

eManifest Pilot Project

EMSW System Requirements Specifications

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Document History

Version	Date	Changes	Author
1.0	30/05/2016	Project phase 1	EMSA
1.1	27/06/2016	Update following eManifest meeting of 7 June 2016	EMSA
2.0	31/01/2017	Update for project phase 2	EMSA
2.1	24/03/2017	Changes from eManifest Group meeting 2 of 9 February 2017	EMSA

List of abbreviations

ATA	Actual Time of Arrival
ATD	Actual Time of Departure
BPMN	Business Process Modelling Notation
CGM	Customs Goods Manifest
DPG	Dangerous and Polluting Goods
ENS	Entry Summary Declaration
EMSA	European Maritime Safety Agency
EMSW	European Maritime Single Window Prototype
EPC	Electronic Port Clearance
EU	European Union
MRN	Movement Reference Number

References

1. eManifest Pilot Project – Business Rules, version 0.8, 30 June 2016¹
2. eManifest Pilot Project – Open Issues for discussion, version 2.0, 9 December 2016

Appendices

Appendix	Title
Appendix A	Business Rules coverage
Appendix B	Data mapping
Appendix C	System Interface Guide (ISO 28005)
Appendix D	Message Implementation Guide (WCO Data Model)

¹ Revised eManifest business rules are being prepared by the eManifest group. The SRS document will refer to the revised business rules as soon as they are approved.

1. Introduction

This document presents the requirements to be fulfilled by the European Maritime Single Window Prototype (EMSW) for the support of eManifest. The document will be used as a reference for the design and development of the EMSW.

The EMSW consists of an upgrade of the National Single Window Prototype developed by EMSA from 2013 to 2015 as part of an Integrated Maritime Policy (IMP) project. As such, a significant part of the requirements presented in this document are already implemented by the Prototype. Some other requirements need adaptations of the Prototype, in particular the requirements which relate to the eManifest pilot project.

References to the eManifest Business Rules defined in Ref. 1 (eManifest Pilot Project – Business Rules) are indicated in the relevant requirements description. In addition, Appendix A - Business Rules coverage – indicates the parts of this document which address each of the business rules.

The eManifest pilot project is organised in several phases, as follows:

Phase 1 (Q3-4 2016)

- Adaptation to multi-country support, with configuration facilities for each participating MS (e.g. organisations, user accounts, data coverage),
- Implementation of the eManifest with adaptation of the system's business logic, user interface and messaging standard,

Phase 2 (Q1-2 2017)

- Enhancements following phase 1 tests,
- Support of WCO Data Model message standards (EDIFACT and XML),
- Reporting by different data provider organisations, including cargo and dangerous and polluting goods,
- Customs feedback.

Phase 3 (Q3-4 2017)

- Departure customs formalities,
- Entry Summary Declaration (ENS),
- Update of cargo data,
- Re-use of data from previous calls and data exchange between MS.

2. Actors

The following actors are involved with the European Maritime Single Window Prototype (EMSW):

- **Data provider:** The data provider (referred to as ship data provider in the Business Rules) is an individual person responsible for submitting the information required for the fulfilment of formalities in the EMSW. The data provider can be the carrier representative, the ship master, the ship agent or any other representative who is authorised by the carrier to submit information to the EMSW on its behalf. There may be more than one data provider authorised to submit data in respect of a ship call in a port.
- **Authority:** This is an entity which is responsible for the application and enforcement of laws and regulations of the port state with respect to one or more of the reporting formalities covered by the EMSW, and which therefore requires receiving the relevant information submitted in the EMSW by the data provider. The EMSW considers three types of authorities:

- **Port clearance authority:** This is the authority which determines if a ship may enter the port, berth at a facility, conduct certain operations, and/or depart from the port. Such decision is referred to as “port clearance”. Depending on the legislation applicable in the port, one or several authorities may be involved in the port clearance decision (e.g. harbour master, border guards, health authorities).
- **Customs authority:** This means customs administrations of the Member States responsible for applying the customs legislation and any other authorities empowered under national law to apply certain customs legislation.
- **Other authority:** This is the authority (or authorities) which do not record decisions in the EMSW but is allowed to view relevant information submitted by the data provider.

3. General message sequence

Information is reported to the EMSW in **Notification** messages. A Notification message is sent to:

- Request port clearance to enter or leave the port,
- Fulfil the customs formalities identified in **Business Rule 1**,
- Report the actual arrival or departure of the ship.

The EMSW includes two types of Notifications: Arrival and Departure. Each Notification includes a request for port clearance. The involvement of customs is only required in the cases prescribed in the customs legislation.

The eManifest pilot project will during phases 1 and 2 only deal with cargo formalities required on arrival (**Business Rule 1**). Since the EMSW is already capable of receiving Departure Notifications for some of the reporting formalities required by Directive 2010/65/EU, this feature will be kept active. However Member States willing to limit their participation in the pilot project only to the eManifest part should ignore the departure Notification functionality.

