



UPU | UNIVERSAL
POSTAL
UNION

Universal Postal Union

EMS Cooperative

EMS Simple Monitoring and Reporting Tool (SMART), EMS Operational Guide and related components

Statement of work

September 2022



Table of contents		Page
1	Introduction and contractor's tasks	3
2	Glossary	6
3	Description of EMS SMART	9
3.1	General description	9
3.2	Cockpits and dashboards	9
3.3	Types of measurement	10
3.4	EMS SMART statistics repository	12
3.5	Other functionalities of SMART	12
3.6	External links menu	14
3.7	Access levels	14
3.8	SMART – Integration platform	15
3.9	Side bar	15
4	Technical details of EMS SMART	16
5	Description of the EMS Operational Guide and single sign-on	18
6	Technical details of the EMS Operational Guide and single sign-on	23
7	Public track and trace	23
8	Connection with the i-Care system	24

1 Introduction and contractor's tasks

The Universal Postal Union (UPU) is an intergovernmental organization and specialized agency of the United Nations, based in Berne, Switzerland. It hereby invites tenders concerning the implementation of standards adopted for the operation of the Express Mail Service (EMS) by designated operators. The selected contractor will provide services in accordance with a signed contract and in line with the UPU's general terms and conditions.

Bidders are invited to submit tenders for the provision of services as set out below.

N.B. – A glossary of terms and abbreviations is provided in section 2.

Task 1 – Provision of maintenance and support for the EMS Simple Monitoring and Reporting Tool (EMS SMART), EMS Operational Guide, single sign-on, track-and-trace function for the EMS Cooperative website, and interface with the i-Care system

This task comprises maintenance and support for existing systems, including EMS SMART and the EMS Operational Guide, the production and integration platforms, the development testing environment, single sign-on, the public tracking function for www.ems.post, and the interface for the reference data feed and tracking function for the EMS Cooperative's i-Care system. The contractor should reuse the existing system components and new development should be performed on top of the existing code base.

EMS SMART, the EMS Operational Guide and the single sign-on components are currently hosted on the Amazon public cloud infrastructure (Amazon Web Services – AWS). These systems provide interfaces to the public tracking function on the EMS website and the tracking function in i-Care (on AWS). The contractor should have the necessary knowledge and expertise to perform maintenance of systems hosted on AWS and to use the related technology stack.

There are three different environments:

- Production environment;
- User acceptance testing environment (accessible to the EMS Unit and operators);
- Development environment (accessible to developers only).

The contractor should use the hosting solutions provided by the UPU as mentioned above, but under its own technical management, and ensure at least the current level of system performance, security and stability. Based on changes to the size of the database, and system performance, usage and further development, the contractor should inform the UPU if the hosting space on AWS needs to be expanded or of any other requirements to ensure the stable and fast performance of the system. The contractor should be able to work with AWS services on behalf of the UPU at the technical level.

The systems are required to operate with an availability rate of 99.4%. System stability is therefore of great importance. In the event of a disaster, the systems must be recovered within four hours.

EMS SMART will be required to respond to requests from an end user within the same time frame as at present. Pages for operators with the largest volumes of data may take slightly longer. The system is used by approximately 600 active users from 165 countries and territories, with an average of 100 logins by fewer than 100 users per day.

EMS Operational Guide page rendering: as the system needs to be available and usable by postal operators around the world, its usability, in terms of rapid rendering of pages following a user action (e.g. clicking on a button or a link), is an important factor.

The admitted page rendering shall be maintained at the current level, ensuring the responsiveness and usability of the tool. Ideally, users should experience a delay of no more than 3 seconds for the rendering of complex pages. Very complex reports for countries with high volumes may occasionally take a few seconds longer.

Database query execution: database query performance shall be maintained at the current level. The value of the query execution time is also displayed in a header section of the webpage.

The current hosting solution enables these requirements to be satisfied.

Any system downtime for maintenance or the implementation of changes must be agreed with the EMS Unit sufficiently far in advance that appropriate notification can be provided to users. EMS SMART downtime should be kept to a minimum and only in very rare cases should it be visible to users. Scheduled maintenance may be performed subject to a minimum of two weeks' notice. When system downtime is scheduled, a courtesy message in multiple languages shall be published to inform users that the system is under maintenance and to indicate the duration of the maintenance period (times to be provided in GMT).

System maintenance should include regular software updates.

A service desk should be available to the EMS Unit during normal business hours (CET/CEST) from Monday to Friday via e-mail and telephone. The submission of incidents by e-mail is highly preferable to a ticketing system.

Expected incident resolution is as follows:

<i>Priority</i>	<i>Log/reply</i>	<i>Resolution (depending on complexity)</i>
1 (high)	1 hour	1-2 business days
2 (medium)	3 hours	Up to 4 business days
3 (low)	5 hours	Up to 8 business days

The UPU service desk and superusers in the EMS Unit are responsible for first- and second-level support. The contractor will have contact only with the representatives of the EMS Unit. Incidents should be submitted to the service desk by the EMS Unit on behalf of users.

Incident precedence as per the categories listed above is to be defined by the EMS Unit. The escalation method should be defined with the contractor and requests are to be escalated by the EMS Unit if an incident is not resolved within the expected time.

The contractor should provide support for the EMS Unit's report-generation activities in SMART, prepare synchronizations of the UPU code lists, and be available for urgent troubleshooting during report generation, which takes place over one to two days on a monthly basis according to an agreed schedule.

Maintenance of EMS SMART includes monitoring system stability, fixing minor bugs and implementing minor improvements to functionalities, such as adding and removing new designated operators if needed, and making label adjustments. The contractor is expected to monitor the connection to the EDI data platform and liaise with the database support team in the event of any problems with the EMS Bubble.

Maintenance of the EMS Operational Guide and single sign-on includes monitoring, troubleshooting, adding new user roles or changing the privileges assigned to current user roles, implementing minor improvements to EMS Operational Guide functionalities, etc.

Maintenance of the track-and-trace feature includes monitoring to ensure sufficient capacity, troubleshooting, and implementing changes to data display restrictions (which may occur on an infrequent basis).

The contractor must also monitor the i-Care interface to ensure that it remains operational in accordance with the agreed 99.4% availability rate, with maintenance windows to be scheduled during the remaining 0.6% downtime.

The contractor should ensure transparency and provide the UPU with a list of the daily tasks performed for system maintenance and support purposes.

The data contained in the EMS Operational Guide, and especially in EMS SMART, must be protected against unauthorized access. Data security is therefore of great importance.

All necessary software licences are the responsibility of the contractor. No separate or additional charges may be made to the UPU in this regard. The contractor should inform the UPU as to the licences required and implemented to operate the systems.

The contractor should ensure the smooth takeover of all existing systems and applications from the current provider, without performance interruptions. It should be noted that international accounting is dependent on the correct and timely calculation of certain parameters.

If needed, the UPU will provide the contractor with training on EMS processes and related systems, over the course of several days.

The contractor must also ensure that the set-up of the connection with the EMS Bubble, the secure EDI data platform and the PTC systems is extremely secure and reliable.

The transition should be complete by 5 April 2023.

Regular meetings should be held with the UPU to discuss system needs, plans and open issues. While developments are in progress, these meetings are to be held weekly. Liaison via e-mail is as required, on an almost daily basis.

The working language, and the language used for all documentation, should be English.

Task 2 – Ad hoc developments to all EMS systems and components listed above

Changes may need to be made to EMS SMART each year. For example, this may include changes to calculation rules, adjustments of the measurements in accordance with new targets and standards, or the development of new reports.

Any newly developed measurements, reports and functionalities usually need to be added to the usage statistics table, alerts menu and activity audit.

From time to time, changes may need to be made to the EMS Operational Guide and single sign-on. For example, this may include the addition of new queries or functionalities to the EMS Operational Guide or additions to usage statistics.

All new developments should be documented, in detail and in a timely manner, with regard to calculation rules and technical specifications. Updates to the existing documentation may be required. A new development is considered as delivered after final acceptance by the UPU and on condition that the relevant documentation has been provided.

The scope of ad hoc developments is not defined in advance. Such requirements may be triggered by changes to UPU regulations, members' requests or business needs. The scope of such development requirements is drawn up on a case-by-case basis and the necessary effort evaluated by the contractor. The UPU then decides whether or not to proceed with the development. Up to 80 days of development are usually required each year. In the event of a special project or extensive set of measurements, this number may be greater. The contractor should be able to accommodate the necessary development time if the UPU bodies require certain changes by a specific deadline.

The contractor should have the necessary business understanding and expertise to advise the UPU on technical requirements based on business needs, and shall contribute to the process of drawing up the scope of requirements, in consultation with the UPU, with regard to the feasibility and technical efficiency of the required developments. The contractor should be able to propose relevant solutions, offering a modern design with a user-friendly and efficient layout of new features in EMS SMART and the EMS Operational Guide.

All developments should first be applied to the test platforms, which are copies of the production platforms, on which new features can be tested by the UPU and test groups of EMS Cooperative members.

The development process is often iterative, especially in the case of new measurements or reports. Owing to the complexity of preparing initial requirements without a simulation, it is difficult to evaluate whether requirements are complete or entirely correct and do not interfere with existing calculations. The contractor should be prepared to work using this method.

Task 3 – Development of a new EMS SMART functionality

Based on the needs of the EMS Cooperative, an additional EMS SMART feature needs to be developed. The contractor will be required to develop this new function based on the specifications provided in Annex 1. This is a one-time assignment. Any other developments required will be treated as ad hoc developments.

All developments should be documented in a timely manner, including the calculation rules.

N.B. – The subsequent sections 2 to 8, as well as the annexes to this document, except Annex 1, are intended for information purposes aimed at enabling the contractor to understand the current set-up; they are not intended as development requirements for the contractor.

2 Glossary

<i>Term or abbreviation</i>	<i>Definition</i>
Ad hoc groups	Groups of designated operators defined by the EMS Unit, differing from other groupings such as by region
Calendar days/ elapsed days	Number of days between two dates, i.e. the number of days to be added to the day earliest date to arrive at the day latest date. In the quarterly marketing reports, the number of calendar days is equal to Day (Delivery) – Day (EMA).
CAPE	Computer-aided post via EDI. This represents the suite of receptacle-level transactions i.e. PREDES, PRECON, CARDIT, RESDIT, RESCON and RESDES messages.
Delivery/ delivery date	The earliest of the EDH, EMH and EMI events.
Derived events	Events that are derived from an aggregation level. For example, the dispatch closed timestamp and the planned transport are derived from the PREDES transaction; the RESDES timestamp is derived from the receptacle scan captured by the operator to which the dispatch is addressed.
Direct link	When EMS items are inducted in the network by Operator A, addressed for delivery to Operator B, and Operator A manages the dispatch to Operator B, the Operator A to Operator B link is referred to as a “direct link”. See also “transit link”.
Dispatch	A selection of one or more receptacles belonging to a particular mail-category and mail-sub-class being sent from an office of exchange in one country to an office of exchange in another country. (Source: UPU M84 standard)
DO	Designated operator: a party designated by the government to deliver postal services in its country (see HBC – home base country). Designated operators are identified by means of an alpha-3 code assigned by the UPU, e.g. JPA.
E2E	See “end-to-end”.
e-Buyer Post	In e-commerce, the e-Buyer Post is the designated operator in the buyer’s country. The suffix of the S10 merchandise return solution (see “MRS”) identifier indicates the home base country of the e-Buyer Post.
e-Seller Post	In e-commerce, the e-Seller Post is the designated operator in the seller’s country.
EDI	Electronic data interchange
EDIFACT	Electronic data interchange for administration, commerce and trade.

<i>Term or abbreviation</i>	<i>Definition</i>
EDI mailbox	The electronic address used by the DO and other parties, such as airlines and border agencies, to exchange EDI transactions. N.B. – There is currently no UPU code list linking an EDI mailbox owned by a postal party to its designated operator; the contractor shall ensure the implementation of a mechanism to link a party to an operator.
EDI reporting link	EDI reporting links are used in the calculation of statistics relative to timeliness and data compliance. An EDI reporting link is a combination of the DO/party sending EDI transactions and the DO/party to whom the EDI transactions are addressed. For EMSEVT EDI transactions, the EDI reporting link is further identified by the first character of the item prefix.
EDI transaction	Data that is exchanged in an electronic format, generally via a value-added network such as UPU POST*Net or Open Source (GXS). EDI transactions are exchanged between EDI mailboxes; an EDI mailbox belongs to a single party only. UPU code list 160 contains the link between EDI mailboxes and the owner party (as well as other information).
Elapsed days	See “calendar days”.
EMS Bubble	The secured data storage platform housed by the PTC, which receives raw copies of all EDI data for EMS.
EMS Cooperative	A group of designated operators within the UPU that work together on operational, commercial, technical and economic matters concerning the EMS service.
EMSEVT – item events	Individual points in the postal operations pipeline. For example, “EMA” is posting.
EMS management team	The UPU EMS Unit. Members of the EMS management team have read access to the service performance statistics of all operators participating in the project.
EMS project group	A group of designated operators that induct or deliver EMS items in the network. Only operators that are members of the UPU EMS Cooperative can set aspects such as measurement rules, statistics, and report access and layout. Regional groups within the EMS project group may set different targets for all or specific statistics. Regional groups cannot change the rules governing how statistics are calculated. Regional groups may request additional reports or statistics.
End-to-end	The journey of an EMS item from posting (EMA) through to collection and delivery (EDH, EMH, EMI). End-to-end performance for EMS items is measured against standards and in calendar days.
ETOE	Extraterritorial office of exchange, i.e. an international mail processing centre (see “IMPC”) that is located in country that is not the home base country (see “HBC”) of the operator in question.
Export	See “leg 1”.
HBC	Home base country, indicated using the ISO alpha-2 country/territory code of the UPU designated operator, e.g. GB for UPU designated operator GBA.
i-Care	The EMS Cooperative’s Internet-based inter-operator customer service system.
IMPC	International mail processing centre: facilities operated by designated operators to handle international mail. IMPCs can operate as an office of exchange (see “OE”), i.e. the origin/destination of international dispatches, and/or as a mail unit, i.e. the origin/destination of an international consignment. IMPC codes are maintained by the UPU and published under code list 108.
Import	See “leg 3”.

<i>Term or abbreviation</i>	<i>Definition</i>
Item	The smallest unit of mail which can be uniquely identified. It is always ¹ transported in a receptacle and may have relationships to other classifying entities if the item can be classified more specifically than the receptacle that contains it. (Source: UPU M84 standard)
Item event	An event that is captured/registered at individual item level; item events are reported in EMSEVT EDI transactions.
Item lifetime	The period that must elapse before a given item ID can be reused to track events on the same reporting route for a new item. The S10 standard specifies 12 months.
ITMATT	A UPU message used to share information about the attributes of an item.
Leg 1	The transport stretch between EMA (posting/collection) and EMC (departure from the outward OE). Also referred to as "export".
Leg 2	The transport stretch between EMC (departure from outward OE) and EMD (arrival at inward OE). Also referred to as "transport".
Leg 3	The transport stretch between EMD (arrival at inward OE) and delivery. Also referred to as "import".
Mail class	An alpha-1 code that identifies the class of mail (letters, parcels, EMS, empty bags). See UPU code list 116 for the list of valid codes.
MRS	Merchandise return solution. MRS items are unwanted goods returned free of charge to their origin. These items bear an ID from the returning operator. For tracking and service performance purposes, the items should be measured against the defined standards for the product. However, these items are not included in the normal payment reports, but are processed according to the return arrangements between the e-Buyer Post and the e-Seller Post.
OE	Office of exchange: a facility that is the origin or the destination of an international dispatch. Office of exchange codes are maintained by the UPU and published under code list 108.
Official report	A report or set of reports requiring validation by the EMS Unit prior to publication.
Owner operator	For UPU S10 identifiers, the operator whose HBC matches the suffix of the item ID.
PTC	Postal Technology Centre of the UPU
QoS	Quality of service, based on measurement of the number of days or elapsed time between events.
Receptacle	A uniquely identifiable collection of one or more letters, packets, empty bags or items being transported together as part or all of a dispatch. (Source: UPU M84 standard). A receptacle is identified by means of a 29-character item ID/barcode.
Regional Coordinator	A member of the UPU EMS Unit, in charge of a group of operators participating in the project. Regional Coordinators have read access to the service performance statistics of each operator within the group.
Reporting link/ reporting route	A reporting link or reporting route identifies the elements that are used to correlate the information from various sources that apply to a given item. These elements are the origin operator (inductor), the origin country (country where the item is inducted in the network), the destination operator, and the destination country.
Return link	A link whereby an item is to be sent back to the origin operator, identified by means of EMSEVT events where the recipient of outbound events is the owner/origin operator.

¹ In situations with direct induction at a domestic sorting centre in the destination country, the dispatch process is bypassed and thus items are not transported in a receptacle.

<i>Term or abbreviation</i>	<i>Definition</i>
RoT	Return of tracking. Measurement of the presence of an event against a selected event.
Time window	See “item lifetime”.
Tracked entity	An individual item or receptacle.
Transport	See “leg 2”.
Transit link	Two scenarios exist: 1 EMS items are inducted in the network by Operator A, destined for delivery by Operator B. Operator A dispatches the item to Operator T for forwarding to Operator B. ⇒ <i>The Operator A to Operator B link is a transit link.</i> 2 EMS items are received by Operator B but are not destined for delivery by Operator B; transit planned by the origin operator or the item has been misrouted at origin. Operator B forwards the item to Operator C. ⇒ <i>The Operator B to Operator C link is a transit link.</i> See also “direct link”.
VolRef	Volume of items.

3 Description of EMS SMART

3.1 General description

The EMS SMART online reporting system is fed by the EDI messages that are collected in the EMS Bubble data pool hosted by the UPU’s PTC, as well as external reference data. The initial requirements that were used to build the system can be found in Annex 2. The system has been further developed since that time and is now more advanced, containing certain highly complex elements, such as the elapsed time calculator.

EMS SMART can be used on various devices, including desktop computers, tablets and smartphones. The screen is adjusted accordingly.

The EMS reporting system comprises several modules:

- EMS Calculation module: calculation of performance on selected tracked entities and EDI transmission;
- EMS Statistics repository: filing of aggregated statistics;
- Online reporting tool: statistics from the EMS Statistics repository are grouped into reports and either published online or made available via a reporting hub. Using the online display, it is possible to drill down to individual entities.

EMS SMART is currently updated twice per day with new data arriving from the EMS Bubble, with calculations performed with each data update in order to refresh the daily view. It may be necessary to add further updates if capacity allows. The minimum requirement is twice per day. The statistics are presented for the last 45 days, for the last six weeks on a day-by-day basis, and for the last 15 months, with the figures for each month being added once the statistics have been frozen following the monthly calculation.

The sets of statistics (presented in dashboards and Excel reports) are versioned. Data versions are stored and the reports can be rerun if errors are discovered (e.g. missing reference data). The contractor should be prepared for this to occur on an occasional basis.

3.2 Cockpits and dashboards

EMS SMART has four cockpits that display sets of indicators on the same screen with performance for the last 10 days, and 15 thematic dashboards with 321 calculated indicators. These can be accessed through the horizontal menu and a vertical menu on the left-hand side.

The four cockpits relate to service performance, data quality, service information and awards compliance.

The 15 dashboards relate to export, transport, delivery, end-to-end performance, transmission timeliness, ratios, M40 compliance, end-to-end elapsed time, end-to-end zone 1 to zone 1, service information, weight distribution, time in customs, volumes, returns and transit. Users can choose to view the results on the dashboards as numbers and as percentages, for inbound or outbound performance for most indicators. Most dashboards offer the option to display compliant and non-compliant performance figures based on the user selection. For example, separating on-time and late items makes it easier to investigate irregularities.

The awards compliance cockpit is calculated for two years simultaneously during the first quarter of each year, with the earlier year subsequently being removed. The indicators for this cockpit are calculated for the year to date and are linked with the respective dashboards.

Screenshots of the cockpits and most of the dashboards, as well as a list of indicators currently calculated, can be found in Annex 3.

The aim of the dashboards is to give users an indication of where they stand with regard to the targets set in the different programmes of the EMS Cooperative:

- The user can select inbound or outbound traffic, as well as positive/compliant or negative/non-compliant results.
- Members have access only to statistics concerning their own traffic or the traffic that they have delivered. Superusers have access to all statistics. Several user roles exist, with varying privileges and access rights. A more detailed description is provided in the single sign-on section.
- The EMS SMART online reporting module presents performance as calculated at the day/time of cut-off for report generation.
- From the dashboard, users can drill down to different levels of detail (e.g. outward OE, day of arrival) for individual items. Users can also download the diagnostic flat files and, in most cases, where the number of items does not exceed 100, they can track and trace items directly from the dashboard with one click.
- In the EMS SMART online reporting module, the results of certain indicators for the current month can be presented with a note or indication that the results are not yet final.
- The statistics presented in the monitoring module may be calculated on the basis of a different selection of items than for the reporting module, e.g. the EMA over EMC ratio in the reporting module may be calculated on the basis of traffic delivered at destination. In the monitoring module, the aim is to identify issues in capturing and/or transmitting the EMC event as quickly as possible, hence the statistics may be calculated on the basis of items which received an EMA event.
- There is a set of calculation rules for each indicator. If the same indicator is reused, the same calculation rules are used for that indicator.
- For data sourced from external parties, daily or weekly updates are not anticipated; such data will be updated monthly at the most.

There is also an elapsed time calculator tool, which calculates the elapsed time between EMSEVT events and some CAPE events, in various combinations, between one and a selection of operators, on request. The tool performs complex matches between items and receptacle information, with the results presented in Excel reports. There are special rules for the reports run and storage by operators/users.

All dashboards allow for the extraction of data in Excel format and for the presentation of data as numbers or percentages, as well as in a graphical view. The graphs can also be extracted.

3.3 *Types of measurement*

Service performance against standards

To calculate performance against defined standards for export, transport and delivery, EMS SMART takes into account the calculation rules specified by the EMS Unit, the service standards tables prepared by the EMS Unit, non-working days (i.e. public holidays and weekends), and zones affected by force majeure. All of this

information is constantly synchronized from the EMS Operational Guide. Calculations are performed individually for each operator for each link, as well as globally.

The EMS reporting system collates information relative to tracked entities according to the rules fixed by the EMS Unit. For example, Operator A sends events EMA, EMB and EMC to Operator B; Operator B does not send an EMD event, but one EMD event is sent by Operator C to Operator A. The EMD event sent by Operator C is filtered out when measuring the EMD/EMC statistics for Operator B.

The EMS reporting system can collect from the EDI repository the time at which specific events selected for measurement were posted on the EDI network.

The performance results show on-time and late results, as well as various anomalies.

The same type of measurement is conducted for end-to-end performance, but includes a prioritized order of anomalies.

Transmission timeliness

- For the measurement of transmission timeliness, the tracked entities may be a message, an event tag or a receptacle. There is no assembly step.
- The EMS reporting system selects the EDI messages according to the rules set by the EMS Unit.
- The EMS reporting system can filter out specific occurrences, e.g. retransmission of older information, multiple RESDES messages for the same receptacle.
- For EMSEVT messages, the network timestamp is passed on to any event found in the message.
- For PREDES, PRECON and CARDIT messages, the network timestamp is assigned to the dispatch or consignment ID.
- For RESDES and RESCON messages, the network timestamp is passed on to any receptacle in the response message.
- The information about calculated entities will remain accessible for a period as defined by the EMS Unit. Information is used to support drill-down to entity level in the online reporting module or to recalculate performance to cater for exceptional situations such as force majeure.

M40 compliance

EMS SMART compares transmitted EDI messages against a subset of rules from the UPU M40 messaging standard, taking into account all message technical data elements.

Other calculations

Other calculations include a comparison of the number of events transmitted by operators over a period with other events for the same items, e.g. the number of EMD events over EMC. This type of calculation requires the system to find all information relating to the same item and to apply a complex set of rules. The most complex calculations concern return and transit events, as one item can have several different origin and transit operators, including return routes.

Certain reports serve as a basis for international accounting worldwide and therefore need to be correct at all times.

Many measurements are also used for the worldwide EMS Cooperative performance awards programme.

Certain measurements may need to be repeated and recalculated if specific situations occur.

The detailed calculation rules are the intellectual property of the UPU. They are recorded and can be provided only to the selected supplier.

3.4 EMS SMART statistics repository

The statistics repository is the core of the EMS reporting system. It holds volume information derived from the calculated entities in the calculations layer, e.g. Operator A sent x EMA events to Operator B on day dd/mm; y out of the x items received an EMC event.

