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EUROPEAN COMMISSION
DG MOVE

STUDY ON REPORTING OBLIGATION RESULTING FROM DIRECTIVE 2010/65/EU (REQUEST FOR SERVICES MOVE/D1/2012-376)

CALL FOR TENDER UNDER TREN/R1/350-2008 LOT 3

Final Study Report

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2. GLOSSARY

ACRONYM	Full name	Definition
AIS	**Automatic Identification System**	**AIS** is an automatic tracking system used on ships and by vessel traffic services (VTS) for identifying and locating vessels by electronically exchanging data with other nearby ships AIS Base stations and Satellites. When satellites are used to detect AIS signatures then the term Satellite-AIS (S-AIS) is used. AIS information supplements marine radar, which continues to be the primary method of collision avoidance for water transport. Information provided by AIS equipment, such as unique identification, position, course, and speed, can be displayed on a screen or an Electronic Chart Display Information System (ECDIS).
ASP	**Active Server Pages**	**ASP** (Microsoft®) is a server-side scripting environment that can be used to create and run dynamic, interactive Web server applications. With ASP, HTML pages, script commands, and COM, components can be combined to create interactive Web pages and powerful Web-based applications that are easy to develop and modify.
Blue Belt		The **Blue Belt** is an area where vessels can operate freely within the EU internal market with a minimum of administrative burden while safety, security, environmental protection as well as customs and tax policies are enhanced by the use of maritime transport monitoring and reporting capabilities (processes, procedures and information systems).
EDI	**Electronic Data Information**	**EDI** is a method for transferring data between different computer systems or computer networks.
(E)MSs	**(European) Member States**	The **European MSs** are the members of the European Union and are party to treaties of the European Union (EU) and thereby subject to the privileges and obligations of EU membership. There are 28 member states of the EU: Austria, Belgium, Bulgaria, Cyprus, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

EMSA	**European Maritime Safety Agency**	**EMSA** is one of the EU's decentralised agencies, which provides technical assistance and support to the EC and MSs in the development and implementation of EU legislation on maritime safety, pollution by ships and maritime security. It has also been given operational tasks in the field of oil pollution response, vessel monitoring and in long range identification and tracking of vessels.
ERINOT message	**Electronic Reporting International Notification message**	The **ERINOT** message is an obligatory message with a purpose to notify national authorities and, when necessary, port authorities about the voyage and cargo (dangerous and non-dangerous) details for the vessel which in navigating the inland waterways.
Free Zone		**Free zones** are special areas within the customs territory of the Community. Goods placed within these areas are free of import duties, VAT and other import charges. Free zone treatment applies to both non-Community and Community goods: Non-Community goods stored in the zone are considered as not yet imported to the customs territory of the Community whereas certain Community goods stored in free zones can be considered as already exported. On importation, free zones are mainly for storage of non-Community goods until they are released for free circulation. No import declaration has to be lodged as long as the goods are stored in the free zone. Import and export declarations have only to be lodged when the goods leave the free zone. In addition, there may be special reliefs available in free zones from other taxes, excises or local duties. These will differ from one zone to another. The free zones are mainly a service for traders to facilitate trading procedures by allowing fewer customs formalities.
FTP	**File Transfer Protocol**	An **FTP** is a common method of transferring and exchanging files between two computers via the Internet (over any network). It is a simple network protocol based on Internet Protocol.
HTML	**Hyper Text Mark-up Language**	**HTML** is the language that Web pages are written in. Also known as hypertext documents, Web pages must conform to the rules of HTML in order to be displayed correctly in a Web browser. The HTML syntax is based on a list of tags that describe the page's format and what is displayed on the Web page.

IMO FAL forms	**The International Maritime Organisation's Facilitation of International Traffic forms**	The Convention on Facilitation of International Maritime Traffic (**FAL Convention**) includes in its Standard 2.1 a list of documents which public authorities can demand of a ship and recommends the maximum information and number of copies which should be required. **IMO** has developed Standardized Forms for seven of these documents, which are: the IMO General Declaration (FAL form 1), the Cargo Declaration (FAL form 2), the Ship's Stores Declaration (FAL form 3), the Crew's Effect Declaration (FAL form 4), the Crew List (FAL form 5), the Passenger List (FAL form 6) and the Dangerous Goods (FAL form 7). The general declaration (form 1), cargo declaration (form 2), crew list (form 5) and passenger list (form 6) constitute the maximum information necessary. The ship's stores declaration (form 3) and crew's effects declaration (form 4) incorporate the agreed essential minimum information requirements.
Inland ECDIS	**Electronic Chart Display Information System**	**Inland ECDIS** is a system for the display of electronic inland navigation charts and additional information. Its purpose is to contribute to safety and efficiency of inland navigation and thus also to protection of the environment. Simultaneously Inland ECDIS is to reduce the workload when navigating the ship as compared to traditional navigation and information methods. Inland ECDIS provides also the basis for other RIS, e.g. Inland AIS
LAN port	**Local Area Network port**	A **LAN** is a computer network covering a small physical area. A **LAN port** is a port connection that allows a computer to connect to a network using a wired connection.
LCA	**Local Competent Authority**	**LCAs** are the authorities or organisations designated by MSs to receive and transmit information pursuant to Directive 2002/59/EC e.g. Port authorities, Coastal Stations, Vessel Traffic Service, shore-based installations responsible for a mandatory reporting system approved by the IMO, or bodies responsible for co-ordinating search and rescue operations. Not only for SSN, but also within the scope of the RFD local authorities can be designated. According to Art.4 of the RFD "*MSs shall ensure that the master or any other person duly authorised by the operator of the ship provides notification, prior to arriving in a port situated in a MS, of the information required under the reporting formalities to the competent authority designated by that MS*"**.** **LCAs** are the authorities and organisations designated by MSs where legally required notifications are/will be sent to pursuant to the RFD:
MRCC	**Maritime Rescue Coordination Center**	**MRCCs** are responsible for a geographic area, known as a "search and rescue region of responsibility" (SRR), which are designated by the International Maritime Organisation (IMO).