Notifications are generally submitted by Data Providers. Depending on national legislation, authorities may also act as data providers, for instance to report the actual arrival or departure of a ship or to report other information related to the movements of a ship in the port (e.g. berth, anchorage). In such cases, no decision is required from the other authorities.

For each received Notification the EMSW returns a technical **Receipt** message which is communicated to the data provider. A positive receipt will be sent by the EMSW to the data provider after the EMSW performs a set of checks on predefined rules ensuring the data cohesion. If no conflict detected, the Notification will be sent to the relevant authorities; otherwise the EMSW will reject the Notification giving a relevant warning to the data provider about the nature of the mistake. If the Notification covers customs formalities, the EMSW will only accept the Notification once the data provider completes all the mandatory elements forming part of the customs formalities.

Communication of authorities' decisions and feedback (i.e. port clearance, customs feedback) is done through **Acknowledgment** messages.

For each Notification, there may be:

- One **port clearance decision** per data group (i.e. port call, ship, voyage, port state control, dangerous and polluting goods, cargo, ship's stores, waste, security, crew, passengers, crew effects, health, other) and per port clearance authority depending on the authority's mandate.
- One **customs feedback** per customs cargo formality (i.e. [arrival notification], presentation notification, declaration of temporary storage, transit using an electronic transport document, customs goods manifest, MRN obtained from the proof of union status system).

Customs feedback will only be expected for cargo consignments with customs formalities (cargo consignments with no customs formalities will not be subject to customs feedback). There will therefore be none, one or several customs feedback per consignment.

For each decision or feedback, an individual Acknowledgment message will be sent via the EMSW.

The general message sequence is shown in Figure 1 below, for an example with a notification which includes customs formalities and with two port clearance authorities involved with the notification.

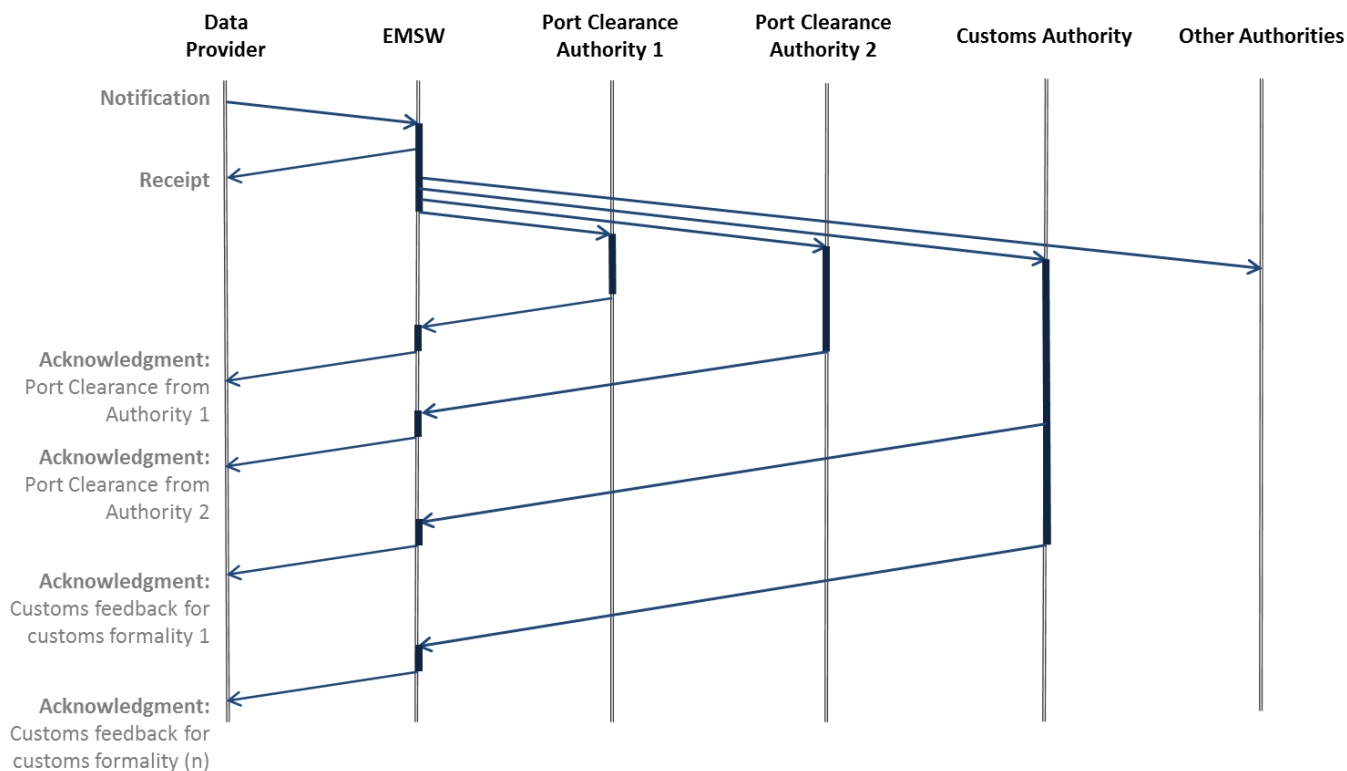


Figure 1: General message sequence

4. Messages contents

4.1 Formalities supported

All formalities identified in **Business Rule 1** can be fulfilled through the EMSW.