The SMART statistics are aggregated at different levels, e.g. operator, region, membership during publication. Owing to the central repository, drill-down functionalities can be offered through the online application with regard to statistics calculated locally in the EMS reporting environment:

- The EMS reporting system can flag certain items for exclusion from or inclusion in specific reports. For example, merchandise returns (unwanted goods) bear an item ID compliant with the identifiers used by the e-Buyer Post. These items are kept in the service performance report (measurement against standards), but are filtered out from the payment reports and instead included in a dedicated payment report.
- More than one set of statistics may be derived from the calculated entity records.
- Statistics provided by external service providers are converted into a compatible format for storage in the repository.
- The EMS statistics repository can freeze identified statistics from updates.
- Statistics in the central EMS statistics repository may be subject to validation by the EMS Unit prior to publication in the online application.
- For official reports, the EMS statistics repository holds only one validated occurrence of a set of statistics per defined period.
- Each set of statistics is uniquely identified in the EMS statistics repository.
- The EMS Unit may ask for simulation reports, e.g. a rerun of previously calculated statistics in order to confirm that a particular issue has been resolved or to estimate impact on service performance following a review of the delivery standards. These statistics are accessible only by the EMS Unit via the online application and will not be used in official reports.

3.5 Other functionalities of SMART

EMS SMART also offers the following functionalities.

3.5.1 Reporting hub

The reporting hub is a download centre, where 27 types of report are published for individual operators and for the EMS Unit. It also includes a report generator tool.

- Once the EMS Unit has validated the statistics, the EMS reporting system can generate the requested reports in Excel, together with the supporting diagnostic file, for publication in the reporting hub.
- The report generator allows superusers to select a report type, a period, a run date, and the periodicity, and to generate reports for all operators.
- Access to specific reports may be subject to authorization.
- Members of the EMS Unit are able to download, for a given period and instruction, all reports and diagnostic files for a single operator, for all operators in a region, or for all operators.
- The names of the folders in the reporting hub indicate the period covered by the reports and the production data.

3.5.2 Tracking module

This functionality provides online tracking and tracing of receptacles and items. It allows users to track multiple items at the same time. The dashboards offer a direct link to the tracking module. Tracking shows all events for items and receptacles available in the EMS Bubble in a user-friendly display with colours, listed in chronological order, including the mailboxes/EDI addresses that transmitted the data, location, destination country as per the EDI message, reason codes, action codes, flight details and other message details as specified,

extracted from the messages where required. There is a separate tab with a timeline view offering details of each event, and a special view showing a complete EDI file containing the scan with properties and contents.

3.5.3 Tools menu

The **tools** menu offers the following functions: activity audit, usage statistics, alert subscriptions and notification.

Activity audit – provides the EMS Unit with access to all activities in the system. Users can select the period, type, action, user, operator, context and description. The results can be downloaded in Excel format.

Usage statistics – allows users to run an Excel report with aggregated usage statistics for a desired period. The report can be sent by e-mail to the user.

Alert subscriptions – allows users to set up their own alert criteria and receive alerts by e-mail. When a new set of monitoring statistics is calculated, the EMS reporting system can launch a comparison against current performance and performance over a past period, and notify the subscribed users. The subscription can be set for a daily and weekly periodicity for a selected number of indicators. The thresholds can be left as those defined by default or set up by each user separately for each indicator. A special subscription to access the results of several operators is possible for certain types of user.

Performance Indicator ⇅	Enabled	ⓘ	EMS Defaults		Subscription Defaults	
			Threshold	Incl. Blanks ⓘ	Threshold	Incl. Blanks
∨ Outbound Export (0/11 enabled)						
On-time	No	<	95.0%	Yes	95.0%	Yes
1 day late	No	>	5.0%		5.0%	

Notification – allows users to create pop-up messages for all SMART users with announcements that are valid for a period of time.

3.5.4 Synchronization

This module allows users to synchronize the following types of reference data with EMS SMART:

- Validated export, transport and delivery standards;
- Operational Guide questionnaires containing public holidays, non-working days, etc.

3.5.5 Reference data

This module includes the following sections: operator, force majeure, code lists, statistic versions and alert EMS defaults. This module is available to superusers only.

Each set of reference data has an associated validity period (e.g. operator X is in test mode until February 2017; as of February 2017, operator X is in full production mode).

EMS SMART is required to support updates to any reference data.

EMS SMART is required to make use of the most recent version of the UPU code lists. However, in the event of recalculations, the version to be used must be that applicable to the period covered by the report.

EMS SMART is able to give read access to the reference data through the online reporting tool.

Further details of the sections are as follows.

Operator

This section includes an overview, per operator, of:

- EDI profile:
 - The operator's EDI mailboxes and the message versions that it can exchange from UPU code list 160a;
 - Network used;
 - The IMPCs used by the operator from UPU code list 108.

It also includes operator details, such as the territory time zone used, operator code, party identifier, country, region, membership status, tracking status, participation in the Pay-for-Performance Plan with the number of agreements and a list of partners, information on signature of the Pay-for-Performance Multilateral Agreement, validation of export, transport and delivery standards, and national holidays, synchronized with and/or drawn from the EMS Operational Guide.

Force majeure

As needed, this interface allows superusers to add cases of force majeure per operator and per leg, as well as zones affected by force majeure and other relevant information. This information is used in the calculation of service performance. The interface also provides an overview of open and closed cases.

Code lists

This section allows superusers to upload Excel files with information that is then displayed in the operator profile. Other reference data tables and the external file with performance figures, such as i-Care results, are uploaded to SMART in this section. The UPU code lists are also uploaded via this module.

Statistic versions

This tool is used to freeze the statistic versions, run calculation jobs and publish the monthly dashboard results. This is the source of the data used to generate Excel reports for the reporting hub.

Alert EMS defaults

This section is used to set up the default values per indicator for the daily and weekly alerts subscription tool. Indicators can be edited. The module also allows users to create a text message that is sent in the e-mail with the attached alert in the form of an Excel file.

3.6 External links menu

This menu includes two sections: the education hub and external links. The education hub includes links to the EMS reports guide on the EMS Cooperative website, and to training videos published on YouTube.

The external links section contains links to the main pages of the EMS Cooperative website and the EMS Operational Guide, a contact link that creates an e-mail to a specific address, and links to the disclaimer and confidentiality statements published on the EMS Cooperative website. The contractor will be expected to add and remove links, and to add other sections if necessary.

3.7 Access levels

EMS SMART offers different levels of access to different sections. Each type of role has a set of defined privileges. Each user is assigned a role under EMS Operational Guide user management, and the same credentials are used for single sign-on to all EMS tools.

3.8 SMART – Integration platform

The system comprises a test platform that is a copy of the production environment, allowing users to test all developments before implementation. It is also connected with the test platform of the EMS Operational Guide. These integration systems must be provided by the contractor and included in the maintenance services.

3.9 Side bar

EMS SMART includes a side bar with four buttons that appears both in the EMS Operational Guide and on the EMS SMART platform. This side bar uses the single sign-on solution, and allows direct and easy navigation between the applications that are connected by this system.

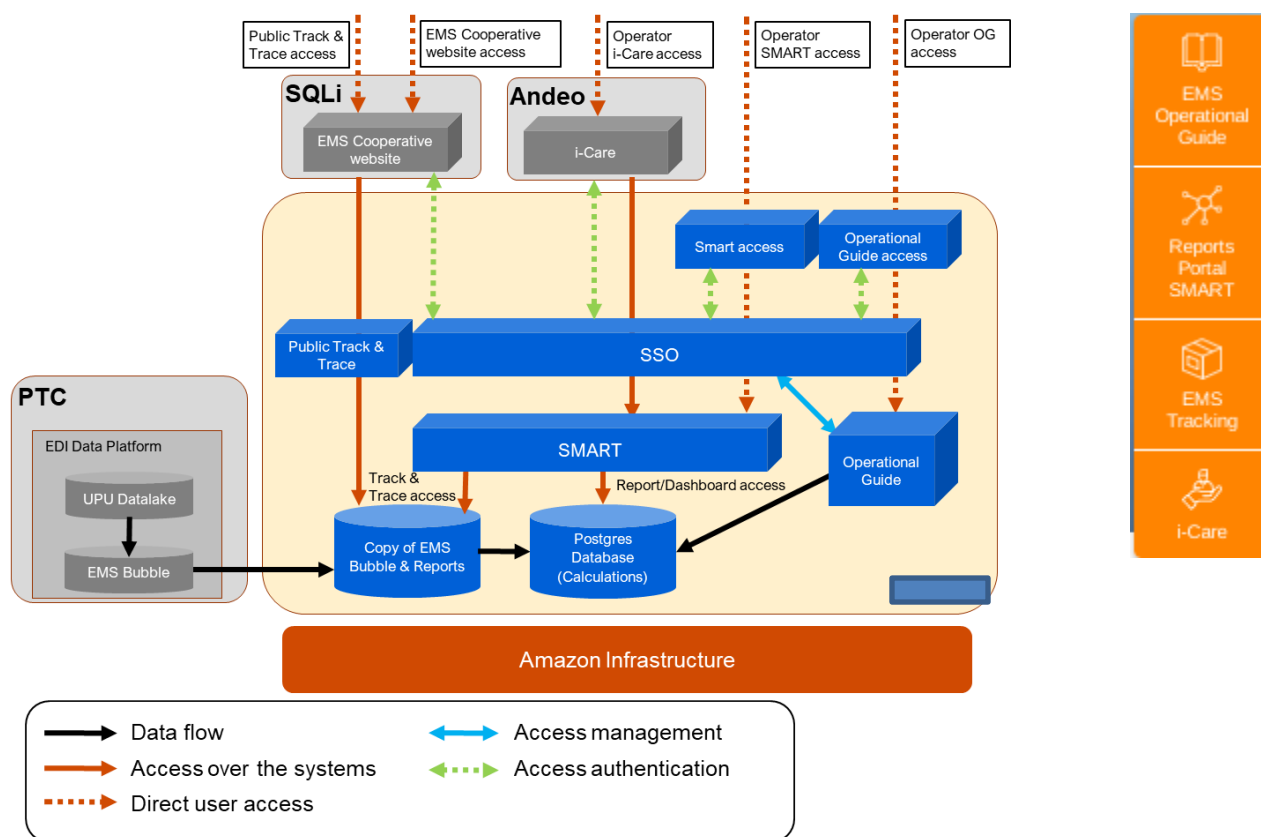
In both systems, the EMS side bar consists of a right-aligned toolbar that allows users to navigate as follows:

– From the EMS Operational Guide to:

- The EMS website
- EMS SMART
- EMS tracking
- EMS i-Care

– From EMS SMART to:

- The EMS website
- The EMS Operational Guide
- EMS tracking
- EMS i-Care



All users see all navigation buttons within the side bar, including those for applications to which they have not been granted access. The buttons are collapsed and expand when hovered over. The contractor shall maintain this side bar.

4 Technical details of EMS SMART

EMS SMART, the EMS Operational Guide and single sign-on are hosted on AWS. The Amazon cloud elements used are listed below:

- For the EMS Operational Guide and single sign-on:
 - CloudWatch (logs, monitoring)
 - Data transfer
 - Web server SSO-int (2CPU, 1 Gb)
 - Web server SSO-prod (2CPU, 2 Gb)
 - Web server OpGuide-int (2CPU, 2 Gb)
 - Web server OpGuide-prod (2CPU, 4 Gb)
 - Web server storage (all instances)
 - Load balancer (four in total, one per web server)
 - Global Accelerator (global CDN)
- For EMS SMART:
 - CloudWatch (logs, monitoring)
 - Data transfer
 - Web server int (2CPU, 4 Gb)
 - Web server prod (2CPU, 4 Gb)
 - Hadoop master int (2CPU, 8 Gb) x3
 - Hadoop master prod (2CPU, 8 Gb) x3
 - Hadoop slave int (8CPU, 32 Gb) x3
 - Hadoop slave prod (16CPU, 32 Gb) x3
 - Hadoop storage (total)
 - Load balancer (three in total, one per web server)
 - Global Accelerator + Cloud Front (global CDN)
 - Elastic MapReduce (managed Hadoop Cluster)
 - ElastiCache int (caching server)
 - ElastiCache prod (caching server)
 - Database int
 - Database prod
 - Database storage (total)
 - S3 (backups)
 - VPC (networking, firewall, VPN)
 - Web server T&T (2CPU, 4 Gb)

Data is managed in a structured form in high-performance databases in order to provide all of the required services without unnecessary redundancy and with an integrated SSO and user management service.

Item data is obtained by replicating the database hosted by the PTC (i.e. the EMS Bubble) on an hourly basis, through a VPN tunnel. Based on information from the database and from the Operational Guide, performance calculations are conducted twice per day. Fixed report generation and additional dashboard value calculations occur monthly, and certain reports are calculated quarterly and annually. Reports are made available to the

EMS Unit and to operators through the SMART reporting hub. Information on single items and events – track and trace – can be retrieved from the database through i-Care, the EMS Cooperative website or SMART.

Raw item data, copied from the EMS Bubble, and reports are stored in the Hadoop database, while aggregated data, produced from the raw data, is available in the Postgres database. Reports generated from the aggregated data are stored in the Hadoop file system. Users accessing information (item, report or dashboard) via SMART are routed seamlessly to the correct database.

Main technologies used for EMS SMART

- Back-end technology
 - Java 8
 - Hadoop (MapReduce, HDFS, Yarn, ZooKeeper, etc.)
 - HBase
 - Postgres
 - H2 database
 - Redis
 - Liquibase
 - Apache Flink
 - Apache POI
 - Spring Boot
 - Spring MVC
 - Spring Security
 - Spring Data (JPA + Hibernate)
- Front-end technology (user interface)
 - JavaScript
 - ReactJS
 - React Redux
 - React-Bootstrap
 - AG Grid
- Development tools/test tools/quality assurance
 - Webpack
 - Apache Maven
 - ESLint
 - Checkstyle
 - SpotBugs
 - Docker
 - Hadoop MiniCluster
 - Mockito
 - JUnit

5 Description of the EMS Operational Guide and single sign-on

The EMS Operational Guide is an important online publication produced by the UPU, containing information on the EMS services offered by postal organizations. The entry of each EMS operator provides information on the scope of their service and all operational aspects of their incoming EMS service. The Operational Guide is designed as a working tool for EMS operators to consult and obtain information on the conditions under which the EMS product is delivered by their partners.

The EMS Operational Guide database is designed to store and display this information on the web (text in a question/answer format, web links, information tables, information in Excel and PDF format, jpeg files) and to serve as a source to produce the necessary glossaries for each operator's needs. It allows online data entry by DOs, which is then validated and published by the EMS Unit. There is also a function to extract various types of information, including queries and reports, and a transit time calculator.

The EMS Operational Guide also contains important information on export, transport and delivery standards, which serves as reference data for calculations in SMART and as a basis for the transit time calculator. The EMS Operational Guide also offers the functionality to communicate with EMS Cooperative members on the standards validation process, and to collect and publish information. The process description can be found in Annex 4.

The EMS Operational Guide feeds EMS SMART with service standards, non-working days, public holidays, OE working days and other operator details. Similarly, it also feeds EMS i-Care with certain operator details.

The EMS Operational Guide also includes e-mail and status change notification functions.

The EMS Operational Guide is published in English, French, Spanish, Portuguese and Russian, with translation provided by the UPU. The contents of the current questionnaire can be found in Annex 5.

One of the requirements for this application is support for various devices, including desktop computers, tablets and smartphones. It is designed to work not only with the most common browsers and popular operating systems, but also to be available via modern mobile devices. Thus, it uses a fluid layout that automatically adjusts the page size to monitor resolution settings, including for small screens.

The current version of the EMS Operational Guide database, which was finalized in 2009 using MS SQL technology, stores and presents data in an online format, as well as in an extractable format for printing or download, which is currently made possible by means of a PDF/Excel/Word reporting function.

The entire database is password protected and available only to EMS Unit staff, technical administrators and DO representatives. There are several active user groups with different levels of access. Firstly, there are EMS Unit superusers, who can validate, edit and publish data. Secondly, there are editors, who are DO representatives and, finally, all other users of the database with read-only access, who are also DO representatives. There are other roles for standards validation. All roles are listed in the single sign-on section below. EMS Unit staff have access to additional entry maintenance tools, plus an audit trail feature, and a tool to modify the website static text labels.

There is the same side bar as in EMS SMART, allowing easy transition between EMS SMART, the EMS Cooperative website, EMS tracking on the website, the EMS Operational Guide and the i-Care system.

The Operational Guide screen contains a menu with several tabs: contents, requests, queries, calculator and standards administration. The landing page for superusers also contains a summary of all requests. This is a page from the "Requests" menu and serves as a cockpit for EMS Unit staff. The screen also contains a drop-down list to select operators/regions, a "Subscribe" button, a help section, access to the profile of a logged-in individual, the option to switch between languages, a notifications sign, and a side bar. For viewers, the landing page is the questionnaire of the operator to which the user is assigned.

The **Contents** tab contains the questionnaire for a selected operator.

The **Requests** tab provides access to requests regarding questionnaires, delivery, export and transport standards, and the postcodes module. Delivery and export standards summarize requests and the status thereof with regard to the corresponding standard validations, while transport standards list the status of transport

standard validations. The postcodes section allows users to upload and modify the postcodes that feed the transit time calculator.

The **Queries** tab provides access to preset queries, flexible queries, questionnaire changes and credit for the EMS Operational Guide update summary.

At present, there is one flexible query, which enables users to select the information that they wish to see in the report by ticking the respective boxes prior to generating the report. There are also preset queries, as follows:

- Call centre to customers
- Call centre to operators
- Countries with prohibited articles in addition to the UPU list
- Delivery rates
- Delivery standards for selected operators
- Export standards for selected operators
- Holidays
- List of operators that changed their delivery rates within a given period
- List of operators that changed their delivery standards within a given period
- List of operators that changed their export standards within a given period
- Multilateral agreement and date of application
- Non-delivery days
- Offices of exchange
- Operational contacts
- Operators offering à découvert service
- Operators which do not cover the entire country
- Operators with special size or weight limits, different from the general terms
- Operators with track and trace websites
- Threshold exempt from customs duty

Examples of queries are provided in Annex 5. The reports can be displayed on the screen, or exported to Word, two types of Excel file and PDF, or sent by e-mail. Users can subscribe to receive the results of a query by e-mail on a regular basis. EMS Unit staff with superuser role can modify the content of queries and delete queries. The contractor will be expected to modify, adjust and create new queries upon request.

The **Questionnaire changes** section allows users to view all changes made to the questionnaires, and to run a report on changes made by specific operators between certain dates.

Credit for EMS Operational Guide updates allows users to see which operators updated the Operational Guide during which quarter. It is possible to select the region, operator, start date, end date and quarterly indicator prior to running the report.

The **Calculator** tab provides access to a complex tool that calculates the transit time between posting and delivery, based on the date and time of posting. It is possible to select the origin and destination operators, origin and destination OEs (if available), origin and destination zones, and origin and destination postcodes. The export, delivery and transport standards must be validated and published in the EMS Operational Guide in order for the calculations to be performed. Calculation on the basis of postcodes is possible if postcodes are available in the system for both operators.

The results list possible combinations on a given day and take into account other reference data published in the questionnaires, such as non-delivery days, public holidays and cut-off times. It calculates the number of

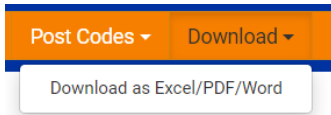
days for export, transport, delivery, and overall total. Currently, in the absence of validated transport standards, the default predefined transport intercontinental standards are used in the calculation.

The **Standards** tab contains a drop-down list with delivery, export and transport standards, transport regions and postcodes. This section allows users to view all details for a selected operator with regard to the corresponding performance standards.

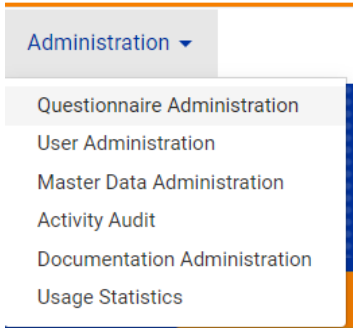
— Currently Validated — Delivery standards revalidation v2.0

1 Offices of Exchange	
1.1 Validated delivery standards	Yes
Date of last update	2017-09-05
1.2 Custom clearance average time for	
Items subject to duty	2 Hours
Items not subject to duty	1 Hours
Comments	—
1.3 Use delivery office codes in calculator	No
2 Measurement Table	
2.1 Version of Measurement Table	2
2.2 Date	2018-02-05
2.3 To be applied from	04 2018
2.4 Remote customs apply	No
3 Days of the week on which EMS items are delivered	
Day	Monday

The **Transport regions** section shows the default transport standards between the regions set for use by the transit time calculator, in cases where the transport standards are not validated. Superusers can edit these standards. The postcodes section lists the published postcodes per operator, if available. It also includes an editing menu for superusers.

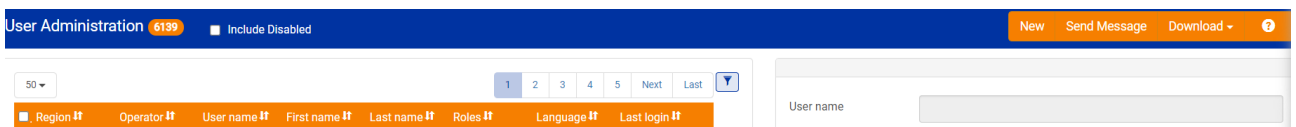


The **Administration** tab provides access to several administrative functions for superusers.



The **Questionnaire administration** section is dedicated to the schema of the questionnaire.

The **User administration** tool serves for the creation of new users, editing of existing users, and assignment of roles. All users from all applications using the single sign-on function are included in this list. Currently, the database contains more than 6000 users. A number of filters are available for sorting purposes, and there are password reset and e-mail functions.



The **Master data administration** section includes a drop-down list with types of master data that can be edited through this function.

The **Activity audit** function records and displays all user activities in the EMS Operational Guide on request.

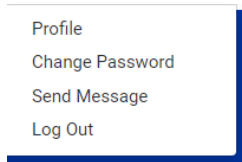


The **Documentation administration** function allows superusers to add and store documents in the system by topic. This relates essentially to explanations of functions and instructions on specific processes.



The **Usage statistics** section allows users to select a period of time and run an Excel report with certain aggregated usage statistics. The report is sent to the user by e-mail.

The **Profile** tab includes information on the user profile, including role, user name, user details, subscription to queries and workflow changes. The **Change password** section allows users to change their password, and the **Send message** function allows superusers to send messages to all EMS Cooperative application users by user name or role. This menu also contains the **Log out** button.



Single sign-on

The CAS server-based single sign-on system is implemented and configured for the EMS Operational Guide, EMS SMART, i-Care and the EMS Cooperative website. All roles and privileges are defined and integrated as part of the EMS Operational Guide database, and are managed as part of the EMS Operational Guide application (master data for roles and privileges, assigning roles to users, etc.). The passwords are encrypted. Currently, there are around 6000 users registered in the database, most of whom have multiple roles. New users can be created directly in the database and also via requests submitted through online forms. For i-Care, new users should be validated by the managers, and a special verification process exists to this end. New users receive a link in order to set up their own password.

Twenty-five user roles for all EMS systems are defined for single sign-on, as follows:

EMS Cooperative website (5)

- EMS Administrator
- EMS Cooperative Member
- EMS IB Staff
- EMS Stakeholder
- EMS Unit Board

EMS Operational Guide (8)

- Editor
- EMS Site Viewer
- EMS Unit Contact Person
- Retroactive questionnaire holiday changes
- Standards Manager
- Superuser
- Technical Administrator
- Viewer

EMS SMART (7)

- SMART Regional Viewer
- SMART Regional Coordinator
- SMART Superuser
- SMART Synchronizer Process
- SMART Technical Administrator
- SMART Tester
- SMART User

i-Care (5)

- i-Care Call Centre Agent
- i-Care Call Centre Manager
- i-Care Master User
- i-Care Operational User
- i-Care Synchronizer Process

6 Technical details of the EMS Operational Guide and single sign-on

The following technologies are used in the EMS Operational Guide and single sign-on.

- Back-end technology
 - Java 8
 - Mongo
 - Apache POI
 - Jasper Dynamic Reports
 - Spring Boot
 - Spring MVC
 - Spring Security
- Front-end technology (user interface)
 - JavaScript
 - ReactJS
 - React Redux
 - React-Bootstrap
 - React-Bootstrap-Table
- Development tools/test tools/quality insurance
 - Webpack
 - Apache Maven
 - ESLint
 - Checkstyle
 - SpotBugs
 - Mockito
 - JUnit
- Single sign-on server
 - Apereo CAS Enterprise Single Sign-On

The Amazon cloud elements are listed in section 4.

7 Public track and trace

The EMS Cooperative website (www.ems.post) offers a track-and-trace feature available to the public. EMS SMART retrieves events from the EMS Bubble and feeds the track-and-trace function. The function is built on the Amazon Web Services cloud infrastructure. The public track-and-trace service displays a defined set of events and data elements with translation into customer-friendly language. Certain restrictions exist regarding the display of available tracking data, depending on the operator. The results can be displayed in English, French, Spanish and Portuguese. Around 17 million items are tracked per year by users from all over the world and usage is constantly increasing.

8 Connection with the i-Care system

The EMS Cooperative's customer care system is fed with reference data from the EMS Operational Guide. It also accesses the user database, and pulls track-and-trace information. Therefore, a dedicated interface has been built between EMS SMART, the EMS Operational Guide and i-Care. A read-only i-Care interface to the EMS Operational guide (www.emsog.post) gathers the following information:

- list of operators, countries and regions in the system (i.e. the corresponding master data lists);
- each operator's details (corresponding to section 1 of the EMS Operational Guide questionnaire);
- national holidays per operator (section 2.5 of the EMS Operational Guide questionnaire);
- list of all users that have i-Care roles, per operator.

