27 January, 2017

EUROPEAN MARITIME SINGLE WINDOW ENVIRONMENT: A VISION PAPER

1. PURPOSE OF THE PAPER

This short paper intends to provide a vision for the future work in the field of reporting formalities – including formalities forming part of the eManifest – outlining the future European Maritime Single Window (EMSW) environment including links with the National Single Windows (NSWs), and the current work on the implementation of the RFD.

2. CURRENT SITUATION

2.1. Objectives of Directive 2010/65/EU on reporting formalities (RFD)

The RFD has a primary objective of trade facilitation by simplifying and rationalising reporting formalities. It requires MSs to accept the fulfilment of reporting formalities by ships in electronic format and their collection via a single window.

The RFD imposes that the single window is harmonised at national level (Art.3.1), and requires the Commission to set up, in cooperation with Member States, mechanisms for further harmonisation at EU level (Art.3.2).

2.2. State of play on the implementation of the RFD

The requirement to set up a single window for reporting formalities entered into force on 1 June, 2015. After a few months of adjustment, MSs report that National Single Windows (NSWs) are up and running, although many indicate that certain formalities or functionalities still need to be added to their systems. Feedback from industry suggests that the situation is still very patchy, with many ports, formalities and/or functionalities not yet covered or lacking harmonisation. There are some indications that the new reporting processes introduced in some MSs are actually more burdensome than those before. This raises doubts on the claim that the RFD is correctly applied in many MSs.

2.3. Limits of the RFD in its present formulation

Aside from implementation issues, many stakeholders, including national administrations, have pointed out a number of shortcomings with the present formulation of the RFD, such as:

- Harmonisation is only imposed at national level: real facilitation would require EU harmonisation;
- The list of the EU legal acts or formalities currently included is not comprehensive: an eManifest for cargo reporting and custom formalities is needed. Other aspects should be considered[1];
- Clearance functions are not included: “active” Single Window functionalities should be added;

[1] For example, ship certificates and certificates of safe loading and unloading of bulk carriers (2001/96/EC)

- 'Reporting only once' is not achieved: data, including ENS data, should be re-used for subsequent port calls in different MSs;

- Nationally required data ('Part C' in the RFD) is excessive, non-harmonised and can be left outside of the single window: a standardised maximum data set should be introduced, including the information necessary for the management of port and port terminals in order to ensure true submit-only-once. The need of each data element and alternative ways of collecting it should be analysed comprehensively;

- The present RFD does not include delegated powers for the adoption of binding technical specifications;

- An appropriate governance method to ensure technical maintenance and update of reporting requirements in line with changes in legislation is not in place.

2.4. The eMS group and the HLSG

The Commission had set up the eMS group – now merged with the SSN HLSG to form a HLSG on digital maritime systems and services with wider scope and expertise[2] – to give effect to Art. 3.2 of the RFD. The eMS group in cooperation with other relevant Commission services and national authorities had developed and adopted Guidelines for setting up National Single Windows, including business rules and a data mapping specifications. More recently, in cooperation with the ECCG[3], it established System Requirements Specifications for submitting an eManifest via the EU Maritime Single Window prototype. However, since the RFD did not foresee powers to adopt legally binding specifications in this regard, the deliverables of the eMS group do not have mandatory character.

3. TOWARDS A EUROPEAN MARITIME SINGLE WINDOW ENVIRONMENT

3.1. Two parallel processes: Evaluation and eManifest initiative

In view of the perceived limitations of the current RFD, the Commission has launched a formal evaluation process. This may be followed by an impact assessment and possibly a proposal for revision of the RFD, which could then introduce new obligations with a view to achieve further trade facilitation.

This process will take a significant amount of time, but, nevertheless, many of the identified problems could be solved earlier, through further cooperation in the HLSG and voluntary adoption of proposed measures. In this vein, work will continue in the HLSG and an ad hoc group has been established to develop concrete solutions (eManifest initiative).

3.2. Evaluation of the Reporting Formalities Directive

The REFIT evaluation of the RFD is meant to assess the contribution towards the achievement of the overall Maritime transport policy objectives.

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[2] Commission Decision EU 2016/566 of 11 April 2016.