NCA-SSN	**National Competent Authority for SafeSeaNet**	The NCA is the body designated by MSs as being responsible for the management of the SSN system at national level. It coordinates all the required actions to comply with the specifications described in the Interface Control Document. The NCA is often, but not always, the Maritime Administration within a Member State. The NCA is the only national authority in contact with the EU bodies for matters related to SSN, and as such, takes part in the management and development of the system at EU level by participating in periodic reviews. The NCA is also responsible for designating LCAs for SSN, and enabling and maintaining their access to the SSN network.
PCS	**Port Community System**	A **PCS** is a tool / a community system to exchange messages in port environment, having a commercial and logistic nature that has *B2B* (*Business to Business*) character.
PSW	**Port Single Window**	A **PSW** is a system which provides local level information about the vessel to the authorities on a port level, that has B2G (Business to Government) and sometimes a B2B (Business to Business) character.
RFD	**Reporting Formalities Directive (Directive 2010/65/EU)**	**Directive 2010/65/EU** of the European Parliament and of the Council of 20 October 2010 on reporting formalities for ships arriving in and/or departing from ports of the Member States and repealing Directive 2002/6/EC
RIS	**River Information Services**	**RIS** are a European concept for harmonised information services to support traffic management in inland navigation, including the interfaces to other transport modes.
SPOC	**Single Point of Contact**	The NCA designated within and by each MS for SSN, as well as the NSW Authority designated by each MS for the purpose of the RFD are both **SPO**Cs.
SSN	**SafeSeaNet**	**SSN** is the European Platform for Data Exchange between MSs' maritime authorities. It is a network / Internet solution based on the concept of a distributed database. The main objective of SSN is to provide a European platform for maritime data exchange between maritime administrations of the MSs, by setting-up a telematic network between all the maritime EU MSs, Norway and Iceland for their co-operation in preventing maritime pollution and accidents at sea.
NSW	**National Single Window**	The **NSW** Concept is the main requirement for the implementation of the RFD. It aims at meeting the generic goals of simplification and harmonisation of the administrative procedures applied to maritime transport by making the electronic transmission of information standard and by rationalising reporting formalities. A NSW is an environment for collecting and dissemination of vessel reporting information with a structured and commonly defined data structure, and rules and rights management of information, which are in accordance with relevant international, national and local legal requirements

NSW Authority	**National Single Window Authority**	The **NSW Authority*** is the competent authority in the meaning of Article 4 of directive 2002/65/EU that receives information, and disseminates this information to all relevant authorities, and coordinates controls in the logistical chain. This authority varies from country to country depending on national legal, political and organisational issues. For the purposes of this document the NSW authority is the competent authority designated by a member state to implement the provisions of the Directive, in particular, with the responsibility for overseeing the setting up and operation of the NSW as envisaged for the purposes of Directive 2010/65/EU. As regards the operation of the NSW, the NSW authority is responsible to: • Confirm to the data providers the receipt of the information; • Distribute or make available the reporting formalities information to the relevant authorities; • Provide the users of the NSW with the appropriate access rights; • Define the mechanisms to ensure the credentials of the users and the non-repudiation and traceability of actions performed by the users; • Establish the data quality checks that need to be performed on the information received; • Transmit the relevant information to the national SSN system; • Co-operate with the SSN National Competent Authority (if different) to establish the users who shall have access to information in the SSN system. (***** *The eMS group had agreed not to use the term NCA in the context of the RFD in order not to confuse the NCA for SafeSeaNet with the competent authority designated by the MS for the SW, since depending on the administrative structure within the member states they may be different and have different functions.*)

VTT	**Vessel Tracking & Tracing**	**Vessel tracking** means the function of maintaining status information of the vessel, such as the current position and characteristics, and - if needed - combined with information on cargo and consignments. **Vessel tracing** means the retrieving of information concerning the whereabouts of the vessel and - if needed - information on cargo, consignments and equipment. VTT of inland navigation supports on-board navigation, shore-based traffic monitoring as part of VTS and other tasks such as calamity abatement.
VTS	**Vessel Traffic Services**	**VTS** are shore-side systems which range from the provision of simple information messages to ships, such as position of other traffic or meteorological hazard warnings, to extensive management of traffic within a port or waterway.
Third Country		A **third country** is a country that is not one of the 28 members of the EU or the EEA-EFTA (European Economic Area - European Free Trade Association) states (Iceland, Liechtenstein, Norway).
WEP	**Wired Equivalent Privacy**	**WEP** is a security protocol for wireless networks that encrypts transmitted data
XML messages	**Extensible Mark-up Language**	**XML** is a mark-up language used to structure text and multimedia documents and to set up hypertext links between documents, used extensively on the World Wide Web.

3. EXECUTIVE SUMMARY

Context and purpose of the mission

Maritime transport must comply with complex administrative procedures concerning reporting formalities, even when it relates to navigation between EU ports (intra-EU transport) and when the cargo consists of goods in free circulation in the EU.

These administrative procedures used to be regulated by Directive 2002/6/EC on reporting formalities for ships arriving in and/or departing from ports of the Member States of the Community, resulted (and still result) in costs and delays and could make maritime transport less attractive. In January 2009, the EC published a proposal to amend Directive 2002/6/EC. After discussions at the EU level, Directive 2010/65/EU on reporting formalities applicable to maritime transport (also referred to as the Reporting Formalities Directive) was adopted in October 2010.

The **Reporting Formalities Directive (RFD)** applies to the reporting formalities applicable to maritime transport for ships arriving in and ships departing from ports in EU countries. The objective of this directive is to reduce the administrative burdens for shipping companies by simplifying and harmonising the documentary and physical checks conducted on ships and goods moving between EU ports. In order to achieve simplification and harmonisation reporting formalities required by EU legislation, international legal instruments - in particular the IMO Convention on Facilitation of International Maritime Traffic (FAL Convention), any other relevant national legislation need to be rationalised, and electronic transmission of the information required to be provided under these reporting formalities must be made standard. The Single Window concept is the main requirement for the implementation of the RFD.

The **main objective of this assignment is to gather and present the information necessary to enable the EC to fulfil its reporting obligation under Art. 15 of the RFD**.

Art. 15 of the RFD states that the EC shall report to the European Parliament and the Council, by 19 November 2013, on the functioning of this Directive, including on:

- The possibility of extending the simplification introduced by this Directive to cover inland waterway transport;
- The compatibility of the RIS with the electronic data transmission process referred to in this Directive;
- The progress towards harmonisation and coordination of reporting formalities that has been achieved under Art. 3;
- The feasibility of avoiding or simplifying formalities for ships that have called at a port in a third country or free zone;
- The available data concerning ship traffic/movement within the Union, and/or calling at third country ports or in free zones.

Landlocked countries without any ports in their territories at which ships covered by the scope of the RFD can call are required to implement only the provisions relating to the flag but not those relating to the sea ports.

Issue analysis

The possibility of extending the simplification introduced by the Reporting formalities Directive to cover inland waterway transport (Art. 15(a) RFD)

The question is whether the simplifications regarding reporting formalities for the maritime transport sector can be extended so that they could also apply to the inland waterway transport sector / reporting formalities system(s).

Although both Art. 15(a) and Art. 15(b) of the RFD are related to River Information Services (RIS[1]), both research topics have been approached in a different way. The possibility of extending the simplification introduced by the RFD (Art. 15(a)) is approached from a functional point of view, whereas the compatibility of RIS with the electronic data transmission process referred to in the RFD (Art. 15(b)) is examined from a more technical point of view.

Simplifications regarding reporting formalities for the maritime sector can be extended to the inland waterway sector, but therefore a stepwise and well-structured action plan with a realistic timetable should be set up. Apart from the technical component of the solution, the challenge will be to convince all concerned stakeholders to take part in - and become part of - the proposed action plan.

The maritime and inland waterway transport sectors are still two different and separate sectors. The maritime transport sector is already strictly regulated by EU and international rules and mandatory administrative procedures (and information sets and reporting obligations). The inland waterway transport sector on the other hand is less regulated by some administrative procedures, and reporting formalities are only defined at MS level on the basis of a smaller information set.