The endpoints of the Operational Guide are accessible only to authenticated technical users.

The track-and-trace service for EMS items is available using REST, whose responses will be JSON objects. These objects are already structured and transformed to the EDI data platform format, so that they can be easily interpreted by i-Care.

The track-and-trace information consists of the items and dispatch events, along with certain extra information, defined in the EDI standards. i-Care makes no further use of mapping for its queries.

EMS Global and Regional Statistics

Current Situation

Currently, global and regional statistics are calculated on a monthly, quarterly, and annual basis. They are provided in static excel files. The global statistics contain aggregated statistics for all EMS operators worldwide whereas regional statistics contain aggregated statistics for certain groups of operators, which are already defined and managed within the system.

Operator results on the other hand are calculated and displayed within SMART on a daily basis, using live and constantly-updated data, in addition to some static reports that are produced on a monthly, quarterly, and annual basis.

Needed development

The contractor shall extend the measurements carried out on a daily and monthly basis through the online module of SMART to include global and regional calculations.

The calculations will be accessed by additional selection options from the main drop down menu where EMS Operators can currently be selected. This option will be accessible by SMART Regional Coordinators, SMART Super Users, and SMART Technical Administrators.

The statistics to be calculated will be all of those in the Monitoring Hub. The results will be aggregations of all EMS Operators in the world or in the relevant region which also have individual results calculated for a given indicator. The Multilateral PFP Agreement will be listed as 'Yes' so long as one operator has a Yes for this indicator. Drill down capabilities in this module are not required. For the Volume dashboard, only one line with the global or regional volume respectively is needed.

Initial requirements for SMART functionalities and useful information

4.1 EMS data platform with EDI

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-001	EDI transactions	The EMS reporting system will accept and load all EMSEVT, ITMATT and CAPE EDI transactions exchanged: <ul style="list-style-type: none"> for traffic potentially identified as UPU EMS (UPU S10 item prefix = "E%" or dispatch mail-class "E") from EMS exporting operators to operators delivering EMS items 	Must
EMS-002	Reporting link	For EMSEVT transactions the EMS reporting system assembles data by EDI reporting link*sending mailbox*receiving mailbox	Must
EMS-003	EDI validation	The EMS reporting system holds a list of each interchange received (UNB line)	Must
EMS-004	EDI validation	The EMS reporting system validates the interchange against Edifact syntax rules (ISO9735) and UPU Standards. Failed interchanges are logged locally	Must
EMS-005	EDI validation	The EMS reporting system detects and logs duplicate transmission of an interchange	Must
EMS-006	EDI validation	The EMS reporting system generates alerts to the sending operator upon detection of an incorrect interchange or a duplicate interchange	Must
EMS-007	EDI validation	The EMS reporting system associates network timestamp information provided by external partners or local sub systems to the list of interchanges	Must
EMS-008	EDI validations	The EMS reporting system loads network control records relative to EDI interchanges that are rejected for non-compliance to Edifact	Must
EMS-009	EDI validation	For each EDI message received the EMS reporting system holds the reference of the EDI interchange in which the message was sent	Must
EMS-010	EDI validation	The EMS reporting system validates each message in an interchange against the message syntax. Faulty messages are logged locally	Must
EMS-011	EDI validation	The EMS reporting system detects and logs duplicate transmission of a message	Must
EMS-012	EDI validation	The EMS reporting system generates alerts to the sending operator upon detection of an incorrect message or duplicate message transmission	Must
EMS-013	EDI validation	The EMS reporting system generates alerts to the sending operator upon detection of an interchange rejected by the EDI network	Could
EMS-014	EDI validation	Information about the interchanges and messages is accessible by the online reporting tool by operators or regional coordinators	Must
EMS-015	EDI validation	The EMS reporting system will ensure that EDI interchanges that he is reprocessing are not counted twice in the reports produced from the interchanges and messages tables	Must



4.3 EMS reporting system

4.3.1 EMS Calculation module

4.3.1.1 Access to the EDI transactions

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-100	EDI transactions	The EMS reporting system has access to a copy of all EMSEVT, ITMATT and CAPE EDI transactions exchanged which are syntactically correct and relates: <ul style="list-style-type: none"> to traffic potentially identified as UPU EMS (UPU S10 item prefix = "E%" or dispatch mail-class "E") to traffic sent from any EMS exporting operator to any operator who processed EMS items or receptacles 	Must
EMS-101	Network timestamp	The EMS reporting system has access to a copy of all network control details for the EDI transactions that contain information relative to an EMS item	Must
EMS-102	EDI transactions Network timestamp	The EMS reporting system ensures it keeps enough information to be able to associate a particular message or event to the network information record of the EDI transaction in which the message or item was transmitted over the EDI network	Must
EMS-103	EDI transactions Network timestamp	The EMS reporting system reports on any EDI interchange that is missing the network timestamp from the network to which the EDI mailbox is attached	Should
EMS-104	EDI transactions	The EMS reporting system can report on any EDI transaction which is not compliant to the message specification	Could
EMS-105	Mailbox compliance	The EMS reporting system can report on EMSEVT transactions which are transmitted via EDI mailboxes which, in theory, are not intended for use for EMS	Must
EMS-106	EMSEVT compliance	The EMS reporting system keeps track of the version of the EMSEVT message which is used between operator pairs to exchange item level tracking information	Must
EMS-107	CAPE EDI compliance	The EMS reporting system keeps track of the version of the CAPE EDI message which is used between operator pairs to exchange dispatch information	Must

4.3.1.2 Calculation runs

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-108	Frequency	The EMS reporting system schedules calculations at frequencies defined by the EMS Unit	Must
EMS-109	Frequency	The EMS Unit modifies the calculations schedule via an Online interface	Must
EMS-110	Frequency	The EMS reporting system keeps a log of any calculations. The audit trail data in the logs will include at minimum: <ul style="list-style-type: none"> Name of the calculation script e.g. "StatisticsGeneratedFromDelivery" Version of the script Date and time when the calculations were started Requestor Period covered by the calculations Type of run: scheduled (frequency), ad hoc request 	Must

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-111	Anomalies	The EMS reporting system holds the launch of calculations for the official reports till any issue with missing EDI transactions, missing network timestamp, third party provided data or EMS reference data needed for the calculation has been resolved	Must
EMS-112	Anomalies	The provider of the EMS reporting system informs the EMS Unit when the calculations of the official reports are postponed following an anomaly identified under EMS-111	Must
EMS-113	Traceability	The EMS reporting system can report on the audit trail data on request from the EMS Unit	Must
EMS-114	Traceability	The EMS Unit can visualize online the audit trail data of each calculation run	Could
EMS-115	Reference data	The EMS reporting system uses exclusively reference data valid for the period that is being calculated	Must
EMS-116	Reporting links	The EMS reporting system calculates performance on the entire traffic regardless of the operator being in test mode or in full production mode	Must

4.3.1.3 Assembly of EDI transactions into tracked entities

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-117	Item entity	The EMS reporting system is required to make provision for traffic collected outside the home base country of the inductor operator and for traffic delivered by an operator outside of his home base country	Must
EMS-118	Item entity	The EMS reporting system is required to include in the calculations EMS traffic delivered by non-designated operators	Must
EMS-119	Item entity	The EMS reporting system is able to select specific instances of a particular EMSEVT tag, a particular CAPE EDI message or a particular ITMATT occurrence as specified by the EMS Unit. This includes the filtering out of duplicate transmissions.	Must
EMS-120	Item entity	The EMS reporting system must be able to enrich tracked entities with external data such as identification of MRS items (unwanted/returned goods)	Must
EMS-121	Item entity	The EMS reporting system assembles EMSEVT and CAPE transactions by item-Id and reporting-link	Must
EMS-122	Item entity	When an item receives multiple occurrence of the same event (tag) on the same reporting-route the EMS reporting system selects the occurrence as defined by the EMS Unit	Must
EMS-123	Item entity	The EMS reporting system can link any event selected on a reporting link to the associated EDI transaction and network timestamp	Must
EMS-124	Receptacle entity	The EMS reporting system assembles CAPE EDI transactions by receptacle-ID and reporting-link	Must
EMS-125	Receptacle entity	When a receptacle receives multiple occurrence of PREDES, PRECON, CARDIT, RESCON or RESDES on the same reporting route the EMS reporting system selects the occurrence as defined by the EMS Unit	Must
EMS-126	Item and receptacle entities	The EMS reporting system can link any CAPE message selected to the associated EDI transaction and network timestamp	Must
EMS-127	Timeliness	The EMS reporting system measures transmission timeliness by sending operator	Must
EMS-128	Timeliness and compliance	The EMS reporting system filters out retransmitted EDI data or outdated EDI data as per EMS Unit specification	Must
EMS-129	Compliance	The EMS reporting system keeps track, by operator pairs, of the EDI mailbox combinations through which the selected EDI transactions are exchanged	Should

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-130	Compliance	The EMS reporting system keeps track of the version of the EDI messages used between operator pairs	Must
EMS-131	Compliance	The EMS reporting system reports on the volume of EMSEVT events by sending operator, sending mailbox, recipient operator, recipient mailbox, event tag and version of the message	Must
EMS-132	Compliance	The EMS reporting system reports on the volume of dispatches by recipient operator and version of the message.	Could
EMS-133	Compliance	The EMS reporting system reports on the provision of mandatory business elements, inclusive their values, between operator pairs	Must
EMS-134	Completeness	The EMS reporting system reports on the provision of non-mandatory business elements, inclusive their values, between operator pairs	Should
EMS-135	Enrichment	The EMS reporting system assigns the network timestamp to selected events selected for the item entity	Must
EMS-136	Enrichment	The EMS reporting system flags specified items on specific routes using external source of information e.g. MRS. N.B.: no scenario requiring special identification has been identified yet	Must

4.3.1.4 Performance calculations

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-137	Special items identification	The EMS reporting system can identify items with event EMA and: <ul style="list-style-type: none"> missing EMC event on the reporting-link but with an event EMC sent on a different reporting-link missing EMC event on the reporting-link but with EXA or EXB at outward-OE, or EXD or EXX terminating 	Must
EMS-138	Special items identification	The EMS reporting system can identify items without EMA on the reporting-link that starts from the origin/owner but with an event EMA sent from the origin/owner on a different reporting link	Must
EMS-139	Special items identification	The EMS reporting system can identify items: <ul style="list-style-type: none"> with an EMC on the reporting link, missing EMD but with EXX or EXB aviation security terminating items on a transit route items without event EMD but with an event EMD transmitted by a different operator than the operator to whom the origin operator sent the event EMC items in a PREDES from the origin addressed to a different operator than the operator to whom the event EMA was sent 	Must
EMS-140	Special items identification	The EMS reporting system can identify with EMD, no delivery but with EDA, EDC, EME, EDF or EDX terminating	Must
EMS-141	Anomalies	When tracking events are missing on a reporting route the EMS reporting system can identify whether the missing events were sent on another reporting-link and report on it	Must
EMS-142	Standards	When calculating service performance against standards and service performance in working-days the EMS reporting system uses the standards in place at the time of the reference event i.e. for an item with dated EMA in February, EMB dated in March and revised leg 1 standards from March the item will always be measured against the leg1 standards event if the items included in the selection have an event EMB dated in March	Must
EMS-143	EMS Cooperative reference data	Operators in full production and without validated leg 2 and leg 3 standards are measured against the default standards set by the EMS Unit	Must

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-144	Recalculations	The EMS Unit can launch a recalculation of service performance on exactly the same selection of entities and associated events (snapshot taken during the first launch in the calculation module). The retention period of any snapshot is determined by the EMS Unit	Must
EMS-145	Time between launch of the calculations and availability of the statistics.	The time between the launch of the calculations and the filing of the official statistics in the EMS statistics repository shall not exceed 12 hours when all reference data is available at the time the calculations are started	Must

4.3.2 Statistics repository

4.3.2.1 Traceability and retention

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-146	Traceability local calculations	The EMS reporting system calculates sets of aggregated statistics using the entities created in the calculation module; the results are filed the results in the EMS Statistics repository.	Must
EMS-147	Traceability local calculations	For each set of statistics filed in the repository the EMS reporting environment keeps the references of the calculation run on which the statistics are based.	Must
EMS-148	Traceability local calculations	The EMS reporting assigns a unique ID to each set of statistics in the EMS Statistics repository	Must
EMS-149	Traceability local calculations	The EMS central repository holds audit trail data for each set of statistics in the repository. The audit trail data comprises at minimum: <ul style="list-style-type: none"> • Name of the set of aggregates e.g. EMC over EMD • Date and time when the aggregates were calculated • Requestor • Period covered by the calculations • Type of run: scheduled (frequency), ad hoc request, re-run • Validation status: N/A, waiting for validation, validated • For official results: date and time of validation 	Must
EMS-150	Traceability imported statistics	Each set of statistics sourced from external provider and filed in the EMS statistics repository is uniquely identified in the EMS repository	Must

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-151	Traceability imported statistics	The EMS central repository holds audit trail data for each set of imported statistics filed in the repository. The audit trail data comprises at minimum: <ul style="list-style-type: none"> Name of the set of aggregates e.g. RUGBY Date and time when the statistics were uploaded Version of the upload script Reporting period covered by the statistics Type of run: scheduled (frequency), ad hoc request, re-run Validation status: N/A, Waiting for validation, validated For official results: date and time of validation if applicable	Must
EMS-152	Regeneration of statistics	The EMS Unit may launch, via an online interface, the recalculation of statistics (e.g. after a late update of the reference data)	Must
EMS-153	Traceability	When official statistics are recalculated on request of the EMS Unit the previous statistics for the same period are flagged as "superseded"	Must
EMS-154	Traceability	The EMS Unit can view the list of all the statistics filed in the repository with their status and their audit trail data, inclusive the references of the calculation run for locally calculated statistics	Should
EMS-155	Traceability	The EMS Unit has a direct read/download access to any statistic in the repository	Must
EMS-156	Consistency	For official statistics, whether they require validation or not, the EMS statistics repository holds only one valid/official set per reporting period	Must
EMS-157	Calculations	The calculation module in the EMS statistics repository calculates aggregates on elapsed time or elapsed days between any pair of events, EMSEVT or CAPE upon request from the EMS Unit	Must
EMS-158	Retention	The EMS reporting system holds the official statistic results for a period as defined by the EMS Unit	Must

4.3.2.2 Aggregation levels for reporting

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-159	Aggregation items and receptacles	The EMS reporting system aggregates statistics at minimum between: <ul style="list-style-type: none"> Reporting-link Origin region Destination region Mail category (from PREDES) Mail sub-class (from PREDES) 	Must
EMS-160	Additional aggregation for leg 1	Additionally the EMS reporting system aggregates statistics between by outward OE from the event EMC when available or by origin of the dispatch when there is no event EMC present	Must
EMS-161	Additional aggregation for leg 1 performance against standards	Additionally the EMS reporting system aggregates statistics by collection zone and service standard	Must

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-162	Additional aggregation for leg 2 items	Additionally the EMS reporting system aggregates statistics between by: <ul style="list-style-type: none"> • Outward OE from the event EMC when available, or by origin of the dispatch when there is no event EMC present and PREDES is available • Inward OE from the event EMD when available, or by dispatch address when there is no event EMD and PREDES is available 	Must
EMS-163	Additional aggregation for leg 2 receptacles	Additionally the EMS reporting system aggregates statistics by PREDES outward OE and PREDES dispatch address	Must
EMS-164	Additional aggregation for leg 3	Additionally the EMS reporting system aggregates statistics by inward OE from the event EMD	Must
EMS-165	Additional aggregation for leg 3 performance against standards	Additionally the EMS reporting system aggregates statistics by delivery zone and service standard	Must
EMS-166	Additional aggregation for transmission timeliness	The EMS reporting system aggregates statistics between: <ul style="list-style-type: none"> • Sending operator • Sending mailbox • Receiving operator • Receiving mailbox 	Must
EMS-167	Additional aggregation for transmission timeliness	Additionally, for events EMC, PREDES, EMK the system aggregates statistics by outward office of exchange	Must
EMS-168	Additional aggregation for transmission timeliness	Additionally, for events EMD, RESDES, EMJ, EDA, EDB EME, EDC, EMF the EMS reporting system aggregates statistics by inward office of exchange or customs-return-point-ID (EDC)	Must
EMS-169	Additional aggregation for EDI compliance	The EMS reporting system aggregates statistics between: <ul style="list-style-type: none"> • Sending operator • Sending mailbox • Receiving operator • Receiving mailbox • Message name • Message version • Event tag (for EMSEVT) or Event code (for RESDIT) 	Should

4.3.2.3 Aggregation levels for monitoring

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-170	Aggregation items and receptacles	The EMS reporting system supports the same aggregation levels as for reporting with the addition of the day and weekday of the reference event	Could

4.3.2.4 EMS statistics by measurement area

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-171	Performance in elapsed hours	For measurable items the EMS reporting system files per period of minimum 6 hours up to 240 hours and after 240 hours: <ul style="list-style-type: none"> the volume of items the average elapsed time by periods of minimum 6 hours up to 240 hours the average elapsed time for time > 240 hours 	
EMS-172	Performance in elapsed days and in working-days	The EMS reporting system files, per period of minimum 1 day up to 25 days and after 25 days: <ul style="list-style-type: none"> the volume of items the average elapsed time by periods of minimum 1 day up to 25 days the average elapsed time for time > 25 days 	
EMS-173	Leg 1 performance in elapsed or working-days	Additionally the EMS reporting system files the anomalies: <ul style="list-style-type: none"> The volume of items without EMA The volume of items without EMC The volume of items without EMA and without EMC The volume of items with EMA and EMC in non-chronological order 	
EMS-174	Leg 2 performance in elapsed or working-days	Additionally the EMS reporting system files the anomalies: <ul style="list-style-type: none"> The volume of items without EMC The volume of items without EMD The volume of items without EMC and without EMD The volume of items with EMC and EMD in non-chronological order 	
EMS-175	Leg 3 performance in elapsed or working-days	Additionally the EMS reporting system files the anomalies: <ul style="list-style-type: none"> The volume of items without EMD The volume of items with EMD and delivery in non-chronological order 	

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-176	Leg 1 performance against standard	The EMS reporting system files : <ul style="list-style-type: none"> • RefVol.= Vol. of items delivered in the period with EMA and EMB and events in chronological order • Ref.Vol with EMA and EMB but in non-chronological order • Vol. of items selected with EMA without EMB • RefVol measured OnTime • RefVol measured Late • RefVol with WrongOE • RefVol with WrongCollectionPoint • RefVol without OE (excl. missinEMB) • RefVol without CollectionPoint 	
EMS-177	Leg 2 performance against standard	The EMS reporting system files : <ul style="list-style-type: none"> • RefVol = Vol. of items delivered in the period with EMC and EMD and events in chronological order • RefVol with EMC and EMD but in non-chronological order • Vol. of items selected with EMD without EMC • RefVol measured OnTime • RefVol measured Late 	
EMS-178	Leg 3 performance against standard	The EMS reporting system files: <ul style="list-style-type: none"> • RefVol = Vol. Delivered in Period • RefVol1 = RefVol with EMD, EDB, EME and EDC in sequence • Vol. in RefVol with no EMD • Vol. in RefVol with EMD but Customs events in non-chronological order • Vol. in RefVol1 with EMD but without OE code • Vol. in RefVol1 with EMD but no delivery zone in the delivery event • Vol. in RefVol1 for which the combination the delivery location is not found in a delivery zone attached to the inward OE <ul style="list-style-type: none"> • NumWorkingDays between actual delivery and calculated delivery; applies only to Vol. in RefVol1 with an entry found in the standards table • Vol. in RefVol1 delivered within the standard • Vol. in RefVol1 delivered later than the standard • Ref.Vol with EMC and EMD but in non-chronological order 	
EMS-179	Return of tracking information items	The EMS reporting system files: <ul style="list-style-type: none"> • Vol. of items with the reference event • For any event tag the vol. of these items with the event present • Vol. of these items with any of (EDH, EMH, EMI) event present 	

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-180	Return of tracking information CAPE	<p>The EMS reporting system files:</p> <ul style="list-style-type: none"> • Vol. of receptacles selected • Vol. of items from the origin operator in the selected receptacles • Vol. from a different operator in the selected receptacles • Vol. of items from the origin operator with EMC • Vol. of items from the origin operator with ITMATT • Vol. of items from a different operator with EMC or EMK from the origin of the PREDES • Vol. of the selected receptacles with RESDES from the addressee of the dispatch • Vol. of the selected receptacles with PRECON • Vol. of the selected receptacles with RESCON • Vol. of the selected receptacles with CARDIT • Vol. of the selected receptacles with RESDIT 74 • Vol. of the selected receptacles with RESDIT 24 	
EMS-181	Statistics transmission timeliness	<p>The EMS reporting system files, per period of minimum 1hour, from – 4 hours up to 240 hours and after 240 hours:</p> <ul style="list-style-type: none"> • the volume of events • the average elapsed time by periods of minimum 1 hours, from – 4 hours up to 240 hours • the average elapsed time for time > 240 hours 	
EMS-182	EMSEVT V3 compliance	<p>The EMS reporting system files in the EMS Statistics repository the following information:</p> <ul style="list-style-type: none"> • Sending operator • Sending mailbox • Receiving operator • Receiving mailbox • Message Type • Message version • Event tag • RefVol = Number of events • Vol. in RefVol with collection-postcode present(EMA) • Vol. in RefVol with posting-office-ID present(EMA) • Vol. in RefVol with sender's-postcode present(EMA) • Vol. in RefVol with item-lodgement-mode present(EMA) • Vol. in RefVol with network-entry-location-type present(EMA) • Vol. in RefVol with export-customs-office-ID present(EMB, EMC, EXD) • Vol. in RefVol with customs-retention-reason present(EDB, EME) • Vol. in RefVol with Held-reason present(EXD, EXX, EDA, EDF, EDX) • Vol. in RefVol with Held-action present(EXD, EDA, EDF, EDX) • Vol. in RefVol with outward-OE/transit-OE present (EXA, EXB, EXC, EMC, EMK) • Vol. in RefVol with (transit-)dispatch-number present(EMC, EMK) 	

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
		<ul style="list-style-type: none"> • Vol. in RefVol with (transit-)dispatch-address present(EMC, EMK) • Vol. in RefVol with (transit-)export-receptacle-ID present(EMC,) • Vol. in RefVol with transit/inward-OE present(EMJ, EMD, EDA, EDB, EME, EMF) • Vol. in RefVol with dispatching-OE present(EMJ, EMD) • Vol. in RefVol with received-dispatch present(EMJ, EMD) • Vol. in RefVol with (transit)-import-receptacle-ID, present(EMJ, EMD) • Vol. in RefVol with import-customs-office-id present(EDB, EME, EDC) • Vol. in RefVol with sorting-centre-id present(EDD, EDE) • Vol. in RefVol with delivery-office-id present(EMG, EDF, EDG, EMH, EMI) • Vol. in RefVol with collection-point-id present(EDH) • Vol. in RefVol with collection-point-postcode present(EDH) • Vol. in RefVol with (attempted-)delivery-location present(EMH, EMI) 	

4.3.3 Online reporting tool

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-183	Authorization to publish	Member operators with access to the Online reporting tool can see only performance on their traffic or on the traffic they processed.	Must

4.3.3.1 Official reports

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-184	Authorization to publish	The online reporting tool retains from publication the official statistics which are subject to validation till the authorization to publish has been granted by the EMS Unit.	Must
EMS-185	Publication	The online reporting tool holds the statistics from publication till the monthly update of the reference data needed by the publication process has been received from the EMS Unit and uploaded.	Must
EMS-186	Publication	The operator of the EMS Reporting system informs the EMS Unit if the publication of official statistics is pending receipt of reference data from their end.	Must
EMS-187	Publication	For the official statistics that do require validation, the authorization to publish is granted by the EMS Unit via an online application	Should
EMS-188	Official reports	The online reporting tool publishes official statistics for links when both the origin and the destination operators are in Full production (criteria set by the EMS Unit)	Must
EMS-189	Reference data	For official reports the online reporting tool uses the version of the reference data that matches the period for which the reports are calculated.	Must

4.3.3.2 Reports for operators in test mode

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-190	Operators in test mode	The online reporting tool generates reports with statistics about operators who are not in full production mode. These reports are filed in the download centre and accessible only by the EMS Unit	Must
EMS-191	Operators in test mode	The online reporting tool publishes online performance reports for operators in test mode. The reports are accessible only by the EMS Unit	Could