[3] Electronic Customs Coordination Group under the umbrella of DG TAXUD

This evaluation, based on evidence-based judgment, will define to what extent the interventions have been effective and efficient, relevant to the objectives, coherent both internally and with other EU policy interventions, and have contributed EU added value. Also, this evaluation will identify possible excessive administrative and regulatory burdens, inconsistencies and gaps which could be addressed in the light of simplification and burden reduction, which are already stated objectives in the Directive.

The evaluation report is expected to be ready in Spring 2017.

3.3. Objectives of the eManifest initiative

The eManifest pilot project aims at establishing a fully harmonised electronic manifest encompassing cargo formalities required by both maritime and customs authorities. In addition, it tries to address some of the shortcomings of the RFD via integration of additional functionalities in the single window prototype previously developed by EMSA.

Two activities are carried out in this framework:

a. Definition of the functional requirements for the collection of a harmonised electronic manifest (the so-called eManifest) together with the formalities to be provided in accordance with the RFD, and elaboration of a system for the transmission of relevant data to national authorities and the sharing of information between MSs.

b. Demonstration of how a EMSW would function in practice and delivery of a technical solution that could be taken up on a voluntary basis.

The two activities are linked because the eManifest would be submitted to a EMSW prototype, but they are also 'autonomous' and can be implemented independently from each other.

By working on a specific tool, EMSW prototype, the project is meant to help in identifying and removing practical obstacles and at the same time promoting a harmonised approach. It would also make sure that, if necessary, any legislative development fully responds to the needs of the industry.

3.4. Scope of the eManifest initiative

The main deliverables of the project are:

- Establishment of maximum harmonised data set and message standard for cargo reporting, to be submitted to the EMSW prototype together with other reporting formalities covered by the RFD. The data set can be transmitted either via a web-interface or a machine-to-machine interface. It will comply with the EU Customs Data Model, finding its legal basis in the UCC Delegated and Implementing Acts.

- Identification of the appropriate XML and EDIFACT standard for data transmission, in agreement with WCO, ISO and UN/CEFACT. Customisation of data request by different MSs within the perimeter of the maximum data set;

– Harmonised interface for the submission of the eManifest information together with the other formalities required by the RFD based on the reporting once principle;

– Establishing and testing the data flows between different actors;

– Addition of response messages to acknowledge receipt and provide clearance;

– Inventory of part C data requests with a view to develop a maximum data set;

– Assessment of the possibility for re-using data at EU level to rationalise reporting.

3.5. Role and future use of the EMSW

On the basis of the RFD, the maritime single window performs two main functions:

a) Collect information from the operators ('interface' function); and

b) Make available the information received to any competent and relevant authority, as well as to the SafeSeaNet system for sharing of relevant information between MSs ('gateway' function).

Currently, MSs are setting up systems whereby they collect and distribute information through NSWs and/or through Port Community Systems (PCS). Figure 1 below describes two typical approaches to reporting. In country A, the NSW performs both functions of interface and gateway; in country B, the PCSs act as interfaces and share the gateway function with the NSW[4].