In addition, the EMSW allows the fulfilment of formalities identified in Part A (except the ENS) and Part B of the annex of Directive 2010/65/EU as well as other formalities required by national legislation and already available in the current version of the Prototype. The list of formalities supported by the EMSW is provided in Appendix B – data mapping.

In accordance with **Business Rule 20**, all information from the formalities above is described using a structured data format.

The maximum data set supported by the EMSW is provided in Appendix B – data mapping. In accordance with **Business Rules 21 and 22**, each participating Member State has the possibility to configure the EMSW. The identification of the data elements, and therefore the formalities, which are supported by the EMSW is done through configuration by the national EMSW administrators depending on national legal provisions (refer to chapter 6.3 below). For customs formalities, the data requirements are laid down in the UCC Delegated Act (2015/2446) Annex B, Title I, Chapter 3, Section 1 "Data Requirements Table".

4.2 Contents of Notification messages

In accordance with **Business Rule 16**, Notification messages may include information from some or all formalities introduced above. Data Providers will define the content of the Notification message depending on which formalities they wish to fulfil.

The structure of the Notification is shown in Figure 2 below. Each box represents a data group. When no cardinality is indicated, cardinality "0..1" is considered.

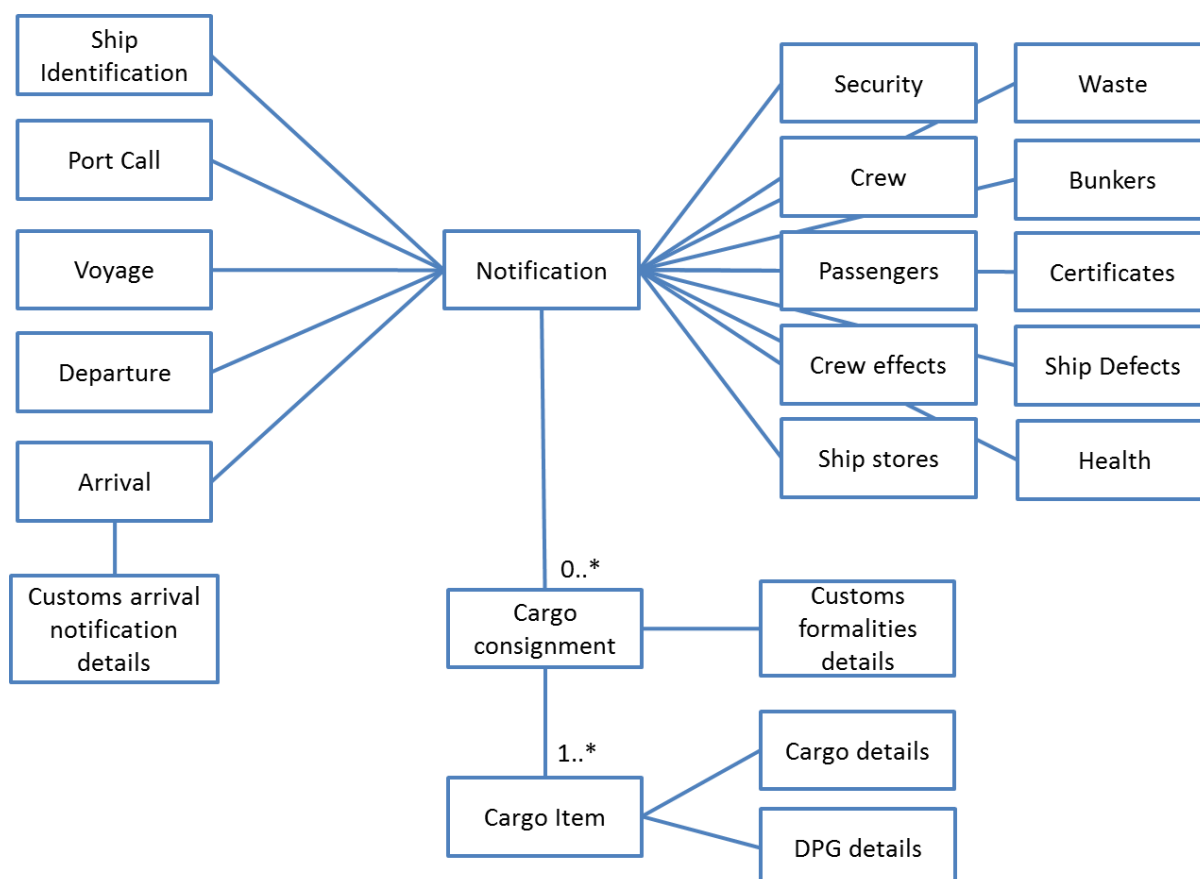


Figure 2: Structure of Notification messages

4.3 Data structure of Cargo Data

One or several cargo consignments may be reported per Notification. A consignment includes one or several cargo items.