The compatibility of the River Information Services with the electronic data transmission process referred to in the Reporting Formalities Directive (Art. 15(b) RFD)

In order to examine the compatibility between the electronic data transmission referred to in Art. 5 of the RFD and the electronic data transmission process used in RIS, the question on *what* is required (cf. Art. 15(a)) should be answered first.

It is possible to harmonise the information sets used in the maritime transport sector and the ones used in the inland waterway transport sector, by (i) issuing more strict rules for reporting formalities in the inland waterway transport sector and (ii) defining how the electronic data transmission will be organised. This requires a new directive or other regulation on data exchange in the inland waterway sector.

The World Customs Organisation (WCO) data model should be used as a reference framework for the harmonisation of information sets and data exchange between the maritime transport sector and inland waterway transport sector.

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[1] **River Information Services (RIS)** is defined as a concept for harmonised information services to support traffic and transport management in inland navigation, including interfaces to other transport modes.

The progress towards harmonisation and coordination of reporting formalities that has been achieved under Article 3 of the Reporting Formalities Directive (Art. 15(c) RFD)

Art. 15(c) of the RFD aims at measuring the progress towards harmonisation and coordination of reporting formalities that has been achieved under Art. 3 of the Directive, which contains two elements:

- Art. 3.1 RFD - Measures taken by the MSs to ensure a harmonised and coordinated request for reporting formalities within each MS;
- Art. 3.2 RFD - Mechanisms developed by the EC for harmonisation and coordination of reporting formalities within the Union.

Since the NSW concept is the main requirement for the implementation of the RFD, the current state of development of such a SW at MS level will be an essential element to measure the progress made in each MS towards harmonisation and coordination of reporting formalities.

On the basis of the gathered information, conclusions are that:

- All MSs seem to have taken initiatives regarding implementation of a national maritime SW. There is a considerable variety (i) of SW concepts, systems, environments, (ii) of approaches to create a SW, and (iii) in the current state of affairs of development of the SWs.
- Part of the MSs is waiting for the EU technical specifications regarding the SW, other MSs modernise, (inter)connect and/or or 'rebuild' their existing national reporting formalities (lodge and/or exchange) systems in order to create a proper national maritime SW in accordance with the RFD.
- A lot of stakeholders are involved:
    1. Stakeholders at different levels are involved: stakeholders at EU level and at MS level;
    2. Stakeholders in several policy fields are involved: maritime administrations and administrations in other than the maritime policy field;
    3. As a consequence of which the RFD implementation process us complex and requires coordination.
- The AnNa initiative is appreciated by the participating EU MSs and the combination of both the EC/DG MOVE's efforts (cf. eMS (sub)group(s)) and the work parallel done by (and within the framework of) the AnNa project should be considered as an added value for the overall implementation of the RFD.
- The opinions on the eMS (sub-)group(s) are somewhat divided. Most participants generally appreciate the efforts of the EC/DG MOVE. On the basis of some specific critical or negative comments regarding the organisation, communication and functioning of the eMS groups some improvements could be made.

The main difficulties MSs are struggling with are (i) the impact of RFD implementation on the available budget and budgeting process of the (involved stakeholders in) MSs, (ii) the interaction and/or involvement of the many different (public and private) stakeholders and authorities in various policy fields that are required in - several aspects of - the implementation process of the RFD, (iii) some concerns and/or national legal difficulties regarding exchanging confidential (sensitive) information and guaranteeing data quality, (iv) the lack of no (or not enough) enough technical specifications at EU level, (v) the implementation deadline (1.06.2015) that is getting close and the tight implementation timing.

In order to guarantee a smoother implementation process of the RFD by the MSs it could be recommended that (i) all MSs (e.g. via the EC / eMS groups) should be able to use the AnNa

initiative outputs - as 'best practices', and that (ii) the EC could establishes a follow-up mechanism after the implementation deadline of the RFD/NSW (d.d. June 2015) in order to optimise the use of the NSWs.

The feasibility of avoiding or simplifying formalities for ships that have called at a port in a third country or free zone (Art. 15(d) RFD)

Most human activities are regulated and although most regulations are essential, they sometimes come to be regarded not only as unnecessary, but also as a significant burden on the activities they are supposed to control. Few activities have been more subject to over-regulation than international maritime transport, partly because of the international nature of shipping. Countries develop customs, immigration and other standards independently of each other and a ship visiting several countries during the course of a voyage could expect to be presented with numerous forms to fill in, often asking for exactly the same information but in a slightly different way.

The examination of the feasibility of exempting or simplifying administrative formalities for ships coming from, calling at, or heading towards a port situated outside the EU or a control type I free zone (within the meaning of customs legislation), should be without prejudice to the applicable legal acts of the Union, and the information that Member States may request in order to protect internal order and security and to enforce customs, fiscal, immigration, environmental or sanitary laws.

In order to examine this issue, following aspects have been described and examined: First, the provisions in the FAL Convention have been described and analysed and the relationship with other international instruments – such as the SOLAS Convention (especially IMDG Code and ISPS Code) – have been examined. Secondly, the problem of infected vessels have been analysed, both with respect to the cargo as with respect to the crew.

The findings on Art. 15(d) can be of use to the development of a future Blue Belt environment. The Blue Belt is a concept according to which ships can operate freely within the EU internal market with a minimum of administrative burden and in which safety, security, environmental protection as well as customs and tax revenues are ensured by the best possible use of existing capabilities to monitor maritime transport. Today, a vessel for example travelling from Antwerp to Rotterdam is considered to have left the EU customs territory. Therefore, upon arrival in Rotterdam, all goods on board are considered to be non-Union goods, having to go through all necessary customs procedures. With the development of the eManifest, operators are able to prove the Union status of the goods on board, even if the vessel has left the EU customs territory to move from one EU port to another or if the vessel has called at a third country port in between.

There is definitely a need of avoiding or simplifying formalities for ships that have called at a port in a third country or free zone. However, certain conditions need to be fulfilled in order to make this legally and economically feasible.

In order to extend the simplification of formalities for ships calling at a third country port, the simplification within the EU should be optimised first. Concerning RSS, improvements could be made with respect to the burden of proof as well as the notification duty. The role and cooperation of DG TAXUD is therefore crucial. Moreover, until now, discussions on simplifying formalities have been focusing on the cargo. Nevertheless, it is also important to include also formalities with regard to crew members as problems concerning visa and shore leave still exist on international as well as EU level.

On a longer term, the European Customs Code will need adjustments. The role and cooperation of DG TAXUD is again crucial. Next to this, agreements with third countries – especially Russia, Norway and Turkey – have to be developed.

In order to enhance transparency for all stakeholders, a central database could be developed. Shipping companies as well as shippers would be able to get the necessary information from this database. The Port Community System (PCS) could play a crucial role in setting up this database, as this system already is linked with shippers. Nevertheless, currently PCS is being used differently in the Member States and should therefore be harmonised.