4.3.3.3 Online reporting and monitoring

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-192	Presentation	The on-line reporting tool presents statistics in the form of a series of dashboards, provisionally: <ul style="list-style-type: none"> • Service performance measurement against standards • Service performance in elapsed hours, days, working days • Scanning performance • Transmission timeliness • Message compliance • CSS performance 	Must
EMS-193	Drill down	From a dashboard and a specific statistic the user can look at the results from different perspectives, e.g.: <ul style="list-style-type: none"> • Traffic from/to a specific region or a group of operators he has defined • Traffic by outward office of exchange/inward office of exchange • Traffic by induction zone • Traffic by delivery zone • Traffic by day of arrival • Traffic by service standards • Traffic by weekday/day 	Must
EMS-194	Audit trail	For any published statistic the user can view the associated audit trail information.	Could
EMS-195	Export	For selected statistics the user can request that a report be generated online in Excel or pdf format.	Must
EMS-196	Export	The user can request a printout of the statistics displayed on his screen. The printout will include the selection criteria applied e.g. group of operators, period, name of the statistics, audit trail information for reports.	Must
EMS-197	Drill-down	For selected statistics the user can request that the system generates a diagnostic file for the entities behind the statistics and their associated details. The diagnostic file will include the selection criteria e.g. group of operators, period, name of the statistics.	Should
EMS-198	Dashboard	A user can created his own dashboards.	Should

4.3.3.4 Monitoring reports

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-199	Publication	Monitoring reports do not require authorization to publish	Must
EMS-200	Drill-down	Drill-down is possible up to the individual entities, items or receptacles, for the last calculated statistics	Must

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-201	Drill-down	Drill-down is possible up to the individual entities, items or receptacles, for the 13 past months	Must

4.3.3.5 Download centre

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-202	Online storage	Each operator has access to only the statistics relative to its traffic or the traffic it processed and to global overviews as defined by the EMS Unit.	Must
EMS-203	Online storage	The download centre keeps 15 months of formatted reports and diagnostic flat files online	Must
EMS-204	Archive and retrieval	Upon request from the EMS Unit, formatted reports and associated diagnostic flat files are retrieved from archives for a period back up to 24 months	Must
EMS-205	Folder structure	The name of the folder clearly indicates the period to which the reports and associated diagnostic flat files inside belong	Must
EMS-206	Recalculated statistics	When official statistics have been recalculated the EMS Unit requests, via an on-line application, that former Excel reports and associated diagnostic flat files be removed from the download centre.	Must
EMS-207	Access by Regional Coordinators or ad hoc groups	Regional coordinators and management of ad hoc groups have access to the performance statistics of each operator in the group.	Must
EMS-208	Access by EMS Unit	The Excel reports and diagnostic flat files for all EMS operators are available to the members of the EMS Unit only and from one central place	Must
EMS-209	EMS Unit consolidated statistics	Consolidated statistics in Excel are filed in a folder with access restricted to the members of the EMS Unit	Must
EMS-210	Audit trail	The unique Id assigned to the statistics in the central repository and the creation date are reported in the footer of the formatted reports	Must
EMS-211	Audit trail	The header of any accompanying diagnostic flat file will include the unique Id assigned to the statistics in the EMS statistics repository, the date of the creation of the file and the version of the script that creates the file	Must
EMS-212	EMS Reports	At a minimum, the EMS reporting system should produce the following reports: <ul style="list-style-type: none"> • Pay-for-performance reports – monthly and quarterly • Monthly performance reports and overview – monthly • Audit and measurement report – quarterly and annually The indicators to be included in each report are referenced in Annex 1	Must

4.3.3.6 Reference data used during publication

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-213	Online storage	Each operator can view the reference that has been applied to its organization when publishing the reports. See EMS-004.	Could

4.3.3.7 Access

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-214	Authorization and access rights	Only members of the EMS Unit grant access and privileges to the EMS new generation reporting system	Must
EMS-215	Statistics	The EMS reporting system generates statistics on the use of the online reporting tool e.g.: <ul style="list-style-type: none"> • The number of users registered, by administration, and with their level of authorization • The frequency of access to the system by administration, dashboards • The list of users who have not connected since a certain number of months, days, weeks 	Must
EMS-216	Access	The system can, on request of the EMS Unit, deactivate or reactivate accounts	Must
EMS-217	Access	The online reporting tool can be accessed through a Web browser, requiring no special software to be installed	Must
EMS-218	Access	The online reporting tool can be accessed through other devices such as smartphones, tablets ...	Must

4.3.4 Alert module

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-219	Frequency	After each new monitoring statistics are generated the EMS reporting system runs comparison against the latest calculated statistics and the level of performance below or above which the requestor requested to be notified	Must
EMS-220	Requestor	Members of the EMS Unit can request to be alerted when the performance of any member of the Cooperative, the members of a defined region, a list of members or an individual member falls outside defined levels	Must
EMS-221	Requestor	An individual operator may request that an alert be generated when its performance falls outside levels it sets	Must
EMS-222	Requestor	An individual operator may request that an alert be generated when the performance on its traffic processed by any operator, region, list of operators falls outside the levels it sets	Must
EMS-223	Criteria	Alerts can be set on: <ul style="list-style-type: none"> • Volume of items, dispatches, EDI transactions, events • KPI e.g. EMC over EMA • Time lag e.g. 2 days if it is anticipated that traffic will receive an event EMC within two days of the event EMA • Group of operators (all, in the same region, user-defined lists) 	Must
EMS-224	Criteria frequency	Period covered e.g. items with EMA for Monday previous week up to day of the calculations	Must
EMS-225	Criteria period	Period during which to run the report	Must
EMS-226	Recipient of alert	Alerts are sent via email to the requestor	Must
EMS-227	Recipient of alert	Only users with ad hoc level access can request alerts to be sent to another addressee	Should
EMS-228	Alert notification message	The notification message will list the alert criteria and the anomaly detected	Must
EMS-229	Alert notification message	The notification message includes a link to the monitoring dashboard where the corresponding statistics can be further analyzed	Must
EMS-230	Email alerts	The EMS Unit can create email messages to be sent to EMS reporting system users, or groups of users. Emails shall be capable of having attachments, including Word, Excel, and PDF documents	Must

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-231	Email alerts	They EMS reporting system should be capable of saving email templates, to be selected and used by the EMS Unit as needed	Should

4.3.5 Reference data

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-232	EMS Cooperative reference data	The EMS reporting system holds all reference data in centralized tables	Must
EMS-233	EMS Cooperative reference data	Only the EMS Unit can request updates of the reference tables	Must
EMS-234	EMS Cooperative reference data	The EMS reporting system is capable to handle updates via an online application or through an access to the EMS Operational Guide for the Cooperative reference data: <ul style="list-style-type: none"> • Regions and associated operators • Definition of full tracking • Transport/leg 2 standards (regional) • Country time zone association • Criteria for full tracking • Zones impacted by force majeure • Default leg 3 standards 	Must
EMS-235	EMS Cooperative reference data	The EMS reporting system is capable to handle updates via an online application or through an access to the EMS Operational Guide for the operator's reference data: <ul style="list-style-type: none"> • Membership status • Tracking status • Whether the operator has validated Leg 1 standards • Whether the operator participates in the multilateral agreement • Whether the operator participates in Pay-for-performance • Reporting-links in Pay-for-performance • Public holidays • Working days/weekend days • Leg 1 standards • Leg 2 standards • Leg 3 standards • End-to-end standards 	Must
EMS-236	EMS Cooperative reference data	The EMS Unit grants access to the online reporting tool inclusive the download centre via an online application	Must
EMS-237	EMS Cooperative reference data	Each set of reference data is assigned a validity period and the EMS reporting system ensures there is no overlap in time (e.g. there can exist only one set of leg 1 standards for operator xxx for the period between 01/01/2017 and 31/06/2017)	Must

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-238	EMS Cooperative reference data	The EMS reporting system holds a history of the changes brought to any of the EMS reference tables listed	Must
EMS-239	EMS Cooperative reference data	The EMS reporting system reports to the EMS Unit any error encountered during the update reference data requested either online or via an access to the EMS Operational Guide	Must
EMS-240	UPU Code Lists	The EMS reporting system's operator ensures the version of the UPU CL108 (IMPC codes), UPU CL160 (EDI addresses), UPU CL112 (event reason codes), UPU CL113 (event action taken) is updated after each publication by the secretariat of the UPU Standards Programme	Must
EMS-241	UPU Code Lists	The EMS reporting system notifies the EMS Unit when a UPU Code List has been updated	Should
EMS-242	Validation	The EMS Unit can request online an extract of specific data elements used in various EDI messages over a specified period (i.e. outward OE codes in the events EMC for the past month, past week, etc.)	Must
EMS-243	Validation	When a new set of service standards is uploaded for testing during the validation process, the EMS Unit can request the system to run compliance checks via an online module e.g.: <ul style="list-style-type: none"> • Comparison of the codes in the standards table against the codes populated in EMSEVT • Overlap of delivery and export zones for the same inward and outward OE • IMPCs used in EMSEVT and CAPE are registered in UPU Code List as offices of exchange dispatching or accepting EMS items • Duplicate codes within the same IMPC • Blank cells • Spaces before and after code • Missing zone in the delivery and export office code list 	Must
EMS-244	Validation	The EMS reporting system can run test reports using reference data under validation i.e. before the reference data is applied in production	Must
EMS-245	EMS Cooperative reference data	The initial values to populate the EMS reporting system will be provided by the EMS Unit	Must
EMS-246	EMS Cooperative reference data	Operators in full production and without validated leg 2 and leg 3 standards are measured against the default standards	Must
EMS-247	EMS reporting environments	The service provider supports three environments: <ul style="list-style-type: none"> • Development testing: an environment where EMS Unit testers can load test reference data and test messages and from where they can access the EMS statistics repository to get the aggregated statistics • UAT testing: an environment that uses the EDI messages from the EMS data platform • Production environment 	Must

4.4 Hosting of the online reporting tool and its maintenance

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-300	Availability	The online reporting tool hosting system is expected to be accessible 24/7 over the public internet	Must
EMS-301	Availability	System downtime for maintenance or implementation of any changes is agreed with the EMS Unit enough in advance such that sufficient notification can be provided to the users	Must

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-302	Availability	Two environments will be made available to end users; one test and one production environment. Migration to production requires official authorization from the EMS Unit	Must
EMS-303	Availability	The system is required to operate at 99.4% availability	Must
EMS-304	Availability	In case of a disaster the system is required to be recovered within 4 hours	Must
EMS-305	Availability	Sufficient notification will be provided of any system downtime for maintenance or the implementation of any changes	Must
EMS-306	Availability	The online EMS reporting system is required to respond within 2 seconds from a request from an end-user	Must
EMS-307	Availability	The EMS reporting hosting system is required to protect data, reference data and data in the download centre, from unauthorized access	Must

4.5 Single sign-on

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-308	Availability	Users should be able to access the online reporting tool through a single sign on with the EMS Cooperative website and the EMS Operational Guide. The tool should therefore be developed to be compatible with the CAS single sign on system already in place for these two sites	Must

4.6 Others

4.6.1 Track and trace

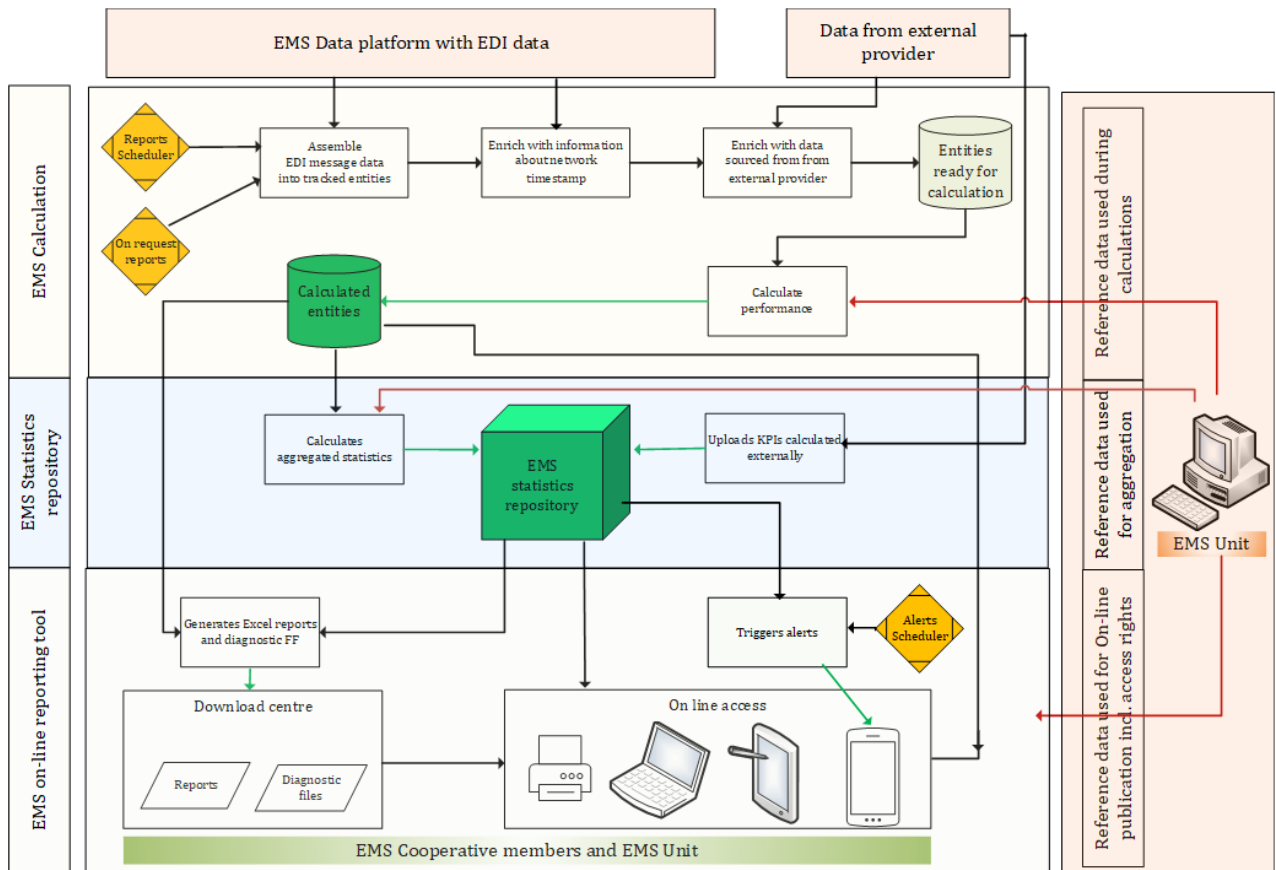
<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-400	Online	The EMS reporting system publishes all EMSEVT and CAPE transactions found for an item, regardless of the timestamps	Must
EMS-401	Online	If the item is found in a PREDES, from the origin or from a transit, the EMS reporting system can look for the characteristics of the dispatch (dispatch-ID, dispatch-closed date and time, planned transport departure and planned transport arrival)	Must
EMS-402	Online	If the item is found in a PREDES from the origin operator the EMS reporting system can look for all the items in the receptacle and whether these items received inbound scans from the recipient of the dispatch	Must
EMS-403	Online	If an item is found in a PREDES from a transit the EMS reporting system can provide <ul style="list-style-type: none"> Dispatch/consignment closure and transport details from PREDES, PRECON and CARDIT RESDIT 74, RESDIT 21, RESCON and RESDES timestamps for the receptacle 	Must
EMS-404	Online	If an item is found in a PREDES from transit only the items from the origin/owner operator in the PREDES are visible to that operator	Must
EMS-405	Online	From the screen with list of items in a receptacle the user can request the tracking history of any other item in the receptacle	Must

4.6.2 UPU CL160 (EDI mailboxes) and UPU CL108 (IMPC codes)

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-406	Online	The EMS reporting system publishes, per operator: <ul style="list-style-type: none"> the list of the EDI mailboxes and characteristics the list of IMPCs under the responsibility of the operator A filter permits to view only the IMPCs that send/receive EMS mail	Could

4.6.3 EDI capability

<i>Req ID</i>	<i>Component</i>	<i>Description</i>	<i>MoSCoW</i>
EMS-407	Online	The EMS reporting system publishes, per operator, which message and version he sends and receives	Could
EMS-408	Online	The EMS reporting system presents to the requestor operator, by operator to whom he is sending EDI transactions: <ul style="list-style-type: none"> the name and version of the messages he his sending the name and version of the message he is receiving 	Could



Useful information:

6.2 UN/EDIFACT

UN/EDIFACT (United Nations rules for Electronic Data Interchange for Administration, Commerce and Transport) comprise a set of internationally agreed standards, directories, and guidelines for the electronic interchange of structured data, between independent computerized information systems.

Recommended within the framework of the United Nations, the rules are approved and published by UNECE in the UNTDID (United Nations Trade Data Interchange Directory) and are maintained under agreed procedures.

UNTDID includes:

- UNCDID

UNCDID comprises a set of uniform rules of conduct for interchange of trade data by tele transmission (UNCID). The UNCID rules are meant to provide a background for users of EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) and other systems of Electronic Trade Data Interchange

- Glossary

- UNTDID

United Nations rules for electronic data interchange for administration, commerce and transport (UNTDID)

The UN/TDID contains the rules and general information on the establishment and use of EDIFACT message type.

The EDIFACT syntax is standard ISO-9735.

The UN/Trade data elements directory, of which EDIFACT data elements are an excerpt, is ISO- 7372.

Message types are based on business requirements and developed with participation of representatives from interested industries and organizations.

- United Nations directories

Set of directories for electronic data interchange for administration, commerce and transport. Each directory provides, for batch and for interactive EDI, the following set of information:

- Message type directory
- Segment directory
- Composite data element directory
- Data element directory

6.3 Short introduction to UPU messages

6.3.1 EMSEVT – item events

The EMSEVT message supports the exchange of events relative to international barcoded items. There are two versions of the EMSEVT message in use: EMSEVT V1 and EMSEVT V3 with EMSEVT V3 being a currently used version and allowing more events to be exchanged.

It corresponds to the UPU Standard - M40.

<i>Event</i>	
<i>Tag</i>	<i>Description</i>
EMA	Posting/collection
EMB	Arrival at outward OE
EXA	Item presented to export customs
EXB	Item held by export customs
EXC	Item returned from export customs
EXD	Item held at outward office of exchange
EXX	Export cancellation
EMC	Departure from outward OE
EMJ	Arrival at transit OE
EMK	Departure from transit OE
EMD	Arrival at inward OE
EDA	Item held at inward office of exchange
EDB	Item presented to import customs
EME	Held by import customs
EDC	Item returned from import customs
EMF	Departure from inward OE
EDD	Item into sorting centre
EDE	Item out of sorting centre
EMG	Arrival at delivery office
EDF	Item held at delivery depot
EDG	Item out for physical delivery
EDH	Item arrival at collection point for pick-up
EDX	Import terminated
EMH	Unsuccessful (physical) delivery
EMI	Final delivery

6.3.2 CAPE suite of messages

The CAPE suite of messages includes the following UPU messages:

PREDES: Pre-advice of dispatch prepared

Sender Origin designated operator office of exchange.

Addressee The destination designated operator office of exchange that is the office to which the dispatch has been sent.

Timing As soon as possible after dispatch finalisation, that is, when the dispatch documentation (paper CN 31, CN 32, or CP 87 or electronic equivalent) has been created and at a time in the process when there should be no changes to the data in the message.

Frequency Once per dispatch.

RESDES: Administration confirmation of dispatch. Receipt/current exceptions

The RESDES message contains information about receptacles of a despatch of mail that have been processed at a destination exchange office. Its purpose is to provide details to the exchange office of origin concerning the status of the receptacles processed so that quality of service can be assessed, as well as to support accounting.

Sender An exchange office of destination which is the responsibility of a postal administration acting as administration of final destination who received a "Pre-Advice of Dispatch Prepared" (PREDES) message.

Addressee The exchange office of origin which sent the corresponding "Pre-Advice of Dispatch Prepared" (PREDES) message.

Timing: For pre-advised dispatches the response RESDES will be generated:

- A. As soon as the complete despatch has been processed, or
- B. When explicitly triggered by the receiving administration, or
- C. At a fixed time each day, detailing the date and time for each receptacle processed during the previous period

If no receptacle has been processed, no response message will be generated.

A RESDES message describes at most one dispatch.

Frequency: At least once per despatch, assuming at least one receptacle in the despatch has been processed.

PRECON: Pre-advice of consignment handed over

The PRECON message contains information about a consignment of mail which has been prepared for hand over to a carrier. Its purpose is to provide:

- planning information to the designated operator which will next handle the consignment;
- the means to automate the checking-in of mail as it is received by that designated operator.

Sender: Designated operator acting as sending operator or transit operator handling one or more receptacles in one or more despatches for a specific transport from or through its own country more receptacles in one or more despatches for a specific transport from or through its own country.

Addressee: Designated operator acting as operator of final destination or transit operator receiving one or more receptacles in one or more despatches of mail using the specific transport.

Timing: Ideally after the "Carrier Confirmation of Receipt" (RESDIT) message has been received or allowed time for carrier response has expired, otherwise at transport document production time. Sufficient time has to be allowed for the PRECON message to reach the destination mail unit.

Frequency: Once per consignment.

RESCON: Operator confirmation of consignment. Receipt/current exceptions.

The RESCON message contains information about a consignment of mail which has been received from a carrier. Its purpose is to provide information which can be used to assist with the measurement of the quality of service delivered by the transport provider(s). This can be achieved by monitoring the arrival of containers and receptacles against the pre-advised transport information.

Sender: Origin designated operator acting as transit operator or operator of final destination which received a 'Pre-Advice of Receptacles Handed Over' message (PRECON).

Addressee: Designated operator which sent the mail to the current designated operator.

Timing: For pre-advised consignments (i.e. PRECON received) the response RESCON will be generated:

- A. As soon as the complete consignment has been recorded
- B. When explicitly triggered by the receiving operator
- C. When a pre-determined time period has elapsed since the expected arrival time, based on the mail category

Frequency: At least once per consignment.

CARDIT: Carrier/documents international transport

The CARDIT message contains information about a consignment of mail which is handed over to a carrier.

Sender: Designated operator acting as sending operator or transit operator handling one or more receptacles in one or more despatches for a specific transport from or through its own territory.

Addressee: The carrier or the handling agent acting on behalf of the carrier which will transport the receptacles from a particular place of departure to a particular place of arrival.

Timing: Subject to local arrangements. The transmission should be late enough to ensure the documents cover the mail actually handed over but early enough for carriers to uplift.

Frequency: At least once per consignment.

RESDIT: Carrier/confirmation of receipt or current exception

The RESDIT message contains information about a consignment of mail as it is processed by a carrier.

Sender: A carrier or handling agent, acting on behalf of the carrier, responsible for transporting receptacles from a particular place of departure to a particular place of arrival.

Addressee: A designated operator acting as sending or transit operator handling one or more receptacles in one or more despatches for a specific transport from or through its own territory.

Timing: Ideally upon discovery of event. Time restrictions imposed by the need to inform the transit operator or operator of final destination in case of changes, especially for airmail; depending on events to be reported, date and time limits apply.

Frequency: Once or multiple per consignment.

6.3.3 ITMATT – postal item attributes

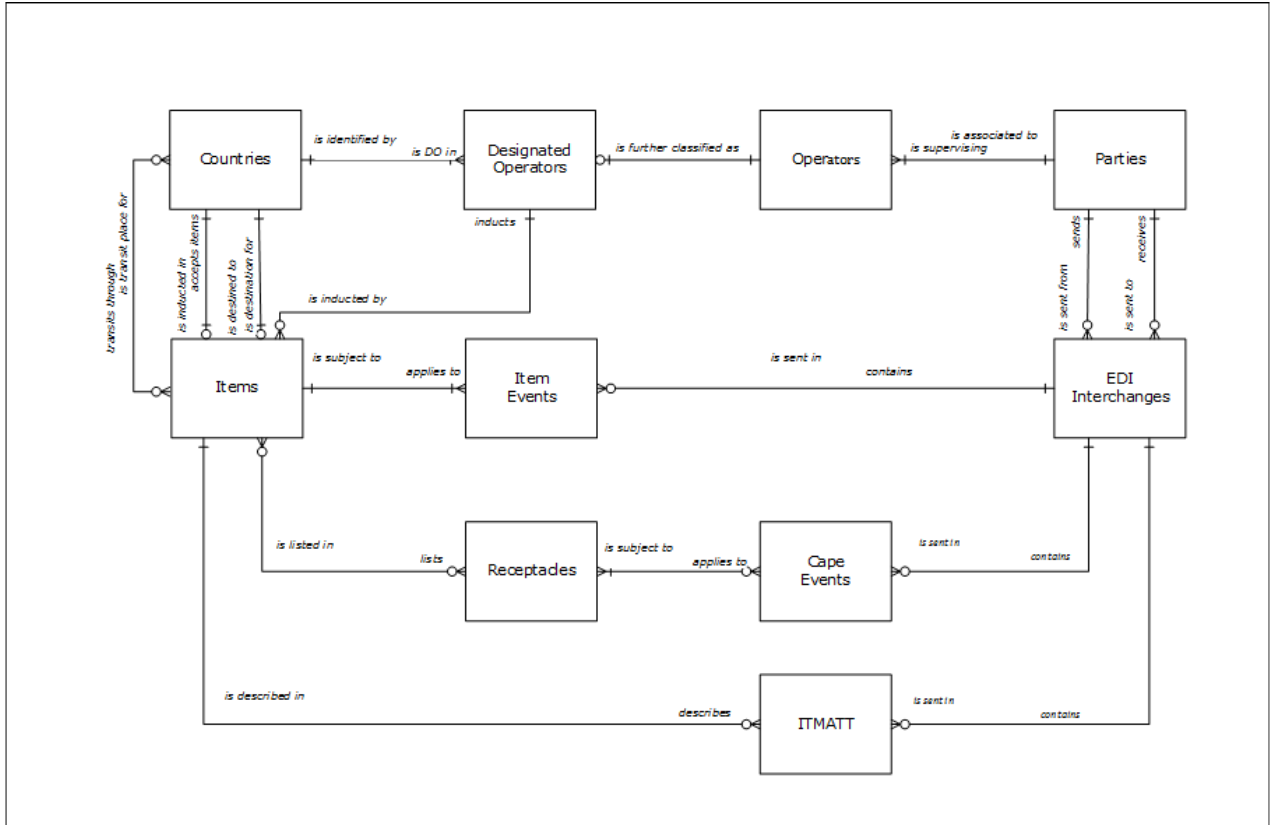
The ITMATT message contains information about the characteristics of a postal item such as the sender details, addressee details, description of the goods.