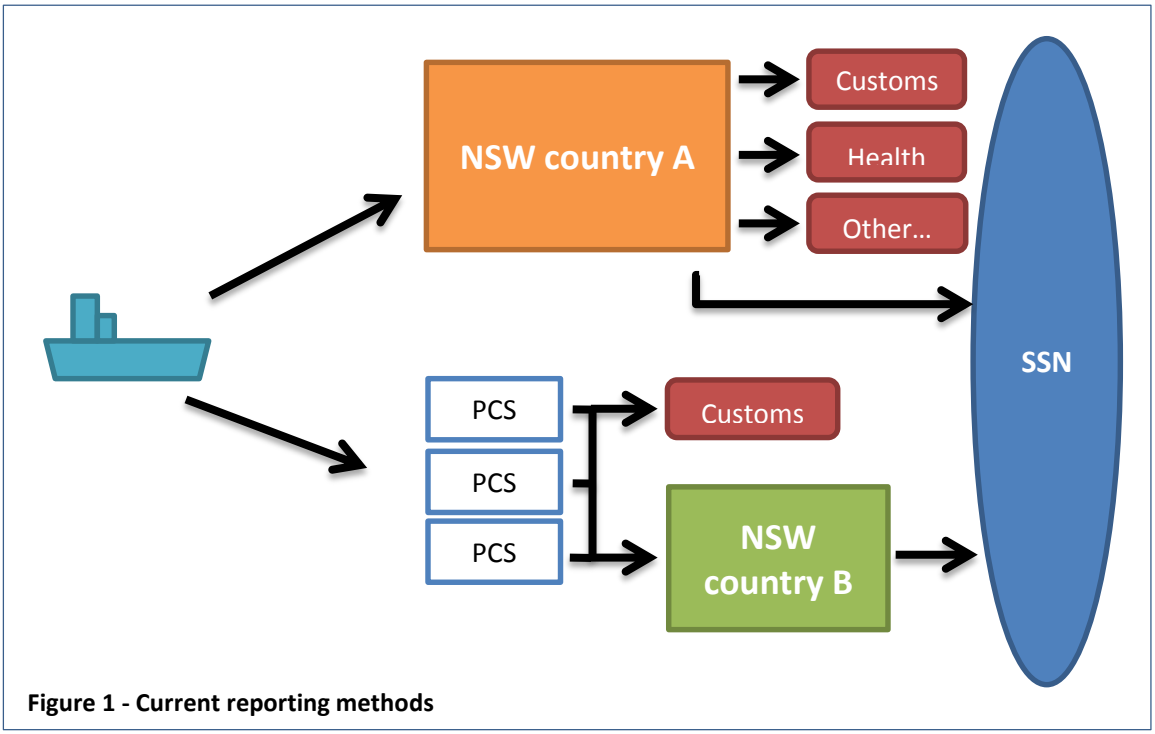

Figure 1 - Current reporting methods

[4] In this example, the case of country B would not be in compliance with the RFD, unless all PCSs collect information in a fully harmonised way.

This situation is not ideal, since it confronts operators with systems that are differentiated between MSs; it might also be illegal, whenever differences persist within any MS.

Feedback received from stakeholders and authorities suggests that the system should possess the following characteristics:

a. **Fully harmonised interface.** A totally harmonised 'interface' available to ship operators to provide information in the same way and format across the EU. Common standards are used for the collection and storage of information (central or federated). This role would be performed by the EMSW or NSWs with fully harmonised interfaces.

b. **Nationally adapted gateways**. The gateway function does not concern the interaction with maritime operators, but rather the exchanges between national administrations. There is less need for a standardised EU approach and greater scope for national systems (NSWs) that are better adapted to national and local environments.

c. **Reporting once principle at EU level.** Storing data at central level would facilitate the reporting once principle. A ship operator would report once to the EMSW or to the harmonised NSW, which would distribute the information to the relevant NSWs along the route of the vessels, without requiring re-submission of the same information to each port of destination. This principle will apply only to information that does not change along the ship's voyage.

d. **Clearance functions managed at national level, but communicated also through the EMSW.** The EMSW can also be used to provide feedback to operators and report decisions taken by national authorities. The authorities' systems used to process the information received will not be affected by the EMSW.

e. **Users registered by the MSs.** MSs are responsible to register the operators, agents and other parties using the EMSW environment, and to provide necessary access credentials. In order to facilitate the re-use of data between MSs, actors recognised in a MS should likewise be recognised in other MSs.

f. **Authorities defined by the MSs.** MSs define and manage the authorities who would be authorised to view and process the information received from operators or who may be authorised to only consult such information in the EMSW environment. MSs may configure their authorities to either view all the information or only limited information in accordance with their roles and responsibilities.

g. **EMSW interface with the NSW and the national authorities.** The data submitted by the operators to the EMSW will be sent to the NSW of the MSs concerned which then process the data according its needs. As an alternative function, and if decided by the MS concerned, the EMSW may provide the relevant data to the Authorities defined (see par. f above) via a European Authority Gateway. The EAG is the place where authorities may consult the information submitted by the ship data providers and record their decisions and feedback. The authority users interact with the EAG via its user interface.

h. **Reporting directly to the NSW.** Ship operators should always have the possibility to report to the MSs in a harmonised way via the EMSW interface. However, the possibility to submit information through the NSWs or through the PCSs which are connected to the NSWs could be maintained as an option, alongside the EMSW channel. Indeed, one can imagine a scenario in which ships calling regularly at a certain port might be satisfied with the use of port-specific systems, whereas ships calling at different ports might prefer to use the EMSW. In the former case, the 'reporting only once principle' would only work if NSWs are fully aligned with the specifications of the EMSW and adequately connected.