The available data concerning ship traffic/movement within the Union, and/or calling at third country ports or in free zones (Art. 15(e))

The objective of Art. 15(e) of the RFD is to obtain insight in the data availability of ship movements/traffic from one EU port to another, or calling intermediately at third country ports or entering free zones: today there is no clear understanding of the importance/extent of this traffic.

Data are required to define the importance of ship movements in the union involving stops in free zones and/or third country ports, but also to get a view on the routes taken - in order to define which routes to monitor or not. For this purpose effective route information is required, including routes taken and the frequency.

Data can also include concerned cargo volumes and traffic frequency (number of ship movements).

Conclusion are that there is a lack of maritime statistics regarding specific ship movements/ traffic within the EU and/or calling at third country ports or in free zones. There are no ship movement and cargo data immediately available at EU level. In order to do a proper impact assessment of the RFD, immediately available data is crucial for DG MOVE.

Two recommendations are proposed. The first recommendation requires an adaptation of the current Directive 2009/42/EC of Eurostat. A second recommendation is related to further investigation of AIS data. In the future, another opportunity will also arise with the implementation of the eManifest.

4. INTRODUCTION

4.1 Context of the mission

4.1.1 Directive 2010/65/EU on reporting formalities applicable to maritime transport (Reporting Formalities Directive)

Simplifying and harmonising administrative procedures concerning reporting formalities

Maritime transport must comply with complex administrative procedures concerning reporting formalities[2], even when it relates to navigation between EU ports (intra-EU transport) and when the cargo consists of goods in free circulation in the EU.

These administrative procedures used to be regulated by Directive 2002/6/EC on reporting formalities for ships arriving in and/or departing from ports of the MSs of the Community, resulted (and still result) in costs and delays and could make maritime transport less attractive.

In January 2009, the EC published a proposal to amend Directive 2002/6/EC. After discussions at the EU level, Directive 2010/65/EU of the European Parliament (EP) and of the Council of 20 October 2010 on reporting formalities for ships arriving in and/or departing from ports of the Member States and repealing Directive 2002/6/EC (also referred to as the Reporting Formalities Directive) was adopted in October 2010. This new directive repealed Directive 2002/6/EC from 19 May 2012.

The Reporting Formalities Directive (RFD) applies to the reporting formalities applicable to maritime transport for ships arriving in and ships departing from ports in EU countries. The objective of this directive is to reduce the administrative burdens for shipping companies by simplifying and harmonising the documentary and physical checks conducted on ships and goods moving between EU ports. In order to achieve simplification and harmonisation reporting formalities required by EU legislation, international legal instruments - in particular the IMO FAL Convention, any other relevant national legislation need to be rationalised, and electronic transmission of the information required to be provided under these reporting formalities must be made standard.

4.1.2 Impact of the Reporting Formalities Directive

The RFD requires:

- The MSs to ensure that the reporting formalities at their ports are requested in a harmonised and coordinated manner, each within their country;
- The EC, in cooperation with the MSs, to develop mechanisms for the harmonisation and coordination of reporting formalities within the EU;
- The master, or any other person duly authorized by the operator of the ship, to provide the competent authority with notification, prior to arriving in an EU port, of the information required under the reporting formalities:

[2] *Reporting formalities* means the information which must be provided for administrative and procedural purposes when a ship arrives in and/or departs from a port in a particular EU MS.

- at least 24 hours in advance, or
- at the latest, at the time the ship leaves the previous port, if the voyage time is less than 24 hours, or
- if the port of call is not known or it is changed during the voyage, as soon as this information is available;

- Electronic transmission[3] of data to be made standard - This means that:
  - EU countries shall accept electronic reports via a NSW[4] as soon as possible and, at the latest, by the 1st of June 2015; The NSW will be the place where all information is reported once, and made available to various competent authorities and the EU countries;
  - EU countries must ensure that information received in accordance with reporting formalities is made available in their national SSN[5] systems and make available relevant parts of such information to other EU countries (upon request) via their (national) SSN system; However, they may exclude date for customs and border control purposes from this exchange;
  - EU countries shall accept FAL forms for the fulfilment of reporting formalities and they may still accept information provided in a paper format until 1st of June 2015.[6]

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[3] *Electronic transmission of data* means the process of transmitting information that has been encoded digitally, using a revisable structured format which can be used directly for storage and processing computers.

[4] The *Single Window*:

- Links SSN, e-Customs and other electronic systems;
- Must be interoperable and compatible with, and accessible to the SSN system and, where applicable, with the systems stipulated in *Decision 70/2008 on a paperless environment for customs and trade.*

  Decision 70/2008 is intended to promote electronic customs in the EC: Customs systems (i) supply pan-European e-government services which facilitate imports and exports, by reducing costs and coordinating procedures, and (ii) provide for the exchange of data between the customs administrations of the MSs, traders and the EC. Supply chain logistics and customs processes are thereby improved and facilitated. If the objectives set out in the decision are to be met, it will be necessary to (i) harmonise the exchange of information, (ii) review customs processes with a view to optimising their efficiency and effectiveness, and (iii) offer traders a wide range of electronic customs services.

[5] *SafeSeaNet* is a European Platform for vessel traffic monitoring and information exchange between MSs' maritime authorities established in order to enhance maritime safety, port and maritime security, marine environment protection and the efficiency of maritime traffic and maritime transport.

[6] Source: Malta-EU Steering & Action Committee (*MEU SAC*), Directive 2010-65-EU Background note "*Towards a European maritime transport space without barriers: Ship Reporting Formalities under Directive 2010/65/EU*"