The aim in the initial development of ITMATT was to speed up the clearance process at destination. With the increase of security requirements in international transport and the growth on e-commerce, the aim is to provide enough information in the ITMATT for the border agencies to proceed with risk assessment prior to departure and for the customs authorities to collect duties and taxes on hundred percent of the inbound traffic.
Sender: A designated operator that exports items.

Addressee: The designated operator that will next process the item.

Timing: Early enough to meet processing requirements at origin and/or destination.

6.4 ERD countries, parties, operators, events and EDI

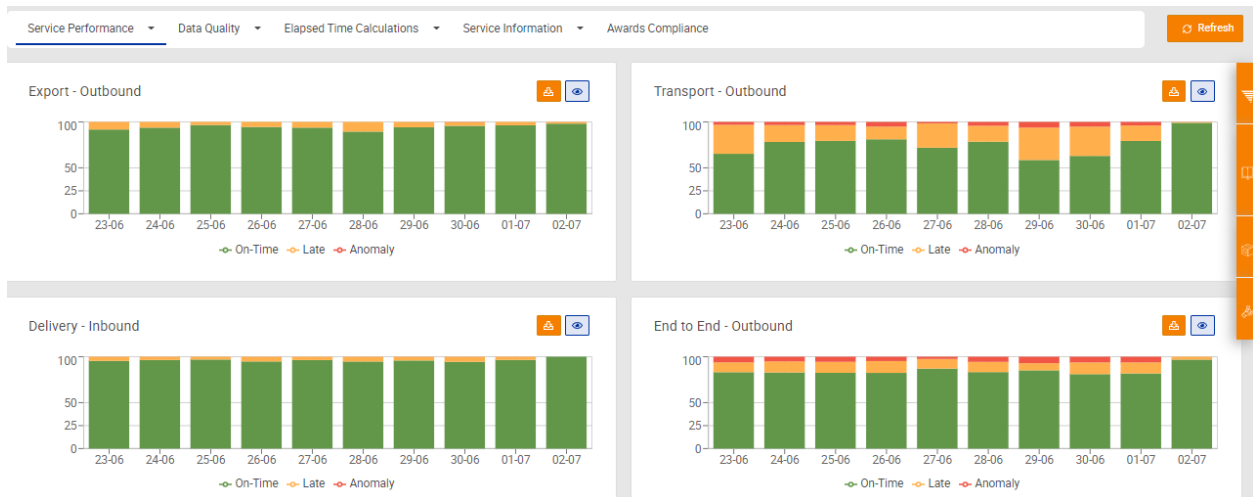


Indicators currently calculated in the EMS SMART in dashboards and cockpits

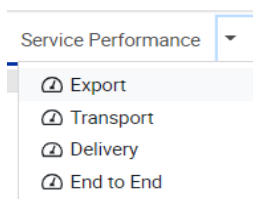
There are four cockpits in EMS SMART that display groups of several indicators on the same screen with performance shown for the past 10 days, as well as 14 thematic dashboards with 321 calculated indicators. The drill down levels and the flat file content are described in the detailed description of the reports, which will be available to the chosen contractor.

1. Service performance cockpit

The cockpit groups together the following graphs for the past 10 days: export – outbound, delivery – inbound, transport – outbound, end-to-end – outbound.



There are four dashboards included: export, transport, delivery, and end-to-end.



The Export performance dashboard includes 11 indicators for inbound and 11 indicators for outbound performance for a total of 22). These are on-time, one-day late, two-days late, three days late, more than three days late, no EMA, out of sequence, no outward OE code in EMC, no collection point, no standard for Export OE, and incorrect collection point.

Here is the example of the monthly view of such a dashboard.

Indicator	05-2020	06-2020	07-2020	08-2020	09-2020	10-2020	11-2020	12-2020	01-2021	02-2021	03-2021	04-2021	05-2021	06-2021
On-time	66.5%	63.1%	91.2%	89.7%	91.7%	93.5%	97.1%	95.4%	98.8%	97.6%	97.9%	97.4%	95.8%	
1 day late	2.9%	2.5%	1.8%	2.5%	1.5%	1.4%	1.1%	2.5%	0.6%	1.1%	0.9%	0.7%	1.7%	
2 days late	1.6%	1.9%	1.3%	1.8%	1.3%	1.0%	0.5%	1.0%	0.2%	0.7%	0.4%	0.4%	1.0%	
3 days late	1.2%	1.6%	1.1%	1.2%	0.9%	0.6%	0.3%	0.4%	0.1%	0.4%	0.2%	0.3%	0.4%	
More than 3 days late	27.5%	30.4%	4.4%	4.5%	3.2%	3.0%	1.0%	0.5%	0.1%	0.1%	0.5%	1.1%	0.8%	
No EMA	0.0%	0.1%	0.0%	0.0%	1.3%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.3%	
Out of sequence	0.2%	0.4%	0.3%	0.2%	0.2%	0.1%	0.0%	0.0%	0.2%	0.0%	0.1%	0.1%	0.1%	
No outward OE code in EMC														
No collection point														
No standard for Export OE									0.0%					
Incorrect collection point														

The transport performance dashboard includes 12 indicators for outbound performance, and 12 for inbound performance, for a total of 24 indicators. These are on-time, one-day late, two-days late, three days late, four days late, more than four days late, no EMC, no outward OE code in EMC, no outward OE code in EMD, out of sequence (EMD before EMC), no origin transport standard (from EMC), and no destination transport standard (from EMD).

Here is the example of the last 45 days view of such a dashboard.

Indicator	19-05	20-05	21-05	22-05	23-05	24-05	25-05	26-05	27-05	28-05	29-05	30-05	31-05
On-time	54.2%	71.0%	80.5%	79.9%	75.4%	70.8%	55.7%	57.9%	86.4%	80.5%	77.7%	73.8%	71.3%
1 day late	13.4%	8.6%	7.6%	9.1%	11.6%	11.2%	17.2%	22.9%	1.1%	6.8%	8.8%	14.0%	12.6%
2 days late	11.7%	6.1%	0.4%	2.3%	4.1%	6.8%	9.0%	5.0%	3.7%	0.5%	4.1%	2.0%	4.2%
3 days late	4.3%	3.7%	0.5%	1.1%	1.8%	1.6%	5.2%	4.4%	1.4%	2.0%	2.8%	2.5%	2.6%
4 days late	2.5%	1.5%	1.4%	0.9%	0.8%	1.3%	1.0%	1.7%	1.3%	2.4%	1.5%	0.6%	0.8%
More than 4 days late	9.9%	5.0%	7.6%	3.2%	4.0%	4.3%	6.9%	5.9%	2.5%	4.3%	1.9%	4.2%	4.5%
No EMC	0.2%	0.4%	0.2%	0.2%	0.1%	0.3%	0.1%	0.3%	0.2%	0.2%	0.2%	1.1%	0.9%
No outward OE code in EMC													
No inward OE code in EMD													
Out of sequence				0.0%			0.2%						0.2%
No origin transport standard													
No destination transport standard	3.7%	3.8%	1.8%	3.3%	2.1%	3.4%	4.9%	1.9%	3.3%	3.3%	3.0%	1.8%	3.0%

The Delivery performance dashboard includes 10 indicators for inbound performance and 10 for outbound performance, for a total of 20 indicators. These are on-time, one-day late, two days late, three days late, more than three days late, no EMD, no OE code, no delivery zone indicator, out of sequence, and no standard.

Here is the example of the day of week view of such a dashboard.

Indicator	Monday	Tuesday	Wednes...	Thursday	Friday	Saturday	Sunday
On-time	93.5%	94.1%	94.6%	95.8%	96.0%	95.1%	95.9%
1 day late	5.2%	4.6%	4.2%	3.3%	3.3%	3.9%	3.7%
2 days late	0.9%	0.5%	0.4%	0.3%	0.2%	0.2%	0.2%
3 days late	0.1%	0.2%	0.2%	0.1%	0.1%	0.1%	0.0%
More than 3 days late	0.1%	0.5%	0.4%	0.4%	0.2%	0.2%	0.1%
No EMD	0.0%	0.0%	0.0%	0.0%	0.2%	0.5%	0.0%
No OE code							
No delivery zone indicator	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Out of sequence							
No standard	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

The End-to-end (against validated standards) dashboard includes 28 calculations for inbound and 28 for outbound, for a total of total 56 indicators.

For end-to-end, these are on-time end-to-end, late 1 day end-to-end, late 2 days end-to-end, late 3 days end-to-end, more than 3 days late end-to-end, on-time leg 1, late leg 1, on-time leg 2, late leg 2, on-time leg 3, late leg 3, total anomalies end-to-end, and total items delivered.

For leg 1 anomalies, these are no EMA, no collection point, out of sequence (EMC before EMA), no outward OE code in EMC, incorrect collection point, and no standard for export OE (incorrect outward OE code).

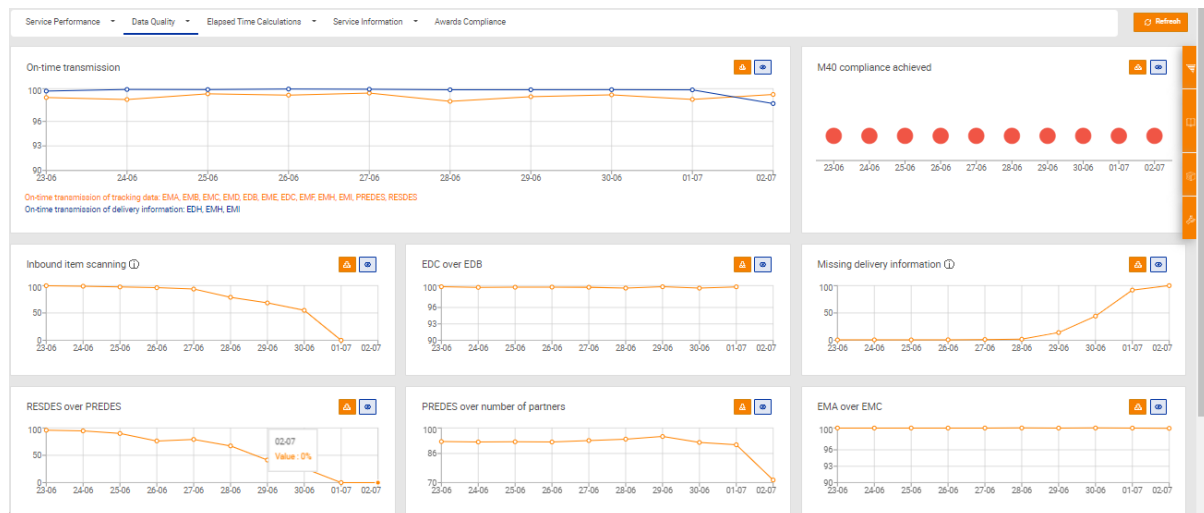
For leg 2 anomalies, these are no EMC, no outward OE code in EMD, out of sequence (EMC before EMD), no origin transport standard in EMC, and no destination transport standard from EMD.

For leg 3 anomalies, these are no delivery zone indicator, out of sequence (delivery before EMD), no delivery standard, and no EMD.

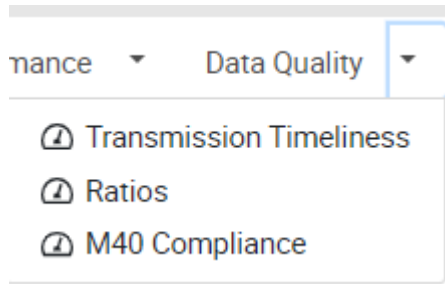
Indicator	19-05	20-05	21-05	22-05	23-05	24-05	25-05	26-05	27-05	28-05	29-05	30-05	31-05	01-06	02-06	03-06
End-to-end																
On-time end-to-end	79.3%	80.0%	84.4%	85.3%	91.3%	87.1%	85.1%	81.3%	84.2%	87.0%	88.2%	92.7%	85.0%	88.6%	82.4%	80.4%
Late 1 day end-to-end	4.4%	3.9%	3.2%	2.2%	1.8%	2.2%	3.0%	3.5%	2.6%	2.1%	2.3%	0.8%	1.7%	2.4%	3.4%	3.6%
Late 2 days end-to-end	2.3%	2.6%	1.9%	2.8%	1.5%	1.7%	2.3%	2.2%	1.6%	1.5%	1.7%	0.7%	1.5%	1.5%	1.7%	2.2%
Late 3 days end-to-end	1.1%	1.2%	1.0%	2.2%	1.0%	1.5%	1.3%	1.2%	1.0%	0.9%	1.1%	0.6%	1.2%	0.9%	0.9%	1.2%
More than 3 days late end-to-end	5.5%	8.5%	5.5%	4.6%	1.6%	4.5%	5.5%	5.6%	7.2%	4.5%	3.4%	1.9%	4.7%	3.3%	5.6%	5.0%
On-time leg 1	94.0%	95.0%	95.1%	98.2%	96.2%	96.2%	96.6%	95.0%	96.3%	97.3%	98.4%	98.7%	96.5%	97.3%	95.5%	92.0%
Late leg 1	5.1%	4.3%	4.3%	1.5%	3.4%	3.2%	2.8%	4.3%	3.1%	2.2%	1.6%	0.6%	1.8%	1.3%	2.1%	4.0%
On-time leg 2	61.2%	59.7%	70.0%	75.5%	79.3%	74.6%	70.5%	68.3%	63.9%	75.8%	79.4%	83.1%	72.1%	72.2%	68.8%	70.2%
Late leg 2	31.6%	37.0%	26.2%	21.0%	18.1%	23.1%	27.1%	27.5%	33.0%	20.9%	17.5%	13.8%	23.7%	24.9%	25.5%	22.6%
On-time leg 3	80.6%	87.5%	86.7%	89.3%	92.1%	89.5%	88.8%	84.3%	88.4%	86.1%	88.9%	87.2%	82.7%	82.7%	83.7%	80.9%
Late leg 3	12.0%	8.6%	9.3%	7.7%	5.1%	7.4%	8.4%	10.0%	8.1%	10.9%	9.6%	7.0%	6.8%	8.1%	13.3%	11.5%
Total anomalies end-to-end	7.4%	3.8%	4.1%	2.9%	2.8%	3.1%	2.8%	5.7%	3.9%	3.0%	3.2%	3.2%	5.9%	3.3%	6.0%	7.6%
Total items delivered	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
LEG 1 anomalies																
No EMA	0.1%	0.4%	0.2%	0.1%	0.2%	0.4%	0.2%	0.2%	0.3%	0.3%	0.3%	0.5%	1.4%	1.2%	1.7%	1.3%
No collection point																
Out of sequence (EMC before EMA)	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
No outward OE code in EMC																
Incorrect collection point																
No standard for export OE (Incorrect outward OE)																
LEG 2 anomalies																
No EMC	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%	0.3%	0.4%
No Inward OE code in EMD																
Out of sequence (EMC before EMD)	0.2%	0.0%	0.0%			0.0%	0.0%	0.0%	0.0%					0.0%	0.1%	1.2%
No origin transport standard in EMC																
No destination transport standard from EMD	6.3%	2.7%	3.2%	2.3%	2.2%	1.8%	1.8%	3.2%	2.5%	1.7%	2.5%	2.3%	2.6%	1.5%	3.3%	4.1%
LEG 3 anomalies																
No delivery zone indicator	0.0%					0.0%	0.0%	0.0%	0.0%		0.0%			0.0%	0.0%	0.0%
Out of sequence (delivery before EMD)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%		0.0%	0.0%	0.0%	0.0%
No delivery standard	0.2%	0.5%	0.3%	0.3%	0.1%	0.8%	0.4%	1.3%	0.4%	0.8%	0.2%	0.2%	1.7%	0.4%	0.3%	0.4%
No EMD	0.6%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%	0.1%	0.2%	0.2%	0.0%	0.1%	0.1%	0.2%	0.1%

2. Data quality cockpit

The cockpit groups together the following graphs for the past 10 days: on-time transmission, provision of delivery information, REDES over PREDES, REDES over number of partners, and EMA over EMC. There is also a list with links to each of the indicators listed in the three dashboards below but not included in the graphs below.



There are three dashboards under this menu: transmission timeliness, ratios and M40 compliance.



The Transmission timeliness dashboard includes 30 indicators, which are tracking data (a set of data), EMA, EMB, EXA, EXB, EXC, EXD, EXX, EMC, EMJ, EMK, EMD, EDA, EDB, EME, EDC, EMF, EDD, EDE, EMG, EDF, EDG, EDH, EDX, EMH, EMI, PREDES, RESEDES, delivery events, and full track and trace.

The Ratios dashboard includes 26 indicators measured for the own scanning and four for the scanning of the partners, for a total of 30. These are EMA over EMB, EMA over EMC, EMB over EMA, EMB over EMC, EMC over EMA, EMC over EMD, EMD over EDH/EMH/EMI, Provision of delivery information, EMF over EMD, EDA over EMD, EDB over EMD, EDC over EDB, EDF over EMD, EDX over EMD, EXX over EMA, RESCON over PRECON, RESEDES over PREDES, PREDES over number of partners, inbound item scanning, missing delivery information, PREDES –number of links, RESCON – number of links, RESEDES- number of links, PRECON – number of links, CARDIT sent, and RESDIT received.

The M40 compliance dashboard includes eight indicators which are existing V3 links, population of the data elements, reason codes (EXD, EXX, EDA, EDF, EDX), reason codes (EMH), action codes (EXD, EDA, EDF, EDX), Action codes (EMH), customs retention codes (EXB, EME), and compliance achieved.

3. Elapsed time calculations group of dashboards

There is no cockpit for this group. It includes two dashboards and one elapsed time calculator.

The end-to-end elapsed time dashboard include 17 inbound and 17 outbound indicators, for a total of 34 indicators. These are J+1, J+2, J+3, J+4, J+5, J+6, J+7, J+8, J+9, J+10, J+15, J+20, J+25, > J+25, no EMA, out of sequence, and average elapsed days.

The end-to-end elapsed time Zone 1 to Zone 1 dashboard include 17 inbound and 17 outbound indicators, for a total of 34 indicators. These are Volume Z1 to Z1, J+1, J+2, J+3, J+4, J+5, J+6, J+7, J+8, J+9, J+10, J+15, J+20, J+25, > J+25, out of sequence, and average elapsed days.

The elapsed time calculator is a tool with a complex set of rules that are available in a separate document for the chosen contractor.

Elapsed Time Calculator

CZ

Service Performance ▾ Data Quality ▾ Elapsed Time Calculations ▾ Service Information ▾ Awards Compliance

Configuration

Events ⓘ Calculation ⓘ as Origin as Destination

Partners ⓘ

Leave blank to select all operators

Period ⓘ Month Yes No

Last 1 days

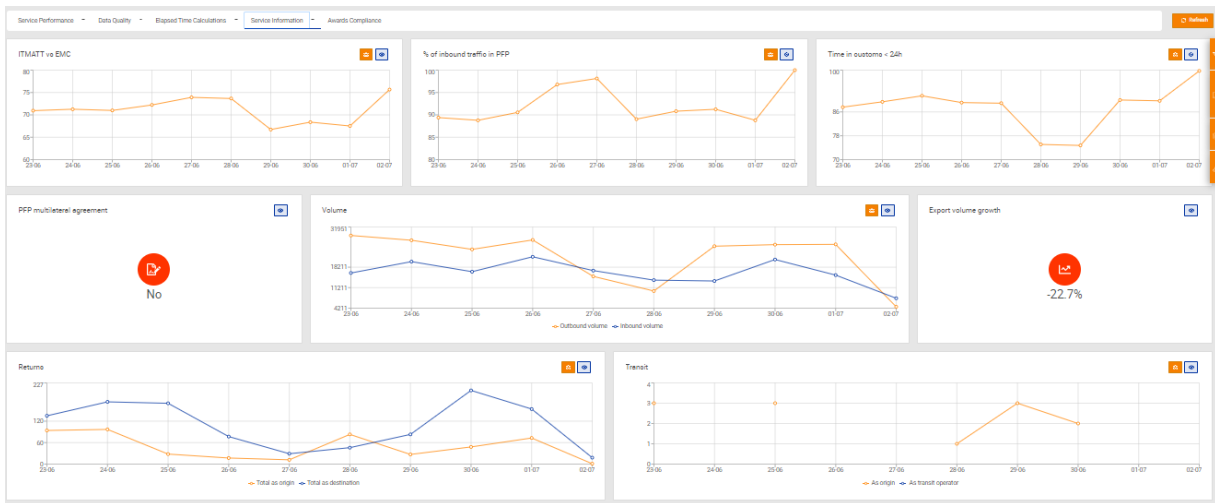
When your report is ready you will receive an email and the report will appear at the top of the list below. The page is self-refreshing, please do not click on generate multiple times.

Reports

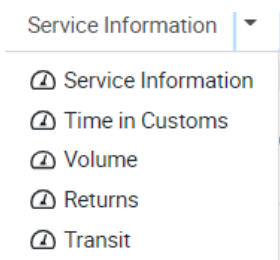
Operator ↑↓	Name ↑↓	Size ↑↓
-------------	---------	---------

4. Service information cockpit

The cockpit groups together the following graphs for the past 10 days: ITMATT vs EMC, %of inbound traffic in PFP, time in customs <24h, PFP multilateral agreement, volume, export volume growth, and returns and transit.



This section includes five dashboards, which are service information, time in customs, volume, returns, and transit.



The **service information** dashboard includes five measurements in the daily view and six more in a monthly view for a total of 11. These are inbound Pfp traffic, outbound Pfp traffic, ITMATT over EMC, ITMATT over EMD, ITMATT send and receive, Export volume growth, validation leg 1, validation leg 2, validation leg 3, Pfp multilateral agreement, and participation in the Pfp Plan.

The time in customs dashboard includes 10 indicators for inbound and 10 for the outbound performance, for a total of 20 indicators. These are <6h, 6h-12h, 12h-24h, 24h-48h, 48h-72h, >72h, average (in hrs), time in customs<24h, out of sequence, and no EDB.

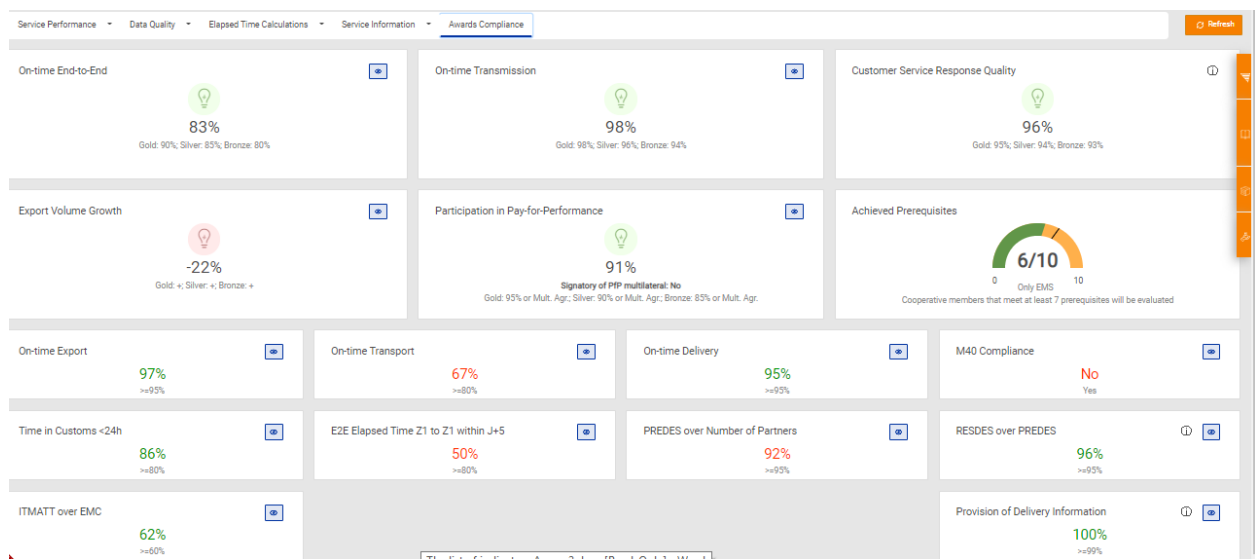
The volume dashboard includes five types of volume calculations for inbound and five for outbound volumes, for a total of 10 indicators. These are by zone, by OE, by partner, between zones, and between OEs.

