levied outside the country of manufacturing are excluded from our prices and shall be borne directly by the Buyer.

6Delivery time

Within 6 weeks DDP Vilnius Lithuania after the order is effective, but not later than 5 of September 2020.