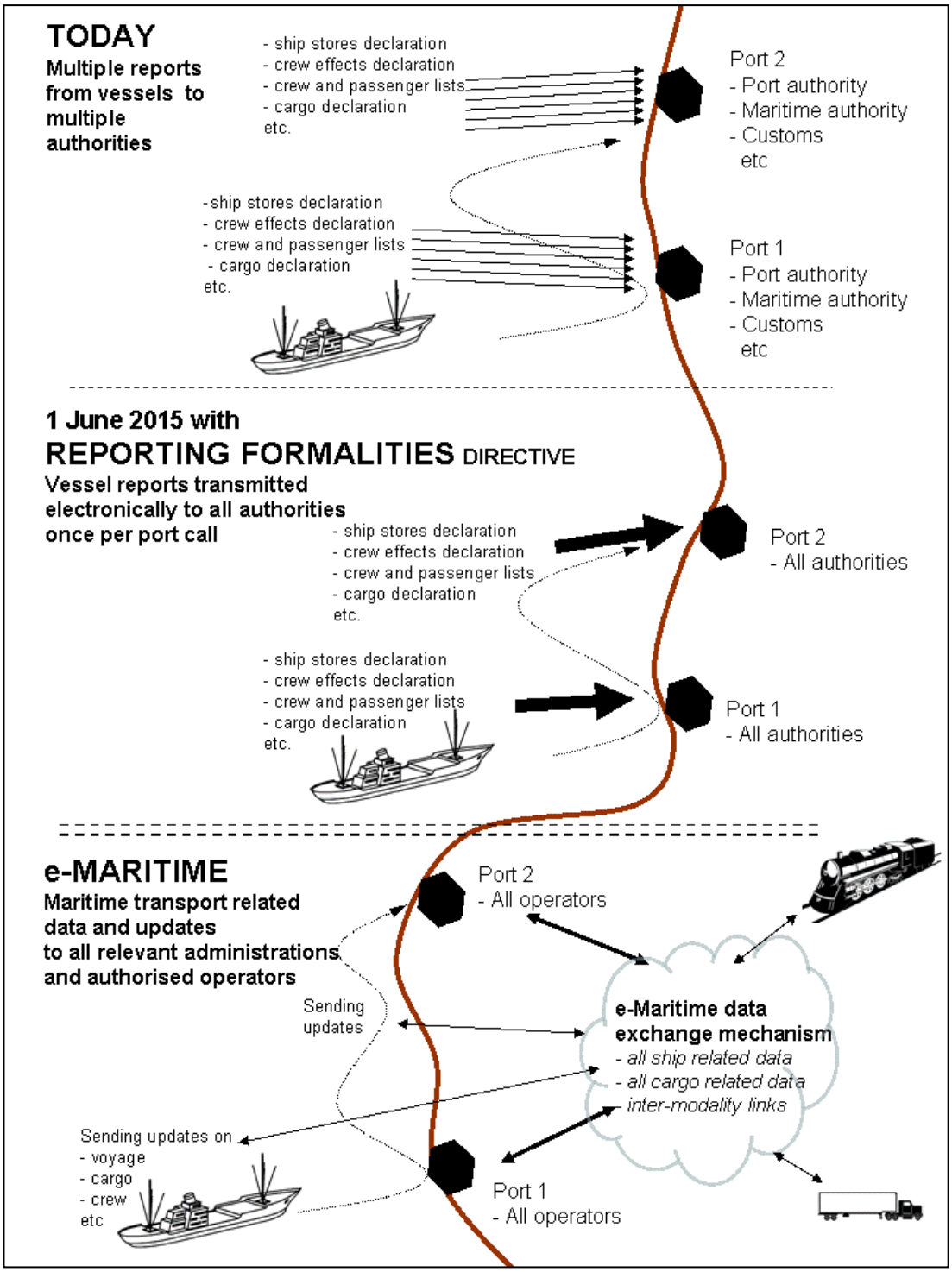

Figure 1: Development with regard to reporting formalities (Source: The EU e-Maritime initiative – Conference on Port Integration Hanse-office 24 April 2012)

4.1.3 Specific context of this assignment: Art. 15 of the RFD

Art. 15 of the RFD states that the EC shall report to the EP and the Council, by 19 November 2013, on the functioning of this Directive, including on:

- The possibility of extending the simplification introduced by this Directive to cover inland waterway transport;

- The compatibility of the RIS with the electronic data transmission process referred to in this directive;
- The progress towards harmonisation and coordination of reporting formalities that has been achieved under Art. 3;
- The feasibility of avoiding or simplifying formalities for ships that have called at a port in a third country or free zone;
- The available data concerning ship traffic/movement within the Union, and/or calling at third country ports or in free zones.

Art. 15 of the RFD also states that the report, if appropriate, shall be accompanied by a legislative proposal, in which case the report shall provide technical and economic data which will be used as inputs in the possible assessment of the economic, environmental and social impact of the proposal in line with the guidelines of the EC for impact assessment studies.

4.2 Objectives of the assignment

The main objective of this assignment is to gather and present the information necessary to enable the EC to fulfil its reporting obligation under Art. 15 of the RFD.

The coordination works between the MSs carried out by the Commission and EMSA to implement the RFD (cf. CIRCA) and the work carried out for the preparation and the implementation of the directives on RIS (cf. Platina project) are accurately taken into account.

The reliable sources for collecting the necessary information and contacting the relevant authorities or other stakeholders in order to obtain the required information are identified and the references to the sources are clearly presented.

On the basis of the information collected, an analysis of the RFD has been carried out and key facts and figures - which can be used as a reliable base for further studies or policy making - are gathered and presented.

This report contains a proposal for recommendations with regard to the investigated issues as well.

5. METHODOLOGY AND WORK PLAN

Art. 15 refers to 5 issues that need to be examined and analysed:

1. The possibility of extending the simplification introduced by Directive 2010/65/EU to cover inland waterway transport;
2. The compatibility of RIS with the electronic data transmission process referred to in Directive 2010/65/EU;
3. The progress towards harmonisation and coordination of reporting formalities that has been achieved under Art. 3 of Directive 2010/65/EU;
4. The feasibility of avoiding or simplifying the formalities for ships that have called at a port in a third country or free zone;
5. The available data concerning ship traffic/movement within the Union, and/or calling at third country ports or in free zones.

In order to successfully complete this project it was conducted in 4 phases:

- Phase 0: A preliminary phase to fine-tune and – if necessary - modify the initially proposed work plan and methodology. This phase resulted in an inception report.
- Phase 1: A data and information collecting phase using desk research and the results of an expert kick-off workshop. A first intermediate report provided the results of a first analyses and of the introductory and guiding expert stakeholder consultation.
- Phase 2: A EU-wide stakeholder consultation (telephone interviews with key stakeholders in the MSs and from the maritime industry), and a first analysis of all data and information in order to present the key facts and figures with regard to the 5 issues referred to in Art. 15 of the RFD, or with regard to any other significant issue that may arise. This phase resulted in a second intermediate report.
- Phase 3: A draft study report providing draft conclusions concerning these issues, to be discussed with the EC/DG MOVE in order to come to final conclusions in the final study report.