The returns dashboard includes four indicator for operators as origin and four as destination, for a total of eight indicators. These are total, valid, invalid reason code, and with EMI.

The transit dashboard calculates forwarded items as transit and as origin, for a total of two indicators.

5. Awards compliance cockpit

This cockpit does not include any new measurements, as it brings together indicators existing in several dashboards.



However, unlike the other dashboards, it calculates the result year-to-date and it also shows one additional indicator, customer service response quality, that is uploaded to the system, previously calculated in another system.

The 16 indicators calculated are on-time end-to-end, on-time transmission, customer service response quality, export volume growth, participation in Pay-for-Performance, achieved prerequisites, on-time export, on-time transport, on-time delivery, M40 compliance, time in customs<24h, E2E elapsed time Z1 to Z1 within J+5, PREDES over number of partners, RESDES over PREDES, ITMATT over EMC, and provision of delivery information.

Validation of service standards in the EMS Operational Guide

1. Export/transport/delivery standards validation

This part/function of the EMS Operational Guide is used to collect data from the members about their export, transport and delivery standards, allowing the possibility to work with this data, and to subsequently easily publish the final set of data. The publication of the export, transport and delivery standards (DS) is done by the EMS Unit staff with the Super User role on the operators page and the same data is used for performance measurement purposes. The standards module is connected to SMART and enables the upload of standards from the standards module into SMART for further processing. After the validation is done, SMART, through the synchronization function, uploads all standards as reference data for reporting.

Only Standards Managers (hereinafter SM) and Super Users (hereinafter SU) have access to the standards module.

2. Service standards module of the EMS Operational Guide

All standards are available in the EMS Operational Guide for SM and SU, in the horizontal toolbar, under the section "Standards". In this module, SM can access export and delivery standards while SU are able to access transport standards as well.

Export standards section – Content

- 1 Offices of Exchange (OEs)
 - 1.1 Validated export standards
 - Date of last update
 - Comments
 - 1.2 Use export office codes in calculator
- 2 Measurement Table
 - 2.1 Version of Measurement Table
 - 2.2 Date
 - 2.3 To be applied from
- 3 Export Standard
 - 3.1 OE Name
 - 3.2 OE Code (IMPC)
 - 3.3 Airport
 - 3.4 Address
 - 3.5 Hours of Operation
 - 3.6 GMT
 - 3.7 Telephone

- 3.8 Fax
 3.9 E-mail
 3.10 Standards from posting of an item to arrival at Outward
 3.11 Zone classification
 3.12 Export Office Code

<i>Question/text</i>	<i>Possible values</i>	<i>Example</i>	
Validated export standards	ALPHA	Yes/No	R/O
Date of last update	NUM	2020-05-18	R/O
Comments	ALPHANUM	some limitations in 123	R/O
Use export office codes in calculator	ALPHA	Yes/No	R/O
Measurement Table	R/O label	n/a	Static Label in the form
Version of Measurement Table	NUM	12	Up to 3 numbers
Date	NUM	2020-05-18	R/O
To be applied from	NUM	06 2020	R/O
Export Standard	R/O label	n/a	Static Label in the form
OE Name	ALPHA	Helsinki	R/O
OE Code (IMPC)	ALPHANUM	FIHELA	R/O
Airport	ALPHANUM	Airport in Helsinki	R/O
Address	ALPHANUM	Vekayvoch 12, Helsinki	R/O
Hours of Operation	ALPHANUM	Mon 00:00-23:59	R/O
		Tue 00:00-23:59	
		Wed 00:00-23:59	
		Thu 00:00-23:59	
		Fri 00:00-23:59	
		Sat 00:00-23:59	
		Sun 00:00-23:59	
GMT	ALPHANUM	+04:00	up to 6 alphanumeric
Telephone	ALPHANUM	(+358) 20 451 5762	R/O
Fax	ALPHANUM	(+358) 20 451 5762	R/O
E-mail	ALPHANUM	jari.ritvanen@posti.com	R/O
Standards from posting of an item to arrival at Outward OE	ALPHANUM	Monday	R/O
		Tuesday	
		Wednesday	
		Thursday	
		Friday	
		Saturday	
		Sunday	
Zone classification	R/O label	n/a	Static Label in the form
Zone 1	ALPHANUM	11000	R/O
Zone 2	ALPHANUM	Budapest	R/O
Zone 3	ALPHANUM	Glasgow	R/O
Zone 4	ALPHANUM	London 12454	R/O
Export Office Code	R/O label	n/a	Static Label in the form
Zone 1	ALPHANUM	11000	R/O
Zone 2	ALPHANUM	FINAAA	R/O
Zone 3	ALPHANUM	FI-1-GA	R/O
Zone 4	ALPHANUM	FI11000	R/O

Transport standards section – Content

- 1 Offices of Exchange (OEs)
 - 1.1 Validated export standards
 - Date of last update
- 2 Measurement Table
 - 2.1 Version of Measurement Table
 - 2.2 Date
 - 2.3 To be applied from
- 3 Transport Standard
 - 3.1 OE Name
 - 3.2 OE Code (IMPC)
 - 3.3 Airport
 - 3.4 Address
 - 3.5 Outward Processing
 - 3.6 Legs: Operator code, IMPC code, Distance, Mon, Tue, Wed, Thu, Fri, Sat, Sun

<i>Question/text</i>	<i>Possible values</i>	<i>Example</i>	
Offices of Exchange (OEs)	R/O label	n/a	Static Label in the form
Validated export standards	ALPHA	Yes/No	R/O
Date of last update	NUM	2020-05-18	R/O
Measurement Table	R/O label	n/a	Static Label in the form
Version of Measurement Table	NUM	12	Up to 3 digits
Date	NUM	2020-05-18	R/O
To be applied from	NUM	06 2020	R/O
Transport Standard	R/O label	n/a	Static Label in the form
OE Name	ALPHA	HEL	R/O
OE Code (IMPC)	ALPHANUM	FIHELA	R/O
Airport	ALPHANUM	Airport in Helsinki	R/O
Address	ALPHANUM	Vekayvoch 12, Helsinki	R/O
Outward Processing	ALPHANUM	All Items receive EMC scan just before transport	R/O
Legs	R/O label	n/a	Static Label in the form
Operator code	ALPHA	AEA	Max 3 alpha uppercase
IMPC code	ALPHA	FIHELA	max 6 alpha uppercase
Distance	NUM	12	max 2 digits
Mon	ALPHA	Yes	R/O
Tue	ALPHA	No	R/O
Wed	ALPHA	Yes	R/O
Thu	ALPHA	Yes	R/O
Fri	ALPHA	Yes	R/O
Sat	ALPHA	Yes	R/O
Sun	ALPHA	Yes	R/O

Delivery standards section – Content

- 1 Offices of Exchange
 - 1.1 Validated delivery standards
 - Date of last update
 - 1.2 Custom clearance average time for
 - Items subject to duty
 - Items not subject to duty
 - Comments
 - 1.3 Use delivery office codes in calculator
 - 2 Measurement Table
 - 2.1 Version of Measurement Table
 - 2.2 Date
 - 2.3 To be applied from
 - 2.4 Remote customs apply
 - 3 Days of the week on which EMS items are delivered
 - 4 Delivery Standards
 - 4.1 OE Name
 - 4.2 OE Code (IMPC)
 - 4.3 Airport
 - 4.4 Address
 - 4.5 Hours of Operation
 - 4.6 GMT
 - 4.7 Telephone
 - 4.8 Fax
 - 4.9 E-mail
 - 4.10 From the airport of destination to the addressee
 - 4.11 Zone classification
 - 4.12 Delivery Office Code
 - 4.13 Comments

<i>Question/text</i>	<i>Possible values</i>	<i>Example</i>	
Offices of Exchange	R/O label	n/a	Static Label in the form
Validated delivery standards	ALPHA	Yes/No	R/O
Date of last update	NUM	2020-05-18	R/O
Custom clearance average time for	R/O label	n/a	Static Label in the form
Items subject to duty	NUM	2h	R/O
Items not subject to duty	NUM	1 day	R/O
Comments	ALPHANUM	some limitations in 123	R/O
Use delivery office codes in the calculator	ALPHA	Yes/No	R/O
Measurement Table	R/O label	n/a	Static Label in the form

<i>Question/text</i>	<i>Possible values</i>	<i>Example</i>	
Versions of Measurement Tables	NUM	12	R/O
Date	NUM	2020-05-18	R/O
To be applied from	NUM	06 2020	R/O
Remote customs apply	ALPHA	Yes/No	R/O
Days of the week on which EMS items are delivered	R/O label	n/a	Static Label in the form
Monday	ALPHA	Yes/No	R/O
Tuesday	ALPHA	Yes/No	R/O
Wednesday	ALPHA	Yes/No	R/O
Thursday	ALPHA	Yes/No	R/O
Friday	ALPHA	Yes/No	R/O
Saturday	ALPHA	Yes/No	R/O
Sunday	ALPHA	Yes/No	R/O
Delivery Standards	R/O label	n/a	Static Label in the form
OE Name	ALPHANUM	Helsinki	R/O
OE Code (IMPC)	ALPHANUM	FIHELA	Up to 6 uppercase letters
Airport	ALPHANUM	Airport in Helsinki	R/O
Address	ALPHANUM	Vekayvoch 12, Helsinki	R/O
Hours of Operation	ALPHANUM	Mon 00:00-23:59	R/O
		Tue 00:00-23:59	
		Wed 00:00-23:59	
		Thu 00:00-23:59	
		Fri 00:00-23:59	
		Sat 00:00-23:59	
		Sun 00:00-23:59	
GMT	ALPHANUM	+04:00	R/O
Telephone	ALPHANUM	(+358) 20 451 5762	R/O
Fax	ALPHANUM	(+358) 20 451 5762	R/O
E-mail	ALPHANUM	jari.ritvanen@posti.com	R/O
From the airport of destination to the addressee	R/O label	n/a	Static Label in the form
Day	ALPHA	Monday	R/O
		Tuesday	
		Wednesday	
		Thursday	
		Friday	
		Saturday	
		Sunday	
Cut off time	NUM	00:00 - 08:15	R/O
EMD Scan cut-off time	NUM	12:00	max 4 digits
Zone	ALPHA	Monday	R/O
		Tuesday	
		Wednesday	
		Thursday	
		Friday	
		Saturday	
		Sunday	
Zone classification	R/O label	n/a	Static Label in the form
Zone	ALPHA	1,2,3	R/O
Cities or post codes only	ALPHANUM	Basel, 34000	R/O
Delivery Office Code	R/O label	n/a	Static Label in the form
Zone	ALPHA	1,2,3	R/O

Question/text	Possible values	Example	
Delivery Office Code Ranges	ALPHANUM	11000-12000	R/O
Comments	ALPHANUM	some limitations in 123	R/O

3. Export and delivery standards validation function


In the Export/Delivery standards module, within the horizontal toolbar, the following actions exist: Edit, Workflows (Open new request, Submit, Discard, Confirm, Extract, Validate), Save, View, View history, Version, Delivery/export office codes (Upload delivery/export office code list from excel, Download delivery/export office code list to excel), and Download (Download as Excel/PDF/Word, Download delivery/ export Measurement table).

Export standards – horizontal toolbar



Delivery standards – horizontal toolbar




All three standards modules (export, transport, and delivery) contain the button for Info . By clicking on this, SM and SU can see the guidelines for finalizing the validation process.


Delivery Standards – English

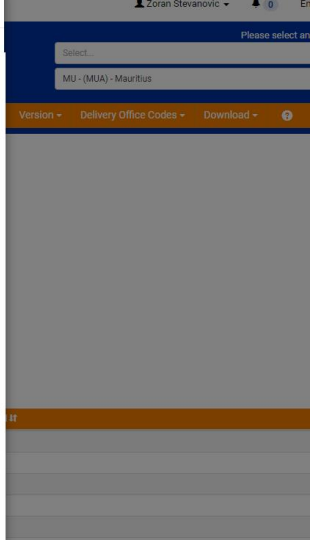
Delivery Standards Revalidation

- Go to the Operational Guide website: www.emsog.post
- Enter your username and password and click [Log In](#).



- On the top left corner, you will find the list of all available sections. The section **Request** is the main one you will need for delivery standards revalidation.

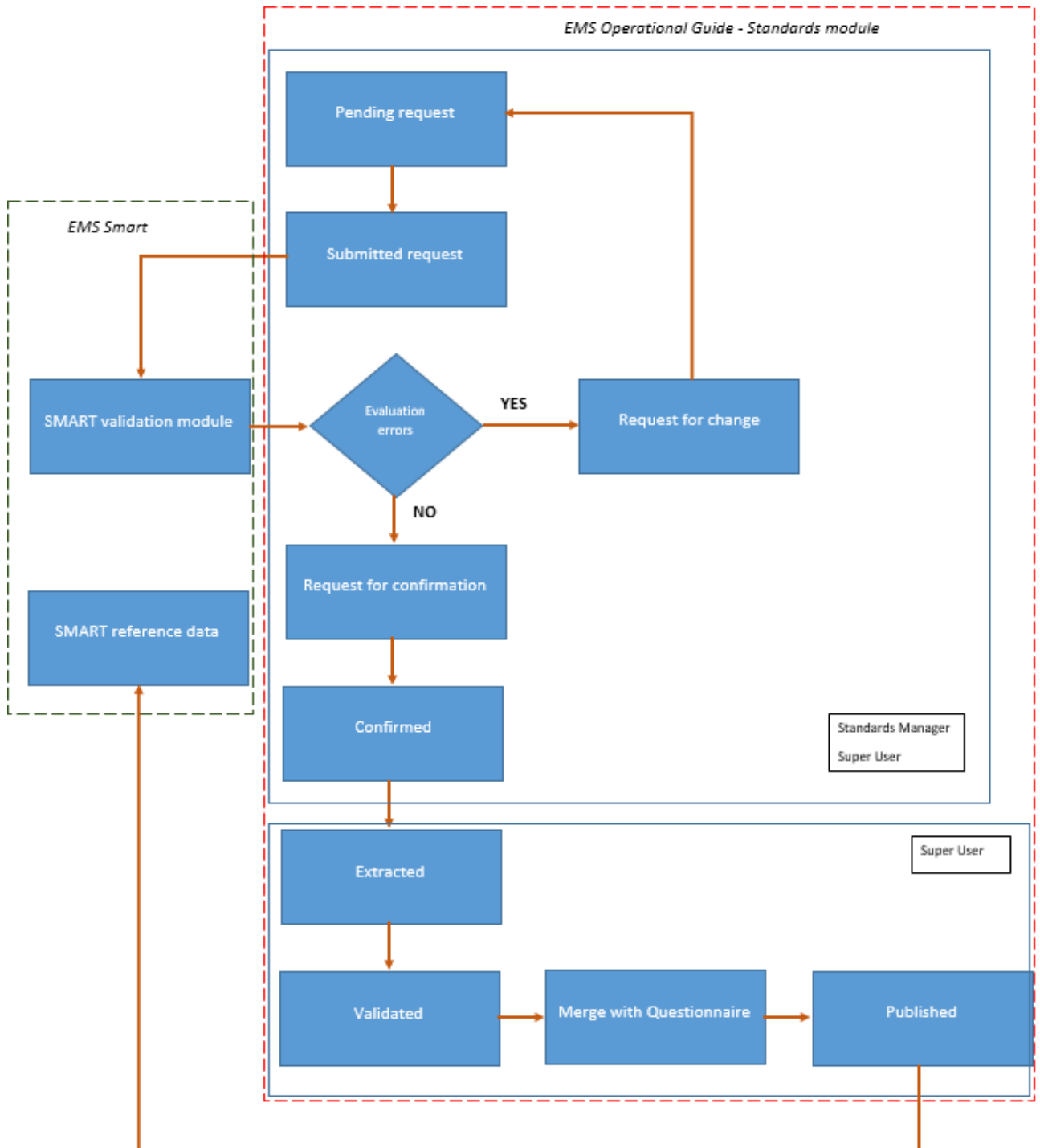




Responsiveness of each activity performed under this module should be in milliseconds. During pre-evaluation and uploading export/transport/delivery measurement table, responsiveness should be three seconds.

Diagram of the Validation process

SM and SU have access to the Standards module.



Pending request

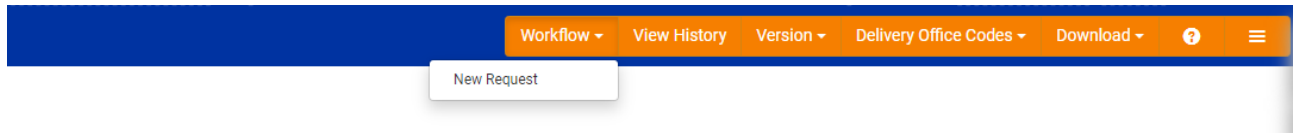
There are two options to open the request for the revalidation of export/delivery standards.

Option 1 – access the Standards section in the horizontal toolbar

- SM access the EMS Standards module via the Standards label
- SM choose export/delivery under Standards label

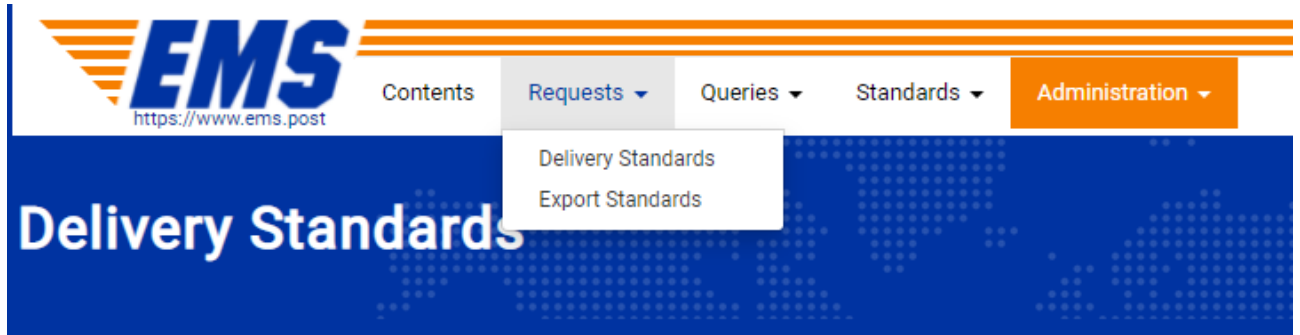


- SM choose under Workflow – New Request
- SM click on OK and create Pending request



Option 2 – access the Requests section in the horizontal toolbar

- SM access the EMS Standards module via Request label
- SM choose export/delivery under Request



- SM choose under Actions – New Request
- SM click on OK and create Pending request

Last Event (GMT) 🇬🇧	Version #	To be applied from #	Workflow Events
2017-12-13 13:39:53	20	04 2017	<div style="border: 1px solid #ccc; padding: 5px;"> Actions ▾ View New Request </div>

SM:

- The Edit mode is used to revise export/delivery standards. In this mode all fields except the last subsection export/delivery office code are open for editing
- Use Workflow functions: edit, submit, and discard pending mode

1 Offices of Exchange

1.1 Validated delivery standards

Date of last update

1.2 Custom clearance average time for

Items subject to duty

Items not subject to duty

Comments

1.3 Use delivery office codes in calculator

No

2 Measurement Table

2.1 Version of Measurement Table

2.2 Date

2.3 To be applied from

2.4 Remote customs apply

No

Yes

2004-09-01

2 Hours

2 Hours

No

2

2021-06-29

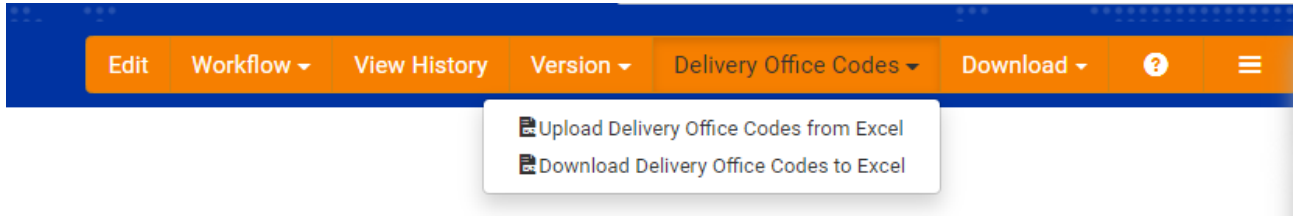
08 2021

No

- SM click on SAVE



- In the view mode, SM upload the export/delivery office codes which will be stored in the subsection export/delivery office code

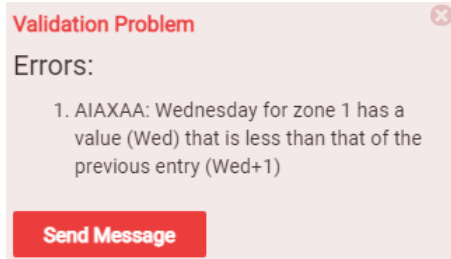


	A	B	C	D	E
1	Zone number	Min Delivery Office	Max Delivery Office		
2	1	OM0100	OM0100		
3	1	OM0111	OM0111		
4	1	OM0112	OM0112		
5	1	OM0114	OM0114		
6	1	OM0115	OM0115		
7	1	OM0116	OM0116		
8	1	OM0117	OM0117		
9	1	OM0118	OM0118		
10	1	OM0119	OM0119		
11	1	OM0121	OM0121		
12	1	OM0122	OM0122		
13	1	OM0123	OM0123		
14	1	OM0124	OM0124		
15	1	OM0130	OM0130		
16	1	OM0131	OM0131		
17	1	OM0132	OM0132		
18	1	OM0133	OM0133		
19	1	OM0134	OM0134		
20	1	OM0138	OM0138		
21	1	OM0140	OM0140		
22	1	OM0141	OM0141		
23	1	ALKUDELIVERYCEN	ALKUDELIVERYCENTER		

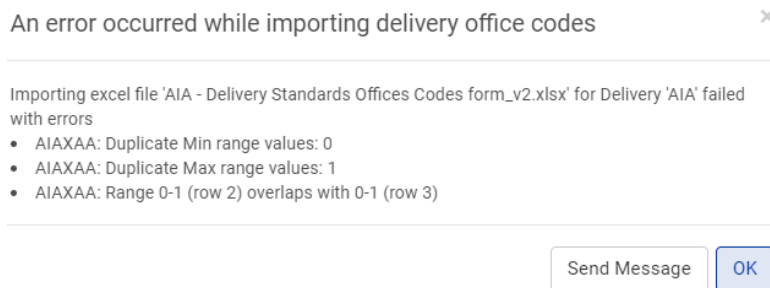
- System allows upload/download of the reference data/standards in excel/pdf/word



- The standards module checks if delivery days published match with the delivery days in the standards
- The standards module creates an error message based on this check



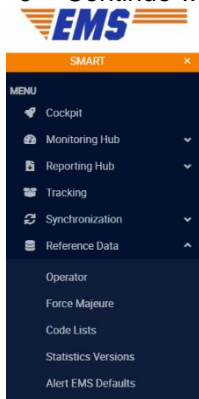
- The standards module checks reference data such as overlapping codes and blank cells before moving to the final stage



- SM do the final check and click on SUBMIT

Submitted request

- SU do further verification
 - o Access submitted request
 - o Check if all data is correct in comparison with the previous version
 - o Continue with the evaluation in SMART:



- Access SMART
- Under the vertical toolbar access Reference Data – Operator
- Choose the delivery/export standards card
- Right click on submitted request (marked in green) and define period
- Click Validate

Delivery Standard Requests

					Measurement Table	
Operator ↑↓	Description ↑↓	Validated ↑↓	Last Modification (UTC) ↑↓	Version ↑↓	To be applied	
AIA (22)		No	29-06-2021			08 2021
AIA (1)	Delivery standards	No	05-11-2017			03 2017

- View in Operational Guide
- Synchronize...
- Validate...
- Copy

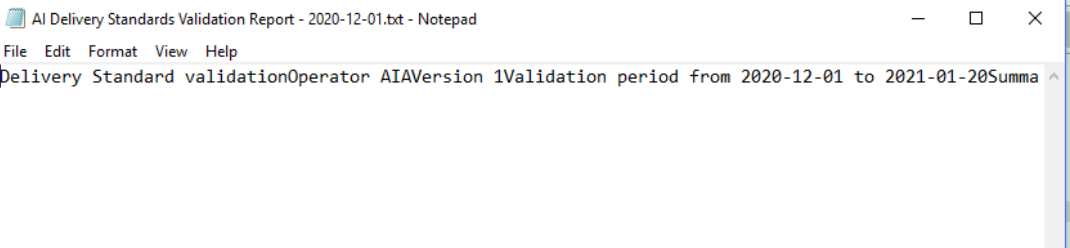
- Download the result as .txt file

Delivery Validation Reports

Name ↑↓

- 2020-12-01 AI Delivery Standards Validation Report
- 2020-12-14 AI Delivery Standards Validation Report

- Download
- Discard
- Copy



- communicate with SM via EMS Standards module

Request to Revise

- Submitted

50

Description #↑	Operator #↑	Last Event (GMT) #↑	Version #↑	To be applied from #↑	Workflow Events
-	AIA	2021-06-29 14:18:51	2	08 2021	<ul style="list-style-type: none"> Actions View Edit Validate Revise Ask confirmation Discard

- SU access Standards module
- Request and choose Export or Delivery
- For a specific operator in Actions choose Revise

Revise

Message

Formats - B I

Cancel OK

- In the message body add the evaluation result for further consideration by SM and click OK
- The Submitted request becomes a Pending request

Or,

Request to Confirm

- SU access the Standards or Request module:
- Request and choose Export or Delivery

The screenshot shows a table with the following columns: Description #, Operator #, Last Event (GMT) #, Version #, To be applied from #, and Workflow Events. The table contains one row with the following data: Description #, Operator # (AIA), Last Event (GMT) # (2021-06-29 14:18:51), Version # (2), To be applied from # (08 2021), and Workflow Events. An 'Actions' dropdown menu is open over the 'Workflow Events' column, showing options: View, Edit, Validate, Revise, Ask confirmation (highlighted in yellow), and Discard.