3.6. Architecture of the EMSW environment

In summary, there is a need to provide a standard European interface architecture to collect information from and provide feedback to operators.

This could be realised by two basic alternative approaches where the one is centralised system linked with the NSWs and the other is a decentralised option where all NSWs have fully harmonised interfaces.

Other reporting channels could be maintained, on condition that the EMSW or fully harmonised NSWs remains fully available alternatives.

These approaches are summarised in Figure 2 and 3 below.

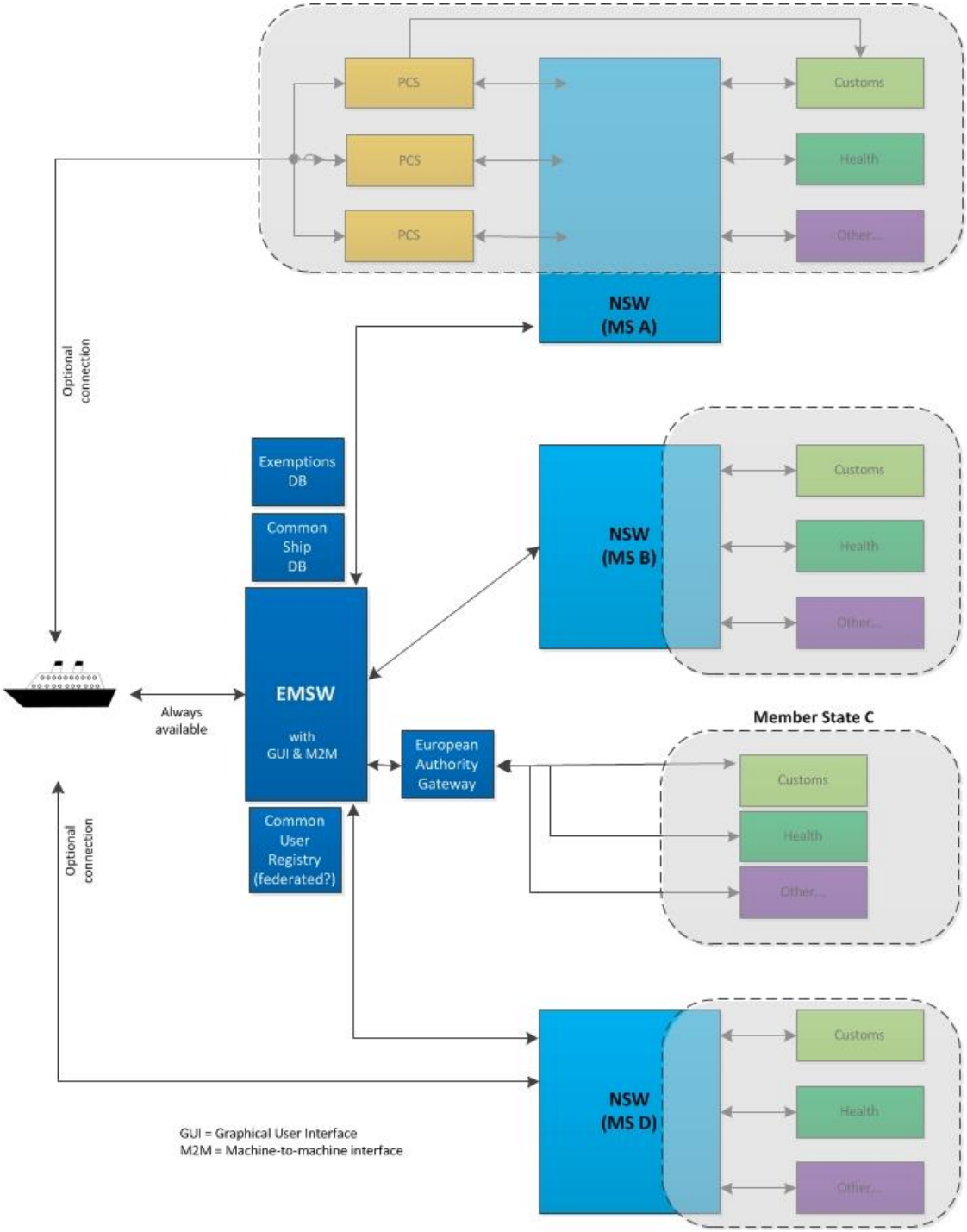

Figure 2 – EMSW

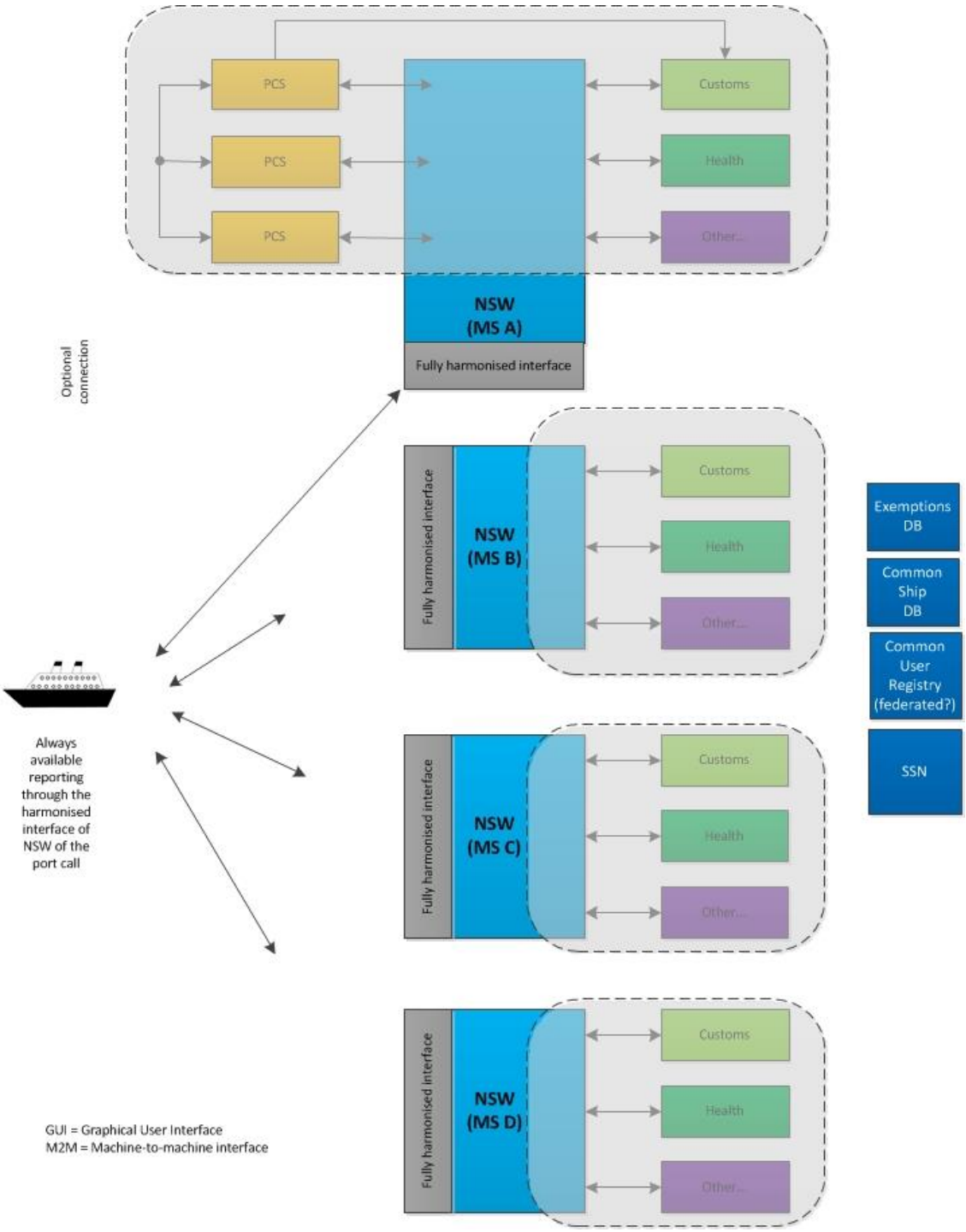

Figure 3 – Harmonised NSWs

Example scenarios

Scenario 1: A bulk carrier transporting only one type of cargo and calling always to the same 3-4 terminals might want to continue using the familiar reporting systems offered by these terminals.