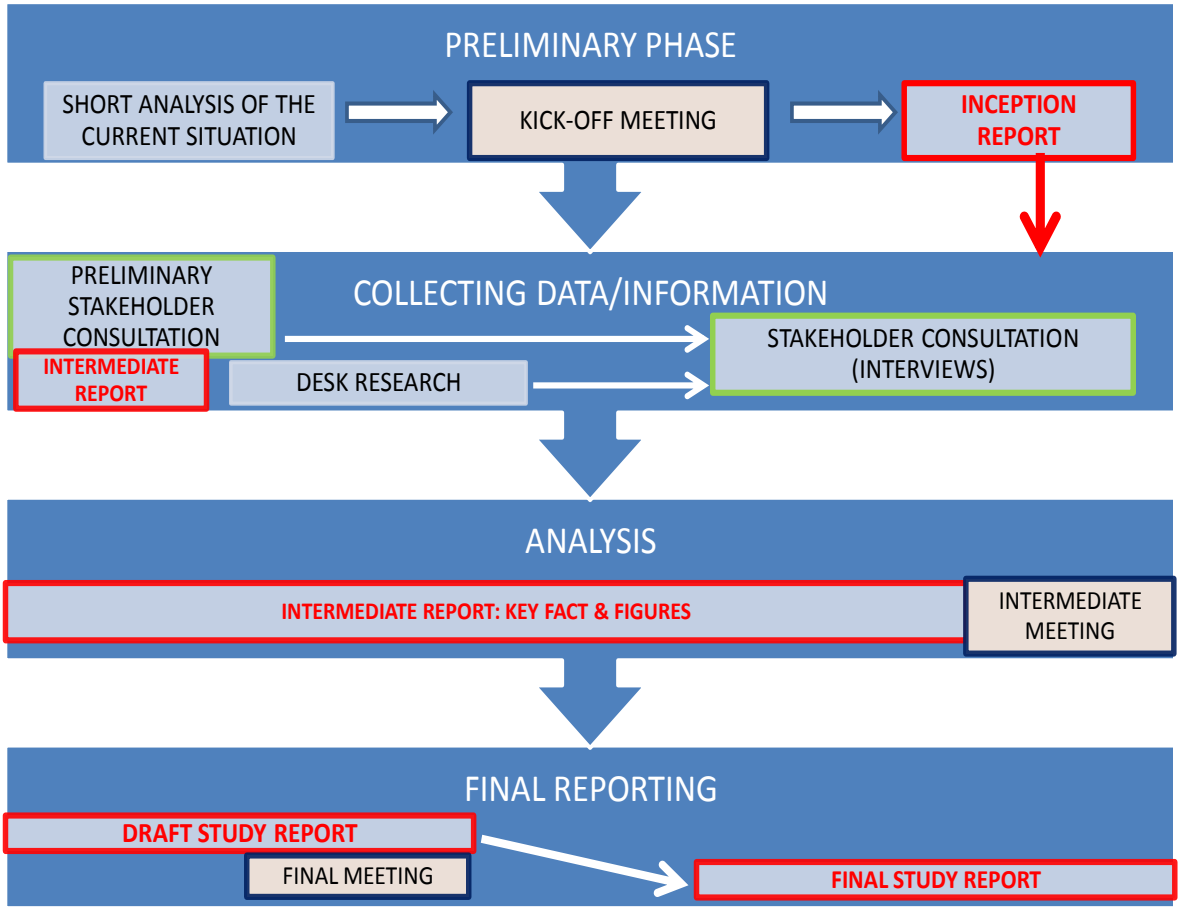

Figure 2: Work plan

6. SCOPE OF THE REPORTING FORMALITIES DIRECTIVE

6.1 Territorial scope of the RFD

According to Recital 24 of the RFD the requirements foreseen in the Directive are not relevant for MSs which do not have any ports at which ships falling under the scope of this Directive normally can call.

Therefore, the landlocked countries which do not have in their territories any ports at which ships covered by the scope of the RFD can call, are required to implement only the provisions relating to the flag but not those relating to the sea ports. The provisions relating to the flag include in particular (i) the notification obligations (prior to arrival into ports) in Art. 4 of the RFD and (ii) the requirement foreseen in Art. 8 of the RFD to ensure confidential treatment of data exchanged in accordance with the RFD.[7]

Austria, the Czech Republic, Hungary, Luxembourg and Slovakia are considered as landlocked countries for the purposes of the RFD. The impact and consequences of their status as landlocked country is clarified - where relevant - in the chapters below covering the analysis of the issues that have been examined.

6.2 Material scope of the RFD

The purpose of the RFD is to simplify and harmonise the administrative procedures applied to maritime transport by making the electronic transmission of information standard and by rationalising reporting formalities. The Single Window concept is the main requirement for the implementation of the RFD.

The directive applies to the reporting formalities applicable to maritime transport for ships arriving in and ships departing from ports situated in MSs.

The directive does not apply to ships exempted from reporting formalities.

The material scope of the RFD is further explained - and interpreted where needed and relevant - in the chapters below.

[7] Transposition Q&A (version 30 March 2012)

7. THE POSSIBILITY OF EXTENDING THE SIMPLIFICATION INTRODUCED BY THE REPORTING FORMALITIES DIRECTIVE (ART. 15(A) RFD)

7.1 Context

Although both Art. 15(a) and Art. 15(b) of the RFD are related to RIS, both research topics should be approached in a different way. The possibility of extending the simplification introduced by the RFD (Art. 15(a)) is approached from a functional point of view, whereas the compatibility of RIS with the electronic data transmission process referred to in the RFD (Art. 15(b)) is investigated from a more technical point of view.

RIS are defined as a concept for harmonised information services to support traffic and transport management in inland navigation, including interfaces to other transport modes. RIS does not deal with internal commercial activities between one or more of the involved private companies, but is open for interfacing with commercial activities.

RIS arose (and arise) from a set of European Directives, Commission Regulations and European Guidelines:

- The EU RIS Directive - i.e. Directive 2005/44/EC of the European Parliament and the Council on harmonised River Information Services;
- The technical guidelines for the planning, implementation and operational use of RIS referred to in Art. 5 of the EU RIS Directive - RIS Guidelines Commission Regulation (EC) N° 414/2007;
- Tracking and Tracing standard - Commission Regulation (EC) N° 415/2007 of 22 March 2007 concerning the technical specifications for vessel tracking and tracing (VTT) systems;
- Notice to Skippers standard - Commission Regulation (EC) N° 416/2007 of 22 March 2007 concerning the technical specifications for Notices to Skippers;
- Electronic Reporting standard - Commission Regulation (EC) N° 164/2010 of 25 January 2010 concerning the technical specifications for electronic reporting;
- Inland ECDIS - Commission Implementing Regulation (EC) N° 909/2013 on the technical specification for the Electronic Chart Display and Information System for inland navigation (Inland ECDIS) referred to in Directive 2005/44/EC of the EP and of the Council.

These Directives, Regulations and Guidelines show 3 important concepts for the implementation/realisation of RIS:

- RIS Services
- RIS Key Technologies
- RIS Reference Data

Commission Regulation No 414/2007 and PIANC Report n° 125 RIS Guidelines (Version 3.0 d.d. March 2011) defines the **RIS Services**, which contain recommendations for the following services:

- Fairway Information Services (FIS)
- Traffic Information (TI) – Tactical Traffic Information(TTI)
- Traffic Management (TM) – Strategic Traffic Information (STI)
- Calamity Abatement Support (CAS)
- Information for Transport Logistics (ITL)
- Information for Law Enforcement (ILE)
- Statistics (ST)
- Waterway Charges and Harbour Dues (CHD)

The RIS Services can be visualised as a layered model (see Figure 3: Structured 'bottom up' approach RIS Services (source: PIANC report N° 125-2011) below). The implementation of RIS should contain at least Fairway Information Services (FIS); in a next step it could also be extended with Traffic Information (TI) and with Traffic Management (TM) as primary services. Based on these three primary services, other services can also be implemented.

Figure 3: Structured 'bottom up' approach RIS Services (source: PIANC report N° 125-2011)

RIS Services should be realised on the basis of **RIS Key Technologies** and **RIS Reference Data**.