- For a specific operator, under Actions choose Confirm

The screenshot shows a dialog box titled 'Ask confirmation'. It features a 'Message' field with a rich text editor toolbar containing icons for undo, redo, bold, italic, text color, background color, bulleted list, numbered list, link, and unlink. Below the editor are 'Cancel' and 'OK' buttons.

- In the message body SM confirm the standards and click OK

The screenshot shows a table with the following columns: Description #, Operator #, Last Event (GMT) #, Version #, To be applied from #, and Workflow Events. The table contains one row with the following data: Description #, Operator # (AIA), Last Event (GMT) # (2021-06-29 14:24:37), Version # (2), To be applied from # (08 2021), and Workflow Events.

- The Submitted request becomes a To Confirm request
- SM receive notification message and SU as cc

New State: toConfirm.

You can view the request history [here](#), or view the content of this request [here](#).
Note: You need to login first to see the content.

This email and any attachments may contain confidential and privileged information. If you are not the intended recipient, please notify the sender immediately by return email at: EMS.Unit@upu.int

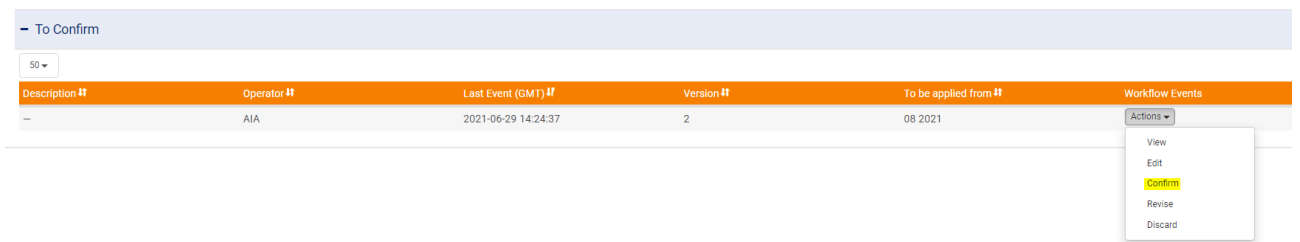
Kind regards,

Publication Notification Service,

EMS UNIT
International Bureau
Universal Postal Union
3000 BERNE 15
SWITZERLAND
* [Tel:+41 31 350 3547](tel:+41313503547)
* [Fax:+41 31 351 5200](tel:+41313515200)
* Web: www.ems.coop

Taking EMS forward

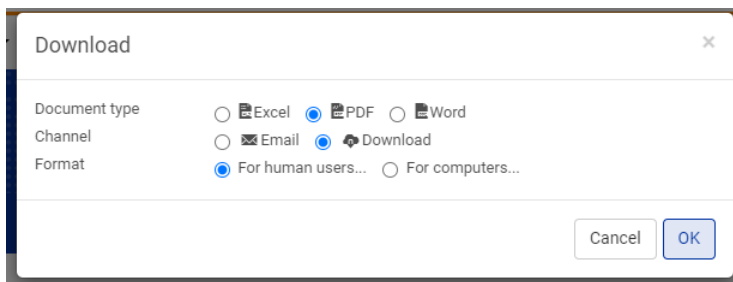
- SM access Request module, choose Export/Delivery standards and in the folder To Confirm, under the Action, choose – Confirm. After the pop up message box appears, SM add a message and click OK. The system moves this request to the status - Validated.



- SU are able to do all validation steps on behalf of SM (open, submit, revise, discard, confirm).

Actions performs by the SU

- Access folder Validated for export and delivery standards
- Download PDF/Excel/Word final standards
- Download measurement table



EMS Validated Delivery Standards	
EMS Validated Delivery Standards	
Country name:	Oman
Version of Measurement Table:	5.0
Date:	25/MAY/2021
To be applied from (MM YYYY):	08 2021
Remote customs apply:	N
OE's to be used:	OMMCTA

Delivery Standards - OMA

1 Offices of Exchange		
1.1 Validated delivery standards	Yes	
Date of last update	2021-06-29	
1.2 Custom clearance average time for		
Items subject to duty	48 Hours	
Items not subject to duty	24 Hours	
Comments		
1.3 Use delivery office codes in calculator	No	
2 Measurement Table		
2.1 Version of Measurement Table	5.0	
2.2 Date	2021-05-25	
2.3 To be applied from	08 2021	
2.4 Remote customs apply	No	
3 Days of the week on which EMS items are delivered		
	Day	Items delivered
	Monday	Yes
	Tuesday	Yes
	Wednesday	Yes

- In the WORKFLOW – from the drop-down list choose Extract and type the message in the message body - click OK



- In the Workflow choose – Validate, type the message and click ok.



- Note: In the situations where we have messages sent, the system sends that message to SM and cc. to SUs, or to SUs only. This depends on the action type.
 - Pending, submitted, request for revise, ask confirmation, confirm, discard, validated – sent to Standard manager and cc SU
 - Extract, Merge into Questionnaire, Archive - to SU
 - This is set by the user administration system where we subscribe the SM to receive these types of messages

Dear Mr. Zoran Stevanovic,
There has been a change in the status of a request you are monitoring.

Operator code: OMA
Description: V5
Message:
New State: pending.

You can view the request history [here](#), or view the content of this request [here](#).
Note: You need to login first to see the content.

This email and any attachments may contain confidential and privileged information. If you are not the intended recipient, please notify the sender immediately by return email at: EMS.Unit@upu.int

Kind regards,

Publication Notification Service,

EMS UNIT
International Bureau
Universal Postal Union
3000 BERNE 15
SWITZERLAND
* Tel:+41 31 350 3547
* Fax:+41 31 351 5200
* Web: www.ems.coop

Taking EMS forward

Dear Mr. Zoran Stevanovic,
There has been a change in the status of a request you are monitoring.

Operator code: OMA
Description: V5
Message:
New State: submitted.

You can view the request history [here](#), or view the content of this request [here](#).
Note: You need to login first to see the content.

This email and any attachments may contain confidential and privileged information. If you are not the intended recipient, please notify the sender immediately by return email at: EMS.Unit@upu.int

Kind regards,

Publication Notification Service,

EMS UNIT
International Bureau
Universal Postal Union
3000 BERNE 15
SWITZERLAND
* Tel:+41 31 350 3547
* Fax:+41 31 351 5200
* Web: www.ems.coop

Taking EMS forward

4. Transport standards validation function

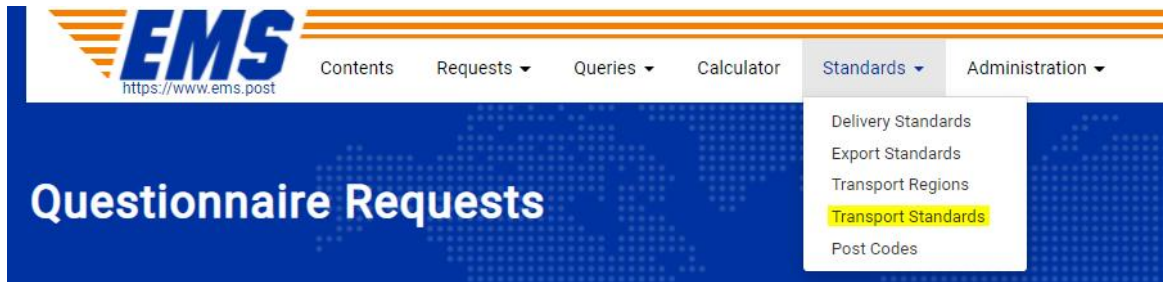
In the Transport standards module, the following toolbars exist: Edit, Prefill, Workflow (Validate, Discard), View history, and Download (Download as Excel/PDF/Word, Upload transport measurement table from excel, download transport measurement table).

Transport



For transport standards:

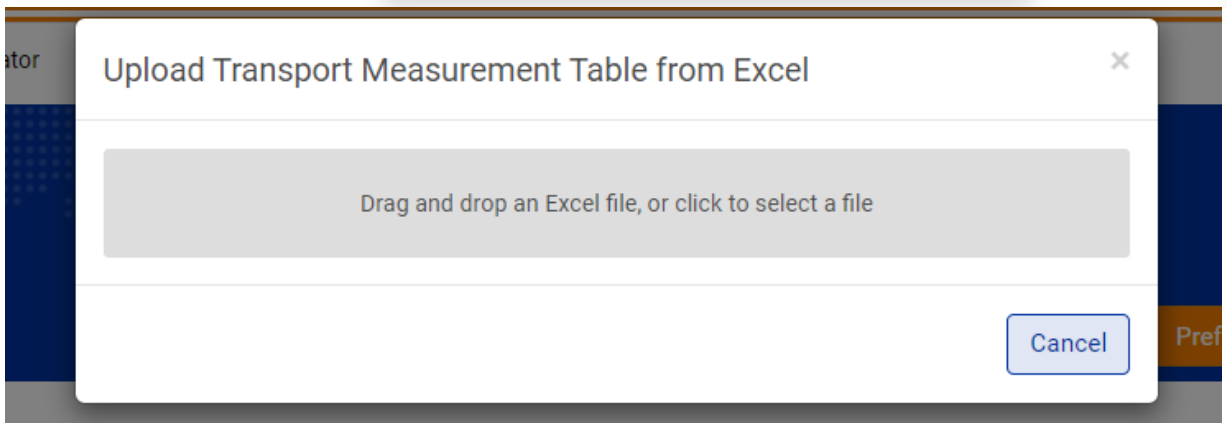
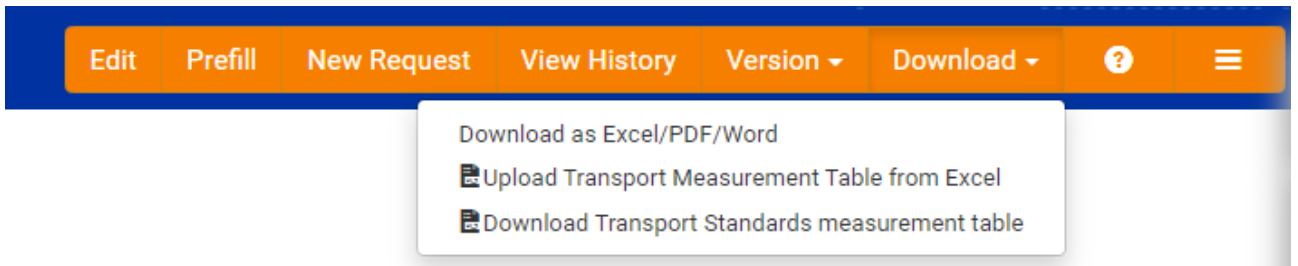
- Only SU are able to do the complete the validation process



- The system is able to prefill specific reference data from the export standards



- The system allows upload/download reference data/standards in excel/pdf/word.



- The system is able to upload reference data using the drag and drop function or to right click on the grey field and choose a file from the computer

DESTINATION POST		Leg 2	Transport 7 days a week	Days in the week when transport is organized (per destination)						
COUNTRY Code	IMPC Code	(EMC to EMD)		Mon	Tue	Wed	Thu	Fri	Sat	Sun
AE	AEAUHA	6	N	N	Y	Y	Y	N	N	Y
AE	AEDXBA	5	N	N	Y	Y	Y	N	N	Y
AF	AFKBLS	7	N	N	Y	Y	Y	N	N	Y
AT	ATVIEB	7	N	N	Y	Y	Y	N	N	Y
AU	AUSYDB	12	N	N	Y	Y	Y	N	N	Y
BA	BASJJA	7	N	N	Y	Y	Y	N	N	Y

- The system verifies if there are errors in uploaded reference data (duplicates, blank cells, content does not correspond to the predefined size, etc.)

An error occurred while importing Transport Measurement Table

Importing excel file 'MUA - Transport Standards Measurement Table v2.xlsx' for Transport 'MUA' failed with errors

- MUPLUB: Cell F89 must be empty, whereas it contains 'N'

Send Message OK

An error occurred while importing Transport Measurement Table

Importing excel file 'MUA - Transport Standards Measurement Table v2.xlsx' for Transport 'MUA' failed with errors

- IMPC CLSCLD exists multiple times in the sheet Outbound OE (MUPLUB)
- IMPC CZPRGA exists multiple times in the sheet Outbound OE (MUPLUB)
- IMPC DEFRAA exists multiple times in the sheet Outbound OE (MUPLUB)
- IMPC DKCPHB exists multiple times in the sheet Outbound OE (MUPLUB)
- IMPC ESMADB exists multiple times in the sheet Outbound OE (MUPLUB)
- IMPC FRCDGH exists multiple times in the sheet Outbound OE (MUPLUB)
- IMPC GBCVTA exists multiple times in the sheet Outbound OE (MUPLUB)

Send Message OK

- The system is connected in real time with SMART and allows the further validation of data inserted in the EMS Standards module

Operator Network Export Standards **Transport Standards** Delivery Standards

Transport Standard Requests

Operator	Description	Validated	Last Modification (UTC)	Measurement Table	To be applied From
MUA (3)	MU - transport standards	No	24-02-2021 13:17:53	<ul style="list-style-type: none"> View in Operational Guide Synchronize... Validate... Copy 	2021
MUA (2)	MU - transport standards	No	02-03-2020 12:54:12		2020
MUA (1)	Transport standards v1.0	No	02-03-2020 12:54:12		2017

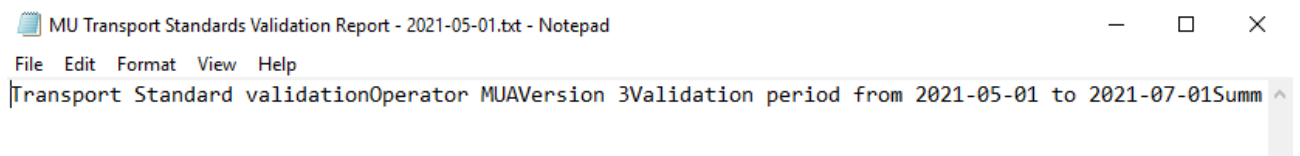
- The Validation module in SMART does further checks

Transport Validation Reports

Name	Size	Generation Date
2021-05-01 MU Transport Standards Validation Report	890 Bytes	30-06-2021 08:11:37

Download Discard Copy

- It provides the result for export and delivery standards revalidation



- SU communicate via email with the operator about revising or confirming transport standards validation. The process of revising and confirming is executed by email.
- When it is confirmed, SU access the EMS Standards module, download all reference data, and validate.



Merge into questionnaire

The SU perform the following actions:

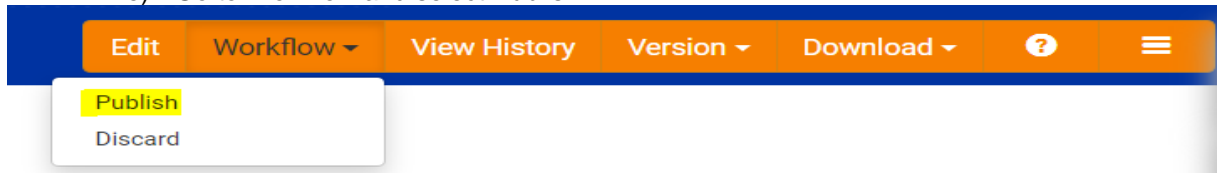
- Access the EMS Operational Guide and click on Standards
- Choose the Delivery or Export standards
- Find the operator which is currently validated in the drop down operator menu
- Verify the date for publication in point 2.3 To be applied
- Go to the Workflow tab and select Merge into Questionnaire



Publication of the Standards

The SU access the main toolbar and:

- Click on Request and select Questionnaires
- Find the operator that has been merged in the drop down operator menu
- In the Submitted folder click on Actions - View
- Check that the new delivery/export standards have been merged into the Questionnaire by clicking on the View History tab
- Go to Workflow and select Publish



- For transport standards, publication is done in the questionnaire as a validation date.

In the request mode, the system allows SM and SU to see the history of all validations, separated per Workflow. This serves users to see the current workflow status and all related correspondence to that validation.

The screenshot shows the 'Delivery Standards Requests' interface. At the top, there are filters for 'AUA' and checkboxes for 'Pending', 'Submitted', 'To Confirm', 'Currently Validated', and 'Previously Validated'. A 'Subscribe' button is also present. Below the filters, there are two main sections:

Currently Validated

Description #	Operator #	Last Event (GMT) #	Version #	To be applied from #	Workflow Events
Delivery standards	AUA	2017-12-13 13:39:53	20	04-2017	Actions

Workflow History (Delivery standards)

User #	Status #	Last Event (GMT) #	Actions
Joanne Pelham	Pending	2017-12-13 10:06:41	
Joanne Pelham	Submitted	2017-12-13 13:39:41	
Joanne Pelham	Currently Validated	2017-12-13 13:39:53	

Content of the current questionnaire

Item #	Question/Text	Type	Possible values	Example	Comments
1	OPERATOR DETAILS	Header	R/O label	n/a	Static Label in the form
1.1	Country or territory name	String	ALPHANUM	Austria	R/O
1.2	ISO CODE	ALPHA (2)	List_ISO_Codes	AT	R/O
1.3	Geographical location	String	List_Geographical_locations	Europe	R/O
1.4	Operator name	String	List_Operators	Österreichische Post AG	R/O
1.5	Operator code	String	List_Operators code	ATA	R/O
1.6	Member of EMS Cooperative	BOOL	Yes/No	Yes	R/O
1.7	EMS Export	BOOL	Yes/No	Yes	R/O
1.8	Signatory of the EMS Standard Agreement on a multilateral basis	BOOL	Yes/No	Yes	R/O
	If yes, since:	String	ALPHANUM	2012-01-01	R/O
1.9	Signatory of the multilateral PFP agreement	BOOL	Yes/No	Yes	R/O
	If yes, since:	String	ALPHANUM	2012-01-01	R/O
	Joined PFP Plan on a bilateral basis	BOOL	Yes/No	Yes	R/O
1.10	Tracking is provided	BOOL	Yes/No	Yes	R/O
	If yes, the website address for tracking is	String	ALPHANUM	http://www.post.at	R/O
1.11	Last electronic update of this entry	String	ALPHANUM	2015-04-02	R/O
1.12	Quarterly credit indicator for EMS Operational Guide updates	String	ALPHANUM	Q2Y15	R/O
2	DELIVERY SERVICES	Header	R/O label	n/a	Static Label in the form
2.1	Coverage	Header	R/O label	n/a	Static Label in the form

Berne 2021

<i>Item #</i>	<i>Question/Text</i>	<i>Type</i>	<i>Possible values</i>	<i>Example</i>	<i>Comments</i>
2.1.1	Entire territory	BOOL	Yes/No	Yes	R/O
2.1.2	If not, a list of locations not covered	Header	R/O label	n/a	Static Label in the form
2.2	Delivery	Header	R/O label	n/a	Static Label in the form
2.2.1	To customer's address for documents and goods	BOOL	Yes/No	Yes	R/O

<i>Item #</i>	<i>Question/Text</i>	<i>Type</i>	<i>Possible values</i>	<i>Example</i>	<i>Comments</i>
2.2.2	To a P.O. Box	BOOL	Yes/No	Yes	R/O
2.2.3	To a Post Office counter	BOOL	Yes/No	Yes	R/O
2.2.4	At office of exchange	BOOL	Yes/No	Yes	R/O
2.2.5	At customs office	BOOL	Yes/No	Yes	R/O
2.2.6	To the pack station/parcel locker	BOOL	Yes/No	Yes	R/O
2.2.7	Other collection points?	BOOL	Yes/No	No	R/O
	If yes, please indicate which ones	String	ALPHANUM	n/a	R/O
2.2.8	Do you offer a delivery choice to customers?	BOOL	Yes/No	Yes	R/O
	Free of charge?	BOOL	Yes/No	Yes	R/O
2.2.9	The customer is contacted before the first delivery attempt	BOOL	Yes/No	No	R/O
	If yes, by	String	ALPHANUM	n/a	R/O
	Telephone	BOOL	Yes/No	Yes	R/O
	SMS	BOOL	Yes/No	Yes	R/O
	E-mail	BOOL	Yes/No	Yes	R/O
	Other means	String	ALPHANUM		R/O
2.2.10	How many attempts at delivery are made?	String	ALPHANUM	1	R/O
2.2.11	Requests for change in delivery	Header	R/O label	n/a	Static Label in the form
	Which requests do you provide?	Header	R/O label	n/a	Static Label in the form
	Stop delivery	BOOL	Yes/No	Yes	R/O
	Return the items	BOOL	Yes/No	Yes	R/O
	Redirect to new address	BOOL	Yes/No	Yes	R/O
	Second delivery	BOOL	Yes/No	Yes	R/O
	Schedule delivery	BOOL	Yes/No	Yes	R/O

Item #	Question/Text	Type	Possible values	Example	Comments
2.2.12	Comments	String	ALPHANUM	An Attempted Delivery Card will be left in the event of an unsuccessful delivery attempt.	R/O
2.3	Undeliverable Items	Header	R/O label	n/a	Static Label in the form
2.3.1	When the item cannot be delivered at the first attempt, an advice of arrival is left	BOOL	Yes/No	Yes	R/O
2.3.2	A second attempt at delivery is available	BOOL	Yes/No	Yes	R/O
	Upon request?	BOOL	Yes/No	Yes	R/O
2.3.3	An undeliverable EMS item is held back for a period of days	String	ALPHANUM	14	R/O

Item #	Question/Text	Type	Possible values	Example	Comments
2.4	Offices of Exchange (OEs)	Header	R/O label	n/a	Static Label in the form
2.4.1	IMPC codes for EMS Export	String	ALPHANUM	n/a	R/O
	IMPC codes for EMS Import	String	ALPHANUM	ATVIEB	R/O
2.4.2	Validated export standards	BOOL	Yes/No	2014-12-01	R/O
	Date of last update	String	ALPHANUM	2014-12-01	R/O
	Comments				
2.4.3	Validated transport standards	BOOL	Yes/No	2014-12-01	R/O
	Date of last update	String	ALPHANUM	2014-12-01	R/O
2.4.4	Validated delivery standards	BOOL	Yes/No	Yes	R/O
	Date of last update	String	ALPHANUM	2014-12-01	R/O
2.4.5	Custom clearance average time for	Header	R/O label	n/a	Static Label in the form
	Items subject to duty	String	ALPHANUM	2 Hours	R/O
	Items no subject to duty	String	ALPHANUM	1 Hour	R/O
	Comment	String	ALPHANUM	All EMS items inbound to Great Britain are subject to customs inspection	R/O

Item #	Question/Text	Type	Possible values	Example	Comments
2.4.6	Delivery standards	Header	R/O label	n/a	Static Label in the form
	OE Name	String	ALPHANUM	ATVIEB	R/O
	OE Code	String	ALPHANUM	ATVIEB	R/O
	Airport	String	ALPHANUM	Vienna International Airport - VIE	R/O
	Address	String	ALPHANUM	ATVIEB Halban Kurz Strasse 5 A-1230 Wien AUSTRIA	R/O
	Hours of operation	String	ALPHANUM	Mon 06:00-20:30 Tue 06:00-20:30 Wed 06:00-20:30 Thu 06:00-20:30 Fri 06:00-16:00 Sat (Closed)- Sun 06:00-14:00	R/O
	GMT	String	ALPHANUM	+02:00	R/O
	Telephone	String	ALPHANUM	(+43) 577 67 24228	R/O
	Fax	String	ALPHANUM	(+43 1) 400 222 330	R/O
	E-mail	String	ALPHANUM	robert.barisits@post.at	R/O
	From the airport of destination to the addressee	Header	R/O label	n/a	Static Label in the form