Depending on the expected operation in a port, data elements required for specific customs formalities shall be submitted. In accordance with **Business Rule 16**, the data provider will indicate for each relevant cargo consignment the customs formality that he/she intends to perform through the EMSW:

- Presentation notification,
- Declaration of temporary storage,
- Transit using an electronic transport document (simplified transit),
- Customs Goods Manifest: data elements submitted by authorised users,
- MRN² obtained from the Proof of Union Status System.

² Master Reference Number (MRN) means the number allocated by the competent customs authority to prove that goods are registered in the Proof of Union Status system and are therefore Union goods. For the pilot project this will be a dummy value which will need to follow the specific format.

In accordance with **Business Rule 16**, depending on the customs formalities selected, the EMSW will define which data elements are required to be submitted. The data provider will not be able to submit the Notification with the indicated customs formalities before all the corresponding data elements are completed correctly. The data provider will send the Notification once all the required information is completed.

Although the reporting of information on dangerous or polluting goods (DPG) is outside the scope of the eManifest Pilot Project, the EMSW allows that DPG details are reported within the structure of cargo data as part of the cargo item details. It is therefore possible to report DPG details distinctly from the cargo declaration or to report both in the same cargo data structure.

The Arrival Notification (Article 133 of Regulation (EU) No 952/2013 of the European Parliament and of the Council laying down the Union Customs Code) will be indicated by the Data Provider in data group "Arrival".

4.4 Contents of Acknowledgment messages

For each port clearance decision the acknowledgment message includes the following information:

- The identification of the authority which recorded the decision,
- The identification of the notification,
- For each data group covered by the authority:
 - The indication of the notification's data group,
 - A status ("accepted" or "not accepted"),
 - A textual comment from the port clearance authority.

For each customs feedback, the acknowledgment message will include the following information:

- The identification of the authority which recorded the feedback,
- The identification of the notification,
- The identification of the cargo consignment in the notification,
- The indication of the formality that the feedback applies to,
- A status ("accepted" or "not accepted") which will indicate whether the customs formality is accepted by the customs authority,
- An MRN number defined by the customs authority, where relevant, and
- A textual comment from the customs authority.

5. Information flow requirements

5.1 Submission of Notifications

5.1.1 Configuration of data provider organisations

Data Providers registered in the EMSW are associated to "data provider organisations" (e.g. economic operator).

In accordance with **Business Rule 13 and 14**, each data provider organisation will be given:

- A coverage in terms of "data groups" (each organisation may cover one or several of the data groups introduced in chapter **Error! Reference source not found.**), and
- A coverage in terms of "location codes" (each organisation may cover one or several locations of a country, all locations of a country or all locations of all countries. A location code generally corresponds to a UN/LOCODE).

Member States will configure data provider organisations operating in their country. EMSA will configure the data provider organisations which operate in more than one Member State.

For each Notification message received, the EMSW controls if the Notification's port of call is covered by the data provider's organisation, and will control that the Notification does not contain data out of the data groups covered by the data provider's organisation. If the control fails, the EMSW sends a negative Receipt message.

5.1.2 Data quality requirements

In accordance with **Business Rule 24**, the EMSW performs data format and data consistency checks within the Notification message (e.g. check that the MMSI number of the ship is consistent with its Flag). The Receipt message will indicate to the data provider which data element needs to be corrected. The data control business rules are indicated in Appendix B – data mapping.

As indicated in **Business Rule 25**, the EMSW does not check whether Notification messages are reported in time, and does not check if all reporting formalities are completed for a specific ship, or if reporting formalities are possibly wrongly done by a ship.

5.1.3 Request Number

All Notifications, Receipt and Acknowledgment messages related to the same ship arrival or ship departure are associated to a unique identifier called the "Request Number". The Request Number is unique for each ship arrival or departure and is provided by the EMSW in the Receipt message when receiving the first Notification message.

The Request Number of the Arrival Notification is different from the number of the Departure Notification regarding the same ship port call.

5.1.4 Consolidation of Notification messages

The EMSW consolidates the data elements received through the Notification messages and distributes the consolidated information to all relevant authorities. Consolidation is based on the Request Number. All Notification messages received with the same number are merged.

5.1.5 Reporting of Notification by different data providers

To implement **Business Rule 14**, Notification messages with the same request number may be received from different data providers.

In accordance with business rule 13 and in order to address the confidentiality and liability issues raised in **Business Rule 32**, by default only one data provider organisation is allowed to submit Notifications with the same request number. This organisation is identified by the system as the "ship data provider organisation" for that notification.