The 4 RIS **Key Technologies** are:

- Vessel Tracking and Tracing (VTT)- Commission Regulation N° 415/2007;
- Notice to Skippers - Commission Regulation N° 416/2007;
- Electronic Ship Reporting - Commission Regulation N° 164/2010;
- Inland ECDIS – Commission Implementing Regulation N° 909/2013.

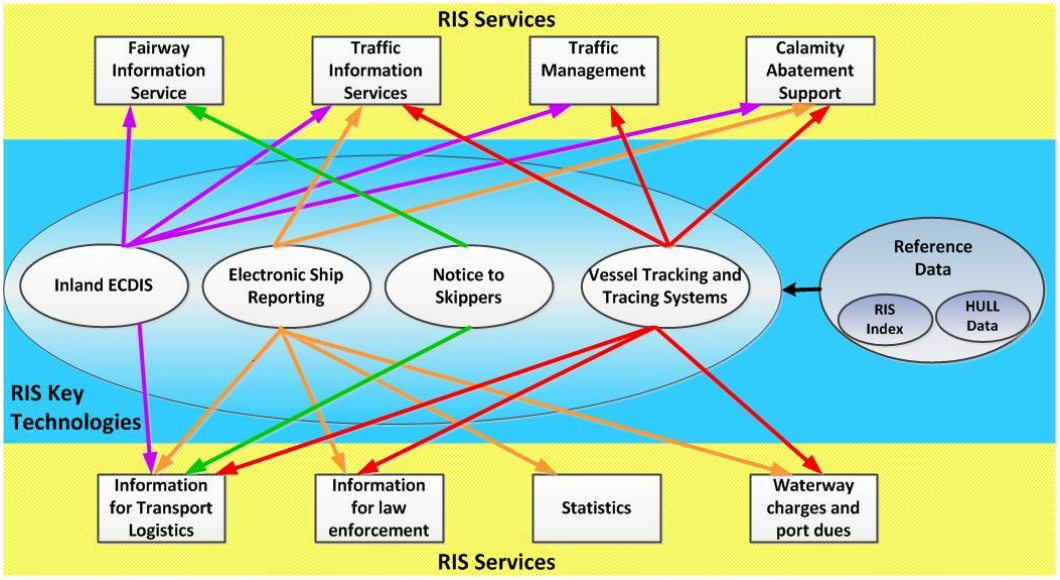

Figure 4: Relation between the 4 RIS Key Technologies and the RIS Services (source: PIANC report n°125-2011)

The efficient and effective use of RIS Key Technologies is based upon the specification and coding, formalisation and a harmonised use of **RIS Reference Data**. Specific RIS Reference Data elements are "HULL data" [8] and the "RIS Index"[9] – cf. figure below.

[8] **HULL data**: According to Directive 2006/87/EC on the technical requirements for inland waterway vessels and the Rhine Inspection Rules (RheinSchUO) and UN-ECE Resolution N° 61 certain inland waterways vessels need a technical inspection before being allowed to sail on European inland waterways. Vessel certification authorities issue community certificates after technical inspections. A subset of the data of community certificates, the so-called "minimum set of hull data", includes the Unique European Vessel Identification Number, the name, length, breadth of the vessel, whether it is single or double hull, etc.

[9] In Annex I of the RIS Directive the "minimum data requirements" are described in order to supply to RIS users all relevant data concerning navigation and voyage planning on inland waterways. These data shall be provided at least in an accessible electronic format, in particular the following data shall be supplied: waterway axis with kilometre indication, restrictions for vessels or convoys in terms of length, width, draught and air draught, operation times of restricting structures, in particular locks and bridges, location of ports and transhipment sites, reference data for water level gauges relevant to navigation. The RIS Index has been established and created to collect these data.

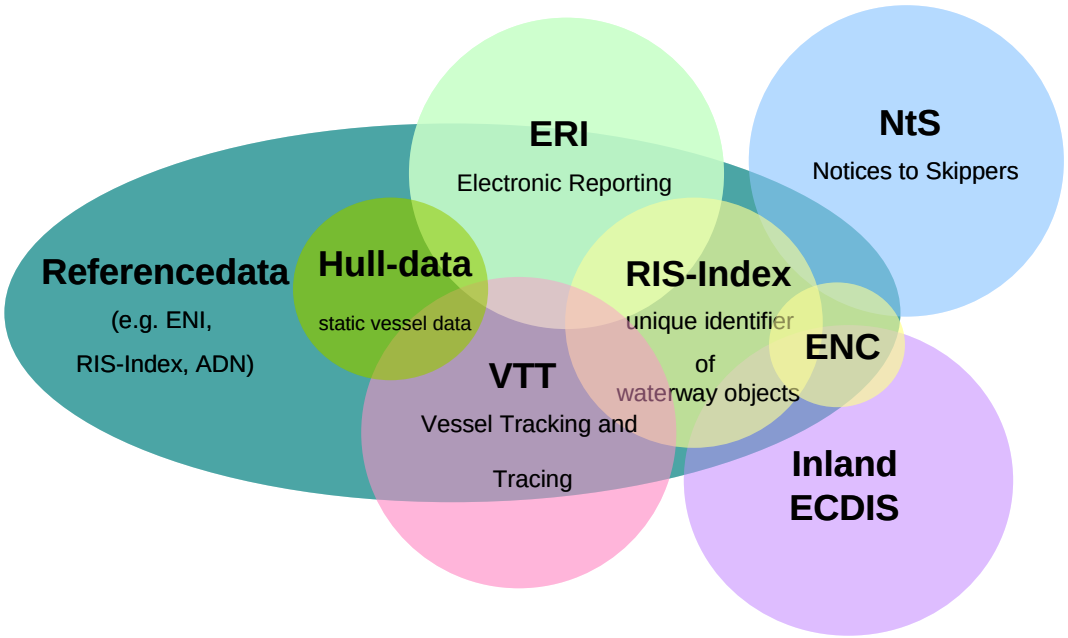

Figure 5: RIS Reference Data used in the RIS Key Technologies (source: PIANC report N°125-2011)

The functional analysis of RIS makes it possible to link information availability with user demands. The table below shows the connections between several (1st and 2nd level) information categories and details on the one hand and the RIS Services providing this information - and the RIS Reference Data[10] - on the other hand. Information users can use this table to identify the relevant RIS Services on the basis of the information categories (en details) they need.

[10] The RIS Reference Data are considered essential for the information categories and are therefore listed in a separate column.

Information category		Information detail	Basic Services			Services					Ref. Data		
1st level	2nd level		Fairway Information Services	Traffic Information (STI & TTI)	Traffic Management	Calamity Abatement Support	Information for Transport Logistics	Information for Law Enforcement	Statistics (1)	Waterway charges and harbour dues	RIS-index	Hull Data	Other
Infrastructure related	Waterway related information	Provide basic routing data	x	x	x		x		x	x	x		
		Provide navigation-based information on fairway and/or navigable water area (incl. harbours)	x	x	x	x	x				x		
		Provide meteorological information	x	x	x	x	x				x		x
		Provide water level related information	x	x	x	x	x				x		x
		Provide information on obstructions and limitations	x	x	x	x	x				x		x
		Provide information on navigation rules and regulations	x	x	x		x			x			x
	Land related information	Provide information on land region	x	x	x	x					x		
		Provide information on harbors	x	x	x	x	x			x	x		
		Provide information on terminals	x	x	x	x	x				x		
		Provide information on locks	x	x	x	x	x				x		
		Provide information on bridges	x	x	x	x	x				x		
Vessel related	Dynamic vessel data	Provide actual position information of vessels		x	x	x	x	x	x			x	x
		Provide actual vessel dynamics (i.e. RoT, velocity, CoG, SoG, …)		x	x			x					
		Provide historic position information of vessels							x	x		x	
		Provide historic vessel dynamics							x				
		Provide event based triggers for vessel position			x			x		x		x	
	Hull related information	Provide data for the identification of vessels (min. hull data set)			x	x	x	x	x	x		x	x
		Provide craft certificates						x				x	x
Voyage related	Location related information	Provide origin of voyage		x	x		x		x	x	x		
		Provide intermediate discharge locations					x	x	x	x	x		
		Provide passage points		x	x		x	x	x	x	x		
		Provide destination of voyage		x			x		x	x	x		
		Provide estimated date/ time of arrivals		x	x		x	x			x		
		Provide requested date/time of arrivals		x	x		x				x		
		Provide date/time of actual arrivals		x	x		x		x		x		
		Provide estimated date/ time of departures		x	x		x	x			x		
		Provide date/time of actual departures		x	x		x		x		x		
		Provide date/time of requested departures		x	x		x				x		
	Vessel/convoy related information	Provide overall convoy data		x	x	x	x	x	x	x		x	x
	Cargo related information	Provide origin of cargo					x	x	x		x		x
		Provide destination of cargo					x	x	x		x		x
		Provide cargo details		x	x	x	x	x	x	x	x		x
		Provide loading unit related information				x	x		x	x			x
	Persons on board related information	Provide number of persons (crew, passengers, …) on board				x							
		Provide details on persons on board				x		x		x			

Table 1: RIS Information categories and RIS Services (source: PIANC report °125-2011)

7.2 Issue clarification

The (translation of the) text (in some languages, e.g. Dutch) of Art. 15(a) of the RFD "*Possibility of extending the simplification introduced by this Directive to cover inland waterway transport*" might cause confusion about the exact meaning of this Article. Does it mean that need to be examined:

- How the - by the RFD - implemented simplifications regarding reporting formalities could be extended so that the inland waterway transport sector/system(s) also/additionally use/implement them? Or
- How the - in the RFD - proposed and implemented simplifications regarding reporting formalities could be extended in such a way that they are also applicable to inland waterway transport?

The latter meaning seems to correspond to a correct interpretation of Art. 15(a) of the RFD: The question is whether the simplifications regarding reporting formalities for the maritime transport sector can be extended in a way that they could also apply to the inland waterway transport sector / reporting formalities system(s).

The purpose of the RFD is to simplify and harmonise the administrative procedures applied to maritime transport by making the electronic transmission of information standard and by rationalising reporting formalities.

The question referred to in Art. 15(a) concerning the relation between the scope of the RFD and RIS is focused on the elements simplifying and harmonising the administrative procedures and rationalising reporting formalities.

This contains 3 main study areas:

- Harmonising and simplifying administrative procedures:

  Which are the procedures used in the maritime transport sector and in the inland waterway transport sector? And can an extended simplification and harmonisation of these reporting formalities, as introduced by the RFD, also cover inland waterway transport?
- Rationalising reporting formalities:

  Which are the reporting formalities in the maritime transport sector and in the inland waterway transport sector? And can an extended simplification and harmonisation of these reporting formalities, as introduced by the RFD, also cover inland waterway transport?
- Procedures and especially reports/reporting formalities, which are based on information:

  The type of information (meta data) and the content of that information (the values) used in the maritime transport sector and in the inland waterway sector need to be listed and analysed in order to know whether it is possible to harmonise the information.

7.3 Research questions

In order to analyse and answer the question mentioned in Art. 15 (a) of the RFD, more detailed research questions need to be defined and analysed:

- Research question 1: The RFD is principally aimed at the maritime sector - Who are the main stakeholders/actors in this sector?

- Research question 2: The 4 RIS Key Technologies and the RIS Services are meant for the inland waterway sector - Who are the main stakeholders/actors in this domain?
- Research question 3: Which stakeholders/actors that are actively involved in both the maritime and the inland waterway transport sector could take advantage of a (further) integration of both information processes?
- Research question 4: Is there - according to the maritime transport sector - need for (more) harmonisation of the maritime reporting information/data with the inland waterway transport information/data?

  And what does the maritime sector think about one central organisation with regard to transport over water (i.e. sea and inland waterways)?
  - Is it advisable/desirable? And why (not)?
  - Is it possible? And why (not)?
  - What could the consequences (of such harmonisation) be for the maritime transport (sector)?
- Research question 5: Is there - according to the inland waterway transport sector - need for (more) harmonisation of the inland navigation reporting information/data with the maritime transport information/data?

  And what does the inland waterway sector think about one central organisation with regard to transport over water (i.e. sea and inland waterways)?
  - Is it advisable/desirable? And why (not)?
  - Is it possible? And why (not)?
    (Taking into account that the information defined in regulation nr. 164/2010 concerning electronic shipping reporting for inland waterway transport are quite similar with the information incorporated in the FAL forms)What could the consequences (of such harmonisation) be for the inland waterway transport?
- Research question 6: Which are the most adequate RIS (expert) groups to consult and/or involve with regard to the objectives/questions of Art. 15(a) of the RFD?

7.4 Analysis

7.4.1 Information gathering / analysis approach

The information gathered for the purpose of the analysis of the question referred to in Art. 15(a) of the RFD is collected on the basis of following sources and methods:

- The knowledge and experience of the members of the project team of the technical and legal aspects of RIS;
- Desktop research;
- Face to Face interviews with relevant key stakeholders from the maritime transport sector (who could benefit from more integration/harmonisation with inland waterway transport) and with relevant RIS authorities (who could benefit from more integration/harmonisation with the maritime transport sector);
- The kick-off workshop organised on the 7th of March 2013;
- The broader EU wide stakeholder consultation (cf. telephone interviews based on a specific questionnaire for the matters referred to in Art. 15(a) en (b) of the RFD);
- A discussion of Art. 15(a) and Art. 15(b) of the RFD with members of the RIS expert groups (NtS, ERI, VTT, Inland ECDIS), and especially with the ERI expert group (d.d. June 2013).

7.4.2 Analysis

7.4.2.1 The involved stakeholders/actors

The main stakeholders/actors in the maritime transport sector (cf. research question 1) are:

- The NSW Authorities
- The National Competent Authorities (NCAs) for SSN
- Local Competent Authorities (LCAs) like Port Authorities (harbours, sea ports)
- Port Community Systems (PCSs)