Scenario 2: A deep sea container vessel which calls to a specific EU port once every two months could prefer to use their corporate machine-to-machine reporting system which

is directly linked to that port's PCS. The reporting is provided by dedicated staff in the company HQ using their own tailor made and integrated software.

Scenario 3: A deep sea container vessel calling on a journey three ports in different MSs decides to use machine-to-machine connection to the EMSW or to the harmonised NSWs. It will report only once the information that does not change.

Scenario 4: A ferry calling between two ports in different EU MSs might want to use the local port community system in its home port and the EMSW or the harmonised NSW for the other port call.

Scenario 5: A cruise ship calling only to ports of a specific MS might prefer to use the harmonised NSW system for all of its port calls.

3.7. Benefits of the EMSW environment

The eManifest initiative and the interlinked EMSW project are not substitutes for a legislative process nor can these have mandatory effects. Nevertheless, MSs could profit from a successful outcome of these two initiatives in many different ways:

- The EMSW would be **easier to maintain**, as changes to the system will be done at EU level (for example when there are changes to EU legal acts or international instruments covered by the RFD);

- For the ship operators there would be a **reduction in administrative costs** as they would only have to be connected to one system, the EMSW, and any changes in the system will be the same for all MSs irrespective of the port they will visit;

- Further simplification can be achieved if the same **information can be re-used for different calls** in ports in different MS and the ship operators only have to update the data when necessary;

- Common functionalities could be implemented in the EMSW – for example the validation of data – which would ensure that the level of **data accuracy and consistency is improved**. This may help other uses of the information, such as the generation of maritime statistics at EU level, reducing the administrative burden of MSs.

- Where national or local systems are already in place, parallel availability of the EMSW would **ensure compliance with the RFD** by providing the harmonised interface and reporting procedure;

- Even for a perfectly functioning nationally harmonised system, the EMSW would provide **valuable redundancy** deriving from the availability of an alternative reporting channel and information system;

- Furthermore, NSWs, and to certain extend PCS, would benefit from **commonly developed specifications**, such as comprehensive and up-to-date data mapping, and **software modules** of EMSW which would be made available to the national authorities;

- The EMSW would automatically fulfil the **information exchange requirements** and allow easy setup of EU support services such as common user or ship information databases.

- The EMSW environment could maintain central registries, which would reduce the administrative burden and provide unique EU level identification. Such data registries could be the Central Location Database (CLD), the Central Ship Database (CSD) and the Central Hazmat Database (CHD) - already hosted and maintained by EMSA.
    - The CLD holds a reference list is of location codes which include UN/LOCODEs and SSN-specific codes. It also holds the list of port facility codes as registered in the IMO database GISIS. The CLD is used to facilitate the submission of information by the ship data provider as it allows searching location codes and port facility codes by their name or code. It is also used by the EMSW for data quality checks.
    - The CSD holds a reference list of ship particulars. It is automatically updated from the information received by the maritime applications hosted by EMSA (SSN, LRIT EU CDC, THETIS, as well as the EMSW). The CSD is used to facilitate the submission of information by the ship data provider as it allowas searching for a ship (by its IMO number, name, MMSI or call sign) and it provides the ship's particulars which can be re-used to fill in reporting formalities information (e.g. ship's flag, length, type). This database can also hold electronic ship and crew certificates and possible provide records on exemptions for reporting.
    - The CHD incorporates a list of dangerous and polluting goods that have to be notified in accordance with Directive 2002/59/EC, as amended, and IMO FAL Form 7, taking into consideration the relevant data elements from the IMO Conventions and Codes. In also includes a link to the relevant entries in the MAR-CIS database which includes information on associated hazards and risks of dangerous and polluting goods. The CHD can be used both as a reference and a verification tool, at national and Union level, during the reporting process.

- In order to reduce administrative burden deriving from registration process and maintenance of the user information, the EMSW environment should also have a common user registration database or a mechanism to share harmonised national user registries with the objective of having unique user IDs in the EU.

4. NEXT STEPS

The results of the project would help to determine if there is scope to continue to work on the implementation of the eManifest and the EMSW also through legislative changes. The results would be considered in the evaluation of the RFD as a possible solution for further simplification and harmonisation of reporting formalities.