That ship data provider organisation may identify cargo data provider organisations which are allowed to complement the notification with additional cargo consignments. Each cargo data provider organisation will only be allowed to view and update its own cargo consignments. Other data provider organisations will not be allowed to see or update these cargo consignments. ..There may therefore be for a unique notification:

- One ship data provider organisation, and
- Several cargo data provider organisations. Each cargo data provider may be the source of one or several cargo consignment.

5.2 Distribution of data to authorities and clearance decisions

5.2.1 Configuration of authority organisations

Authority users registered in the EMSW are associated to “authority organisations”. Authority organisations may be of three profiles as introduced in chapter 1 above:

- Port clearance authority (with the right to record port clearance decisions),
- Customs authority (with the right to record customs feedback), or
- Other authority (with limited right to see Notifications).

MS may configure as many authority organisations as they need for their country (belonging to the above profiles).

In accordance with **Business Rule 26**, each authority organisation will be given:

- A coverage in terms of “data groups” (each authority may cover one or several of the data groups introduced in chapter **Error! Reference source not found.**), and
- A coverage in terms of “location codes” (each authority may cover one, several or all locations code of its country. A location code generally corresponds to a UN/LOCODE).

5.2.2 Distribution of data to authorities

For each Notification received, the EMSW will define the relevant authority organisations. Relevant authority organisations for a Notification are authority organisations which cover the Notification’s port of call and cover at least one of the Notification’s data groups.

Users belonging to each relevant authority organisation will be communicated with the contents of the Notification corresponding to the data groups that the organisation covers.

5.2.3 Acknowledgment messages

Port clearance and customs formalities are considered distinctly. The EMSW will process port clearance decisions from port clearance authorities, and feedbacks from customs authorities.

Port clearance decisions are recorded by each relevant port clearance authority. The port clearance authority records a decision for each data group that it covers.

Note: in the user interface of the EMSW, each notification is provided with an “overall request status” which reflects the port clearance decisions recorded for the notification. If all relevant port clearance authorities have accepted all notification’s data groups, the overall request status will be “accepted”. If at least one port clearance authority has recorded a “not accepted” decision for a data group, the overall request status will be “not accepted”.

Customs feedbacks are reported by customs authorities. If several customs formalities are reported for an individual consignment, a distinct customs feedback will be provided for each individual formality.

For each decision or feedback, the EMSW will prepare an Acknowledgment message. Acknowledgment messages are communicated to all data providers involved with the Notification³.

All authorities involved with the Notification (port clearance authorities, customs authority and other authorities – refer to chapter 5.2.1 above) are also communicated with the Acknowledgment message.

³ In project phase 2, the acknowledgment messages will be sent to all data providers involved. Further acknowledgment distribution mechanisms may be defined in a future phase depending on the outcome of phase 2.

5.2.4 Port clearance models

Two port clearance models are implemented in the EMSW:

- **Silent clearance:** Acknowledgement messages are only communicated when the Notification is rejected by the port clearance authority. The Notification is considered by default as accepted once received by the EMSW (with a positive receipt).
- **Systematic clearance:** Acknowledgment messages are always communicated regardless of the decision taken by the authorities (acceptance or rejection).

The EMSW will apply one of the above models for all MS for all Notifications received. As indicated in the Open Issues document (Ref. 2, section 3.6.1), the EMSW will be configured to apply the systematic clearance model.

5.3 Update and reuse of Notifications

5.3.1 Update of Notifications

In accordance with **Business Rule 18**, updates of previously provided Notification messages are accepted (in order to update or correct parts of the information) for the data elements other than those used in the customs formalities. In the web user interface the data provider has to identify the previous Notification and updates the relevant information. In the system interface this is done by submitting a Notification message with the same Request Number.

In phase 1 and 2, updates of cargo data submissions which are related to customs formalities are not possible after they were submitted to authorities.

When information from an updated Notification is received, previous port clearance decisions which were based on the information impacted by the update Notification have to be reconsidered and are therefore cancelled (**Business Rule 18**). The corresponding status of the port clearance decisions are transmitted to the data provider in the receipt message.

Submitting an update Notification message is only allowed to the notification's ship data provider organisation and to the notification's cargo data provider organisations with the limitation to the information they are entitled to as described in section 5.1.5 above.

5.3.2 Cancellation of Notifications

Cancellation of a Notification is possible before the actual arrival of the ship (i.e. before ATA is reported) in the case of Arrival Notifications and before the actual departure of the ship (i.e. before ATD is reported) in the case of Departure Notifications. The result of cancelling the Notification is that the reported Notification with underlying data and associated decisions are marked as cancelled and considered as not being reported.

Cancellation can only be done by the notification's ship data provider organisation as described in section 5.1.5 above. Cancelled Notifications are not deleted from the EMSW database and may still be consulted by the data provider if needed.

5.3.3 Re-use of previous Notifications

In accordance with **Business Rule 19**, the EMSW user interface allows data providers to re-use Notifications previously submitted in the EMSW for other calls of the same ship in the same country or in others in order to prepare new Arrival Notifications.

The data provider will only have to check the information and update the data which has changed from the other call before submitting the new Notification.

Re-using a Notification message to produce a new Notification is only allowed to the notification's ship data provider organisation, with the limitation to the information it is entitled to as described in section 5.1.5 above. If that organisation operates in more than one MS, it will have the possibility to re-use Notifications that it will have submitted for any port of these MS.

Re-using cargo data will need to be looked into but is not foreseen at this stage.

6. System requirements

6.1 User accounts

Each user account of the EMSW corresponds to an individual person.

Each user account belongs to one and only one organisation. The user account's access rights are derived from its organisation (i.e. profile, locations coverage, data coverage).

6.2 EMSW Administrators

Each MS using the EMSW is given a National EMSW Administrator user account by EMSA.

The National EMSW Administrator may configure the user accounts, organisations, areas (groups of location codes), and data coverage (refer to chapter 6.3 below) of his/her country.

EMSA EMSW Administrators will configure data providers and data provider organisations which operate in more than one MS.

6.3 Countries' data coverage

The identification of the data elements which are supported by the EMSW is done through configuration by the National EMSW Administrator. The National EMSW Administrator may activate or deactivate individual data elements within the list of all data elements supported by the EMSW as listed in Appendix B.

The data coverage configuration applies to all ports of the country.

In accordance with **Business Rule 22**, when the EMSW receives Notification messages through the system interface, the data elements not supported by the country of the port of call are ignored.

In accordance with **Business Rule 21**, when a Notification is prepared in the EMSW user interface, elements not supported by the country of the port of call do not appear in the web user interface.

6.4 User interfaces

The EMSW offers:

- A user interface to data providers, where they may submit Notifications (**Business rule 17**), consult their Notifications and associated authorities response (**Business Rule 28 and 29**) and re-use previous Notifications (**Business Rule 19**),
- A user interface to authorities, where they may consult Notifications and record responses (**Business Rule 27 and 29**),
- A user interface to EMSW administrators, where they may configure user accounts, organisations, areas and data coverage of their countries.

In accordance with **Business Rule 19** the user interface allows data providers to report Notifications manually (forms) or by uploading spreadsheet files (XLSX format).

The authorities' user interfaces feature a Graphical Interface which offers a view of ship positions on a map associated with the Notifications and authorities' decisions applicable to their current voyages. Historical tracks of the ships' positions are also provided.

When using the User Interface, authorities will see the notifications' data according to their coverage.

6.5 System interfaces

The EMSW offers three types of system-to-system interfaces to data providers and to authorities' ICT systems.

- 1) An interface using messages in XML derived from the ISO 28005 standard for Electronic Port Clearance (ISO 28005-1 - Electronic port clearance (EPC) - Part 1: Message structure, ISO 28005-2 - Electronic port clearance (EPC) - Part 2: Core data elements).

Adaptations were made to the standard in order to address the specificities of the EMSW in terms of formalities supported (e.g. EU-specific data elements) and data flow (e.g. customs formalities). A mapping between the data elements of the EMSW and the XML message elements is provided in Appendix B – data mapping. The specifications of this system interface are provided in Appendix C.

- 2) An interface using messages in XML based on the WCO Data Model,
- 3) An interface using UN/EDIFACT GOVCBR messages based on the WCO Data Model.

A mapping between the data elements of the EMSW and the WCO Data Model messages elements as well as the specifications of the messages are provided in Appendix D.

The system interface offers the following services:

- Receive Notification messages from data providers (and send receipt messages back) (**Business Rule 17 and 29**),
- Send consolidated acknowledgment messages to data providers (limited to the ISO 28005 system interface).

Note: There are no link between the EMSW Prototype and the existing national systems at this stage. There is therefore is no system interface to authorities systems.

Note: The WCO Data Model system interfaces will be implemented as soon as the Message Implementation Guide (refer to Appendix D) is approved by the eManifest pilot project's participants and at the condition that at least one project participant is willing to test them.

Figure 3 below illustrates the role of the EMSW system interfaces in the message sequence.

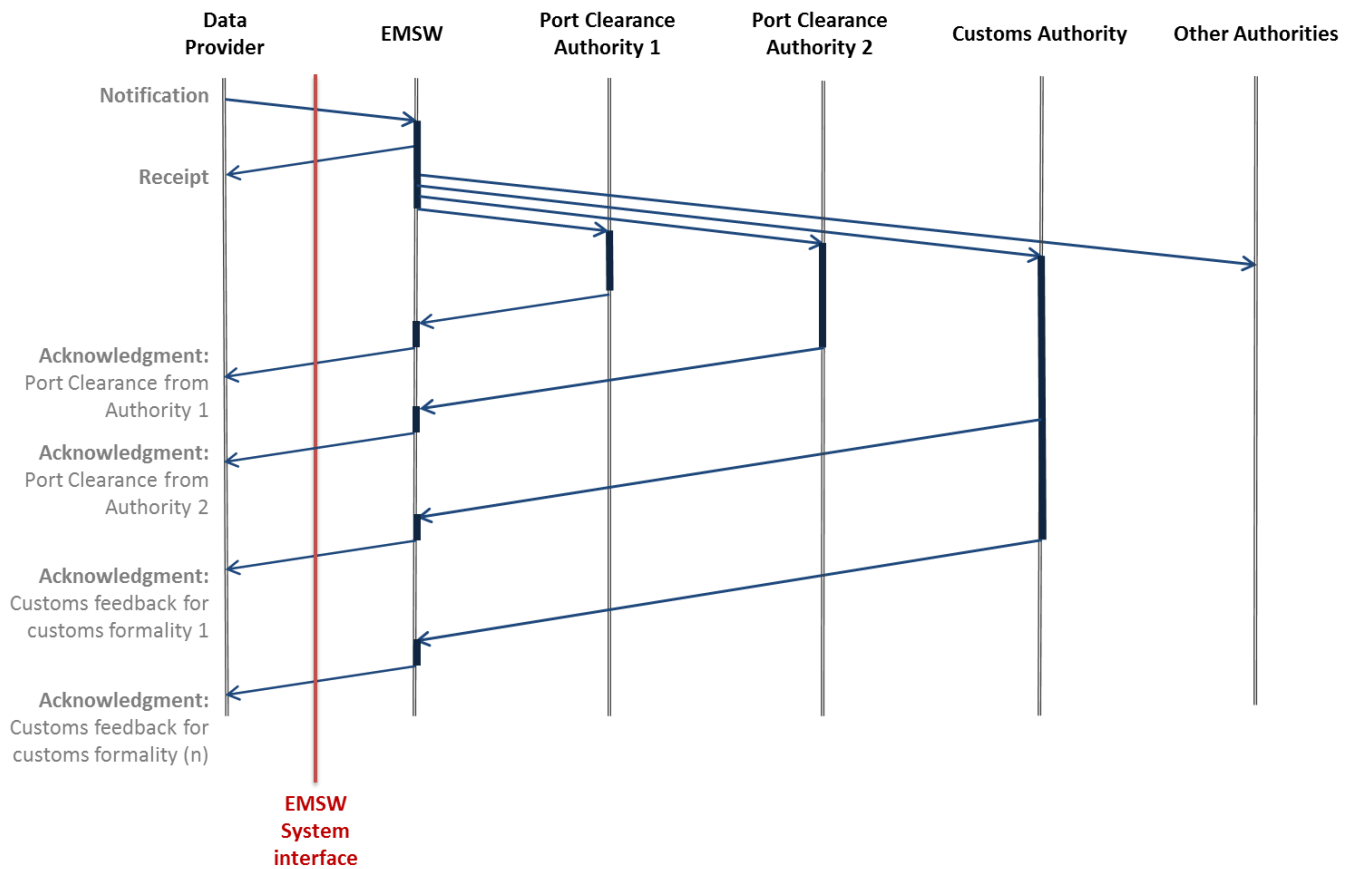


Figure 3: System interfaces of the EMSW

6.6 System interface with SafeSeaNet

The EMSW already includes the SSN messaging mechanism and allows the exchange of information related to ships, port call, waste, security, dangerous and polluting goods, crew and passengers between MS authorities. In project phase 1, exchange of customs formalities data and re-use data from SafeSeaNet by data providers are not supported.

A mapping between the data elements of the EMSW and the XML elements of the SSN messages is provided in Appendix B – data mapping.

The EMSW includes the following functionalities:

- In accordance with **Business Rule 30**, each time that a Notification message is received from a data provider, the EMSW sends a PortPlus message with the consolidated Notification information to SSN (i.e. *MS2SSN_PortPlus_Not* message).
- In accordance with **Business Rule 31**, when receiving a request from SSN regarding dangerous and polluting goods, waste, security, or crew and passengers details (i.e. *SSN2MS_ShipCall_Req* message), the EMSW prepares and sends a response message to SSN with the corresponding data (i.e. *MS2SSN_ShipCall_Res* message).

Note: for the purpose of the eManifest pilot project, the EMSW prototype is not interfaced with the actual SSN system's production environment.

6.7 Reference data from SafeSeaNet central databases

The EMSW receives updates of ship particulars and of location codes from SSN (from SSN Central Ship Database and SSN Central Location Database).

Ship particulars are used by the EMSW to pre-fill Notifications when using the EMSW user interface.

Location codes are used to facilitate the identification of ports and other geographical locations (the user may search a location code by either typing its name or its code).

6.8 Traceability and accountability

The EMSW allows the verification of the history, location, or application of the information by means of documented recorded identification. The following actions are traced and the records are available upon request to the system administrator:

- Receipt of Notification messages through system and user interfaces,
- Receipt of Acknowledgment messages through system and user interfaces.

The information recorded shall be as follows:

- User identification,
- Time stamp,
- Description of action and information.

Appendix A Business Rules coverage

The table below indicates the sections of this document which address each of the business rules of Ref. 1.

Business Rule	Section or observation
1	4.1 - 3
2	Not system related
3	Not system related
4	Not system related
5	Not system related
	Not system related
6	Not system related
7	Not system related
8	Not system related
9	Not system related
10	Not system related
11	Not system related
12	Not system related
13	5.1.1 – 5.3.3
14	5.1.1 – 5.1.5
15	Not system related
16	4.2 – 4.3
17	6.4 – 6.5
18	5.3.1
19	5.3.3 – 6.4
20	4.1
21	4.1
22	4.1 – 6.3
23	5.2.1
24	5.1.2
25	5.1.2
26	5.2.1
27	6.4
28	6.4
29	6.4 – 6.5
30	6.4
31	6.6
32	5.1.5

Appendix B Data mapping

The following reporting formalities may be fulfilled through the EMSW:

A. Formalities identified in Directive 2010/65/EU:

1. Notification for ships arriving in and departing from ports of the Member States (Article 4 of Directive 2002/59/EC establishing a Community vessel traffic monitoring and information system),
2. Border checks on persons (Article 7 of Regulation (EC) No 562/2006 - Schengen Borders Code),
3. Notification of dangerous or polluting goods carried on board (Article 13 of Directive 2002/59/EC establishing a Community vessel traffic monitoring and information system),
4. Notification of waste and residues (Article 6 of Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues),
5. Notification of security information (Article 6 of Regulation (EC) No 725/2004 on enhancing ship and port facility security),

B. FAL forms and formalities resulting from international legal instruments:

1. FAL form 1: General Declaration,
2. FAL form 2: Cargo Declaration,
3. FAL form 3: Ship's Stores Declaration,
4. FAL form 4: Crew's Effects Declaration,
5. FAL form 5: Crew List,
6. FAL form 6: Passenger List,
7. FAL form 7: Dangerous Goods,
8. Maritime Declaration of Health,

C. Formalities derived from Directive 2009/16/EC on Port State Control:

9. 72h pre-arrival notice for ships eligible to expanded inspections (article 9),
10. Actual arrival and departure notifications (article 24),

D. Customs declarations and notifications:

11. Declaration of Temporary Storage (Articles 5(17) and 145 of Regulation (EU) No 952/2013 of the European Parliament and of the Council laying down the Union Customs Code),
12. Arrival Notification (for Customs) (Article 133 of Regulation (EU) No 952/2013 of the European Parliament and of the Council laying down the Union Customs Code),
13. Customs Goods Manifest (CGM) (Articles 5(23), 153(2) and 155 of Regulation (EU) No 952/2013 of the European Parliament and of the Council laying down the Union Customs Code),
14. Electronic transport document used as transit declaration (Articles 5(12), 162, 210 and 233(4)(e) of Regulation (EU) No 952/2013 of the European Parliament and of the Council laying down the Union Customs Code),
15. Presentation of goods notification (Articles 5(33) and 139 of Regulation (EU) No 952/2013 of the European Parliament and of the Council laying down the Union Customs Code),

E. Other information resulting from national legislation:

16. Waste delivery receipt,
17. Bunkers remaining on board,
18. Ship Certificates,

19. Ship defects.

The spreadsheet file attached (“Data Mapping-eManifest-20170109 for phase 2.xlsx”) provides the list of data elements covered by the EMSW, with for each data element:

- The indication of the changes from NSW prototype v1.3 to EMSW prototype v2.0 (project phase 1),
- The indication of the changes from EMSW prototype v2.0 to project phase 2,
- A name and a definition,
- The corresponding formalities of points A, B, C and D above,
- If the data element is relevant for the Arrival and/or for the Departure Notification,
- Whether the data element is mandatory and its expected occurrences,
- A technical definition (type, length, coded values),
- The applicable business rules,
- The corresponding XML element in the ISO 28005 EMSW system interface,
- The corresponding XML elements of EDIFACT messages as defined in the IMO Compendium on Facilitation and Electronic Business (FAL.5/Circ.40 of 4 July 2013).

Note: the mapping with the WCO Data Model is provided in Appendix D.

Appendix C System Interface Guide (ISO 28005)

Refer to the file “EMSW Prototype-SIG” in the project web page:

<http://www.emsa.europa.eu/related-projects/emsw/emsw-documentation.html>

Appendix D Message Implementation Guide (WCO Data Model)

Refer to the archive file “EU MIG eManifest - WCO Data model_20161005.zip” which contains the following files:

- EU.MIG_eManifest - WCO Data model_20161005.doc
- EU.MIG_eManifest - WCO Data model_20161005.xlsx
- XSD files

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