Item #	Question/Text	Type	Possible values	Example	Comments
2.4.6 Cont'd	Comments (TABLE)	String	ALPHANUM	All EMS items inbound to Great Britain are subject to customs inspection	R/O
	Zone classification	Header	R/O label	n/a	Static Label in the form
	(TABLE)				
	Comments	String	ALPHANUM	All EMS items inbound to Great Britain are subject to customs inspection	R/O
2.4.7	Days of the week on which EMS items are delivered	Header	R/O label	n/a	Static Label in the form
2.4.8	Export standards	Header	R/O label	n/a	Static Label in the form
	OE Name	String	ALPHANUM	ATVIEB	R/O
	OE Code	String	ALPHANUM	ATVIEB	R/O
	Airport	String	ALPHANUM	Vienna International Airport - VIE	R/O

Item #	Question/Text	Type	Possible values	Example	Comments
	Address	String	ALPHANUM	ATVIEB Halban Kurz Strasse 5 A-1230 Wien AUSTRIA	R/O
	Hours of operation	String	ALPHANUM	Mon 06:00-20:30 Tue 06:00-20:30 Wed 06:00-20:30 Thu 06:00-20:30 Fri 06:00-16:00 Sat (Closed)- Sun 06:00-14:00	R/O
	GMT	String	ALPHANUM	+02:00	R/O
	Telephone	String	ALPHANUM	(+43) 577 67 24228	R/O
	Fax	String	ALPHANUM	(+43 1) 400 222 330	R/O
	E-mail	String	ALPHANUM	robert.barisits@post.at	R/O
	Standards from posting of an item to arrival at Outward OE	Header	R/O label	n/a	Static Label in the form
	(TABLE)				
	Zone classification	Header	R/O label	n/a	Static Label in the form
	(TABLE)				
	Comments	String	ALPHANUM	All EMS items inbound to Great Britain are subject to customs inspection	R/O
2.4.9	The transmitted export office codes and delivery office codes are the postcodes?	BOOL	Yes/No	n/a	R/O

Item #	Question/Text	Type	Possible values	Example	Comments
2.5	National Holidays	Header	R/O label	n/a	Static Label in the form
2.5.1	National holidays on which EMS items are not delivered	Header	R/O label	n/a	Static Label in the form
2.6	Admissibility of items	Header	R/O label	n/a	Static Label in the form

Item #	Question/Text	Type	Possible values	Example	Comments
2.6.1	Do you have any Prohibited items in addition to the UPU list of Prohibited items?	BOOL	Yes/No	Yes	R/O
	If yes, add list	String	ALPHANUM	indecent or immoral items; infringing and piracy items;	R/O
	Link to the UPU website's List of Prohibited items	String	ALPHANUM	https://www.upu.int/en/Postal-Solutions/Programmes-Services/Postal-Supply-Chain/Customs	R/O
2.6.2	When an item containing a prohibited article has been wrongly admitted, the following action takes place	Header	R/O label	n/a	Static Label in the form
	The item is returned to the origin operator	BOOL	Yes/No	Yes	R/O
	The item is destroyed	BOOL	Yes/No	Yes	R/O
	Other	String	ALPHANUM	Turn over to the Customs Authority	R/O
	If not, the item is dealt with according to the National legislation	BOOL	Yes/No	Yes	R/O
2.6.3	The limit of weight and size of an item is in accordance with article 11 A of the EMS Standard Agreement: "EMS items shall be admitted up to a maximum weight of 30 kilogrammes. In addition, EMS items shall not normally exceed 1.50 metres for any one dimension or three metres for the sum of the length and the greatest circumference measured in a direction other than length".	BOOL	Yes/No	Yes	R/O
	If not, the limits are	Header	R/O label	n/a	Static Label in the form

Item #	Question/Text	Type	Possible values	Example	Comments
	Max Weight	String	ALPHANUM	n/a	R/O
	Max Dimensions	String	ALPHANUM	n/a	R/O
	Comments	String	ALPHANUM		R/O
Item #	Question/Text	Type	Possible values	Example	Comments
3	CUSTOMER CARE	Header	R/O label	n/a	Static Label in the form
3.1	Customer Care to Operators	Header	R/O label	n/a	Static Label in the form
3.1.1	EMS customer service system user	BOOL	Yes/No	Yes	R/O
	How long are you accepting inquires after the delivery or return of the item?	String	ALPHANUM	3 Months	R/O
	WPOD includes the following details	Header	R/O label	n/a	Static Label in the form
	Date of delivery	BOOL	Yes/No	Yes	R/O
	Time of delivery	BOOL	Yes/No	Yes	R/O
	Name of the recipient	BOOL	Yes/No	Yes	R/O
	Signature of recipient	BOOL	Yes/No	Yes	R/O
	The WPOD is provided within three business days	BOOL	Yes/No	Yes	R/O
	If no, is provided within	String	ALPHANUM	5 Days	R/O
	The records of a WPOD are retained for the following period	String	ALPHANUM	3 Months	R/O
3.2	Call centres	Header	R/O label	n/a	Static Label in the form
3.2.1	Call centre to operators	Header	R/O label	n/a	Static Label in the form
	Name of the call centre	String	ALPHANUM	EMS Customer Service Centre	R/O
	Address and street no	String	ALPHANUM	Halban-Kurz-Strasse 10	R/O
	City and postcode	String	ALPHANUM	A-1230 VIENNA	R/O
	Telephone	String	ALPHANUM	(+43) 577 67 95313	R/O
	Fax	String	ALPHANUM	(+43 1) 400 222 361	R/O
	E-mail	String	ALPHANUM	ems.customerservice@post.at	R/O
	Website	String	ALPHANUM	http://www.post.at	R/O
	Hours/days of operation (local time)	String	ALPHANUM	Mon 07:00-18:00 Tue 07:00-18:00 Wed 07:00-18:00	R/O

Item #	Question/Text	Type	Possible values	Example	Comments
				Thu 07:00-18:00 Fri 07:00-18:00 Sat (Closed)- Sun (Closed)-	
	GMT	String	ALPHANUM	+1	R/O
	Comments	String	ALPHANUM	n/a	R/O
	Languages	Header	R/O label	n/a	Static Label in the form
	English	BOOL	Yes/No	Yes	R/O
	French	BOOL	Yes/No	Yes	R/O

Item #	Question/Text	Type	Possible values	Example	Comments
3.2.1 Cont'd	Spanish	BOOL	Yes/No	Yes	R/O
	Portuguese	BOOL	Yes/No	Yes	R/O
	Russian	BOOL	Yes/No	Yes	R/O
	Others	BOOL	Yes/No	Yes	R/O
	Other languages	String	ALPHANUM	Estonian	R/O
3.2.2	Call centre to customers	Header	R/O label	n/a	Static Label in the form
	Name of the call centre	String	ALPHANUM	EMS Customer Service Centre	R/O
	Address and street no	String	ALPHANUM	Halban-Kurz-Strasse 10	R/O
	City and postcode	String	ALPHANUM	A-1230 VIENNA	R/O
	Telephone	String	ALPHANUM	(+43) 577 67 95313	R/O
	Fax	String	ALPHANUM	(+43 1) 400 222 361	R/O
	E-mail	String	ALPHANUM	ems.customerservice@post.at	R/O
	Website	String	ALPHANUM	http://www.post.at	R/O
	Hours/days of operation (local time)	String	ALPHANUM	Mon 07:00-18:00 Tue 07:00-18:00 Wed 07:00-18:00 Thu 07:00-18:00 Fri 07:00-18:00 Sat (Closed)- Sun (Closed)-	R/O
	GMT	String	ALPHANUM	+1	R/O
	Comments	String	ALPHANUM	n/a	R/O
	Languages	Header	R/O label	n/a	Static Label in the form
	English	BOOL	Yes/No	Yes	R/O
	French	BOOL	Yes/No	Yes	R/O
Spanish	BOOL	Yes/No	Yes	R/O	
Portuguese	BOOL	Yes/No	Yes	R/O	

	Russian	BOOL	Yes/No	Yes	R/O
	Others	BOOL	Yes/No	Yes	R/O
	Other languages	String	ALPHANUM	Estonian	R/O
3.2.3	Which of the following channels of communication do you have?	Header	R/O label	n/a	Static Label in the form
	Automatic Voice Response (IVR) touchtone	BOOL	Yes/No	Yes	R/O
	Automatic Voice Response (IVR) speech	BOOL	Yes/No	Yes	R/O
	Internet website (peer-to-peer systems)	BOOL	Yes/No	Yes	R/O
	Social Media: Twitter, Facebook etc.	BOOL	Yes/No	Yes	R/O
	SMS text/instant message	BOOL	Yes/No	Yes	R/O

<i>Item #</i>	<i>Question/Text</i>	<i>Type</i>	<i>Possible values</i>	<i>Example</i>	<i>Comments</i>
3.2.3 Cont'd	Call back option	BOOL	Yes/No	Yes	R/O
	Web chat	BOOL	Yes/No	Yes	R/O
	Video chat	BOOL	Yes/No	Yes	R/O
	Smartphone application	BOOL	Yes/No	Yes	R/O
3.2.4	Proactive monitoring of customer items - SMS/e-mail	Header	R/O label	n/a	Static Label in the form
	Do you send SMS to customers informing of the status of the item?	BOOL	Yes/No	Yes	R/O
	Do you send e-mails to customers informing of the status of the item?	BOOL	Yes/No	Yes	R/O
3.3	Liability between non-signatories of the EMS Standard Multilateral Agreement	Header	R/O label	n/a	Static Label in the form
3.3.1	Indemnity is paid to the administration of origin in event of loss, theft or damage to inward EMS items	BOOL	Yes/No	Yes	R/O

	For documents	String	ALPHANUM	30.00 SDR	R/O
	For goods	String	ALPHANUM	130.00 SDR	R/O
	If yes, does the amount correspond to the origin operator's indemnity to the sender of the item	BOOL	Yes/No	No	R/O
	If not, the limit amount is	String	ALPHANUM	130.00 SDR	R/O
	If indemnity is paid to the operator of origin in event of loss, theft or damage to inward EMS items, the claim from the origin operator is accepted within three months from the date of event D	BOOL	Yes/No	Yes	R/O
	If not, the time limit to accept the claim is:	String	ALPHANUM	150.00 SDR	R/O
4	CUSTOMS	Header	R/O label	n/a	Static Label in the form
4.1	Do you require ITMATT from the origin country?	BOOL	Yes/No	Yes	R/O
	Are you capable to send ITMATT?	BOOL	Yes/No	Yes	R/O
	Are you capable to receive ITMATT?	BOOL	Yes/No	Yes	R/O
	Do you exchange CUSITM?	BOOL	Yes/No	Yes	R/O

<i>Item #</i>	<i>Question/Text</i>	<i>Type</i>	<i>Possible values</i>	<i>Example</i>	<i>Comments</i>
4.1 Cont'd	The threshold (item value) exempt from the customs duty for private customers (SDR) is	String	ALPHANUM	17.66 SDR	R/O
	The threshold (item value) exempt from the customs duty for business customers (local currency) is	String	ALPHANUM	22.00 SDR	R/O
	The threshold (item value) exempt from the customs duty for business customers (SDR) is	String	ALPHANUM	17.66 SDR	R/O
	How many copies of CN 23 are required?	String	ALPHANUM	2	R/O
	Other required documents	String	ALPHANUM	Phytosanitary certificate of origin	R/O
	Comments	String	ALPHANUM	Commercial or proforma invoice is necessary if it is a commercial	R/O

				shipment (not a gift).	
	Does your organization perform customs clearance on behalf of your local customs?	BOOL	Yes/No	No	R/O
	Comments	String	ALPHANUM	n/a	R/O
4.2	National customs authority website	String	ALPHANUM	www.bmf.gv.at	R/O
4.3	A customs broker is used	BOOL	Yes/No	No	R/O
	If yes, the customs broker contact information is	Header	R/O label	n/a	Static Label in the form
	Name	String	ALPHANUM	n/a	R/O
	Address	String	ALPHANUM	Postal Forwarding	R/O
	Telephone number	String	ALPHANUM	Zollamt Klagenfurt Villach, Ackerweg 19 A-9500 Villach	R/O
	Fax number	String	ALPHANUM	(+43 1) 51433 564053	R/O
	E-mail	String	ALPHANUM	(+43 1) 51433 564053	R/O
4.4	The addressee is charged for the presentation of the item to Customs	BOOL	Yes/No	Yes	R/O
	If yes, just for items subject to duty	BOOL	Yes/No	Yes	R/O
	The rate is	Header	R/O label	n/a	Static Label in the form
	Local currency	String	ALPHANUM	9.00 EUR	R/O
	SDR	String	ALPHANUM	7.00	R/O
	Comments	String	ALPHANUM	15.00 € if the value is over 150 €	R/O

<i>Item #</i>	<i>Question/Text</i>	<i>Type</i>	<i>Possible values</i>	<i>Example</i>	<i>Comments</i>
4.5	The addressee is charged for the customs clearance	BOOL	Yes/No	Yes	R/O
	If yes, just for items subject to duty	BOOL	Yes/No	Yes	R/O
	The rate is:	Header	R/O label	n/a	Static Label in the form
	Local currency	String	ALPHANUM	9.00 EUR	R/O
	SDR	String	ALPHANUM	7.00	R/O
	Comments	String	ALPHANUM	15.00 € if the value is over 150 €	R/O

<i>Item #</i>	<i>Question/Text</i>	<i>Type</i>	<i>Possible values</i>	<i>Example</i>	<i>Comments</i>
4.6	Local customs contacts:	Header	R/O label	n/a	Static Label in the form
	Location	String	ALPHANUM	Zollamt Klagenfurt Villach, Ackerweg 19 A-9500 Villach	R/O
	Telephone	String	ALPHANUM	(+43 1) 51433 564053	R/O
	Fax	Fax:	String	ALPHANUM	(+43 1) 51433 564053
	National customs authority website	www.bmf.gv.at	R/O	www.bmf.gv.at	R/O
	E-mail	String	ALPHANUM	zollinfo@bmf.gv.at	R/O
	Hours/days of operation (local time)	String	ALPHANUM	Mon 06:00-22:00 Tue 06:00-22:00 Wed 06:00-22:00 Thu 06:00-22:00 Fri 06:00-22:00 Sat (Closed)- Sun (Closed)-	R/O
	GMT	String	ALPHANUM	+1	R/O
	Comments	String	ALPHANUM	All items originating from outside the EU are subject to customs inspection	R/O
5	DELIVERY PAYMENTS	Header	R/O label	n/a	Static Label in the form
5.1	Rates for Signatories of the Standard Agreement on multilateral basis	Header	R/O label	n/a	Static Label in the form
	Single rate	String	ALPHANUM	9.00 SDR	R/O
	Documents	String	ALPHANUM	n/a	R/O
	Goods	String	ALPHANUM	n/a	R/O
	Per item	String	ALPHANUM	n/a	R/O
	Per kg	String	ALPHANUM	n/a	R/O

<i>Item #</i>	<i>Question/Text</i>	<i>Type</i>	<i>Possible values</i>	<i>Example</i>	<i>Comments</i>
5.2	Rates for operators without any agreement	Header	R/O label	n/a	Static Label in the form
	Single rate	String	ALPHANUM	9.00 SDR	R/O
	Documents	String	ALPHANUM	n/a	R/O
	Goods	String	ALPHANUM	n/a	R/O
	Per item	String	ALPHANUM	n/a	R/O

	Per kg	String	ALPHANUM	n/a	R/O
5.3	Do you have special rates based on bilateral basis?	BOOL	Yes/No	Yes	R/O
5.4	Do you have special rates for your PFP partners?	BOOL	Yes/No	Yes	R/O
	Single rate	String	ALPHANUM	9.00 SDR	R/O
	Documents	String	ALPHANUM	n/a	R/O
	Goods	String	ALPHANUM	n/a	R/O
	Per item	String	ALPHANUM	n/a	R/O
	Per kg	String	ALPHANUM	n/a	R/O
5.5	Rates for return	String	ALPHANUM	9.00 SDR	R/O
5.6	Rates for handling and forwarding of missent items	String	ALPHANUM	9.00 SDR	R/O
5.7	Rates for Special Destinations	String	ALPHANUM	9.00 SDR	R/O
5.8	Rates for Transit a Decouvert service	String	ALPHANUM	9.00 SDR	R/O
	Comments	String	ALPHANUM	n/a	R/O
6	OTHER SERVICES	Header	R/O label	n/a	Static Label in the form
6.1	À découvert service is available	BOOL	Yes/No	Yes	R/O
	If yes, to the following destinations	String	ALPHANUM	Liberia, Israel, Sri Lanka	R/O
6.2	A COD service is available	BOOL	Yes/No	No	R/O
	For more information, contact the contact person for Agreements	String	ALPHANUM	n/a	R/O
6.3	An inward time-certain service is available	BOOL	Yes/No	No	R/O
	For more information, contact the contact person for Agreements	String	ALPHANUM	n/a	R/O
6.4	An inward Multi parcels shipments (MPS) in EMS is available	BOOL	Yes/No	No	R/O
	For more information, contact the contact person for Agreements	String	ALPHANUM	n/a	R/O

Item #	Question/Text	Type	Possible values	Example	Comments
6.5	A receiver- pays service in EMS is available	BOOL	Yes/No	Yes	R/O
	For more information, contact the contact person for Agreements	String	ALPHANUM	n/a	R/O
6.6	The EMS Goods return service (MRS) involves the return of goods by the addressee to the original seller by EMS, with the latter's authorization. Designated operators may bilaterally agree to offer this supplementary service for parcels. Do you provide this service as	Header	R/O label	n/a	Static Label in the form
	A distant seller designated operator?	BOOL	Yes/No	Yes	R/O
	A distant buyer designated operator?	BOOL	Yes/No	Yes	R/O
	A DDP (delivery duties paid) system is available?	BOOL	Yes/No	Yes	R/O
6.7	List all airlines that have agreed to exchange CARDIT/RESBIT messages with your organization	String	ALPHANUM	Swiss Airlines (LX), Emirates Airlines (EK), AirFrance (AF), KLM (KL), Lufthansa (LH)	R/O
7	CONTACTS	Header	R/O label	n/a	Static Label in the form
7.1	Postal address of your organization	String	ALPHANUM	Österreichische Post AG Unternehmenszentrale Rochusplatz 1 1030 Vienna, Austria	R/O
7.2	Agreements contacts	Header	R/O label	n/a	Static Label in the form
	Name	String	ALPHANUM	Siegfried Völkl	R/O
	Function	String	ALPHANUM	Parcels & Logistics Operation	R/O
	Telephone	String	ALPHANUM	(+43) 664 624 2258	String
	E-mail	String	ALPHANUM	siegfried.voelkl@post.at	R/O
7.3	<i>Operational contact</i>	Header	R/O label	n/a	Static Label in the form
	Name	String	ALPHANUM	Siegfried Völkl	R/O

	Function	String	ALPHANUM	Parcels & Logistics Operation	R/O
	Telephone	String	ALPHANUM	(+43) 664 624 2258	String
	E-mail	String	ALPHANUM	siegfried.voelkl@post.at	R/O
	Skype name	String	ALPHANUM	n/a	R/O
<i>Item #</i>	<i>Question/Text</i>	<i>Type</i>	<i>Possible values</i>	<i>Example</i>	<i>Comments</i>
7.4	Emergency contact				
	Name	String	ALPHANUM	Siegfried Völkl	R/O
	Function	String	ALPHANUM	Parcels & Logistics Operation	R/O
	Telephone (s) which is also available after work hours	String	ALPHANUM	(+43) 664 624 2258	String
	E-mail	String	ALPHANUM	siegfried.voelkl@post.at	R/O
	Skype name	String	ALPHANUM	n/a	R/O
7.5	Financial contact	Header	R/O label	n/a	Static Label in the form
	Name	String	ALPHANUM	Siegfried Völkl	R/O
	Function	String	ALPHANUM	Parcels & Logistics Operation	R/O
	Telephone	String	ALPHANUM	(+43) 664 624 2258	String
	E-mail	String	ALPHANUM	siegfried.voelkl@post.at	R/O

Preset Query

Shows a list of predefined queries to be quickly performed when needed. Possibility to download the result in 3 document types: Excel, PDF and Word.

Operational contacts

Excel result

Operational contacts					
Operator Details		Contacts			
Country or territory name	Operator code	Operational contact			
		Name	Function	Telephone	E-mail
United Arab Emirates	AEA	Mr. Marwan Raafat	Senior Director Operations	(+971 52) 433 1160	marwanrafat10@emiratespost.ae
Anguilla	AIA	Miss Ashona Desouza	Supervisor Counter Operations / EMS	(+1 264) 287 3648	ashona_souza@anpost.ai
		Olgerta Mileti	EMS Specialist		olgerta10@albapost.al
Albania	ALA	Dritan Monka	Postal Services Department Director		dritan10@albapost.al
Armenia	AMA	Yuri Hayrapetyan	Responsible for EMS	(+374 10) 41 89 10	yuri_operations@haypost.am
		Joaquim R. de Figueiredo	EMS National Director	(+244) 416431327	joaquim300@angolapost.ao
Angola	AOA	Horácio Lucamba	Division Chief	(+244) 416431327	horacio200@angolapost.ao
Argentina	ARA	Mr. Luis Brodin	Gerencia Ingeniería Internacional	(+54 11) 4512 3511	luis100@argentinpost.ar
Austria	ATA	Mr. Siegfried Völkl	Parcel Austria - Partner Management	(+43) 324 624 7758	siegfried21@austriapost.at

PDF result

Operational contacts

United Arab Emirates		AEA
Mr. Marwan Raafat		
Name		Mr. Marwan Raafat
Function		Senior Director Operations
Telephone		
E-mail		
Afghanistan		AFA
Mohammad Sharif Fahez		
Name		Mohammad Sharif Fahez
Function		General Manager of Postal Modern Services
Telephone		
E-mail		

Word result

Operational contacts

United Arab Emirates		AEA
Mr. Marwan Raafat		
Name		Mr. Marwan Raafat
Function		Senior Director Operations
Telephone		(+971 52) 433 1160
E-mail		marwanrafat10@emiratespost.ae
Afghanistan		AFA
Mohammad Sharif		
Name		Mohammad Sharif
Function		General Manager of Postal Modern Services
Telephone		(+93) 301 204328
E-mail		marketing@afghanpost.af

Editable

Flexible Query

Allows selecting any section or subsection of the questionnaire for selected EMS Operators and creating a query.

Region Latin America Allows to select different Regions and specific Operators

Operator AR - (ARA) - Argentina CL - (CLA) - Chile CR - (CRA) - Costa Rica MX - (MXA) - Mexico Allows to select parameters

Fields Expand

3.1 Customer Care to Operators Allows to select any section and subsections

3.1.1 EMS customer service system user Yes No Either

How long are you accepting inquires after the delivery or return of the item?
WPOD includes the following details

Date of delivery Yes No Either

Time of delivery Yes No Either

Name of the recipient Yes No Either

Signature of recipient Yes No Either

The WPOD is provided within three business days Yes No Either

If no, is provided within

The records of a WPOD are retained for the following period

Excel result

Operator Details		Customer Care						
Country or territory name	Operator code	Customer Care to Operators						
		EMS customer service system user	How long are you accepting inquires after the delivery or return of the item?		Date of delivery	Time of delivery	Name of the recipient	Signature of recipient
			Amount	Unit				
Argentina	ARA	Yes	3	Months	No	No	No	No
Chile	CLA	Yes	24	Hours	No	No	Yes	Yes
Costa Rica	CRA	Yes	1	Days	Yes	No	Yes	Yes
Mexico	MXA	Yes	4	Months	Yes	No	Yes	Yes

PDF result

Flexible Query

Argentina		ARA
3.1.1	EMS customer service system user	Yes
	How long are you accepting inquires after the delivery or return of the item?	3 Months
	WPOD includes the following details	
	Date of delivery	No
	Time of delivery	No
	Name of the recipient	No
	Signature of recipient	No
Chile		CLA
3.1.1	EMS customer service system user	Yes
	How long are you accepting inquires after the delivery or return of the item?	24 Hours
	WPOD includes the following details	
	Date of delivery	No
	Time of delivery	No
	Name of the recipient	Yes
	Signature of recipient	Yes
Costa Rica		CRA
3.1.1	EMS customer service system user	Yes
	How long are you accepting inquires after the delivery or return of the item?	1 Days
	WPOD includes the following details	
	Date of delivery	Yes
	Time of delivery	No
	Name of the recipient	Yes
	Signature of recipient	Yes

Word result

Flexible Query

Argentina		ARA
3.1.1	EMS customer service system user	Yes
	How long are you accepting inquiries after the delivery or return of the item?	3 Months
	WPOD includes the following details	
	Date of delivery	No
	Time of delivery	No
	Name of the recipient	No
	Signature of recipient	No
Chile		CLA
3.1.1	EMS customer service system user	Yes
	How long are you accepting inquiries after the delivery or return of the item?	24 Hours
	WPOD includes the following details	
	Date of delivery	No
	Time of delivery	No
	Name of the recipient	Yes
	Signature of recipient	Yes
Costa Rica		CRA
3.1.1	EMS customer service system user	Yes
	How long are you accepting inquiries after the delivery or return of the item?	1 Days
	WPOD includes the following details	
	Date of delivery	Yes
	Time of delivery	No
	Name of the recipient	Yes
	Signature of recipient	Yes


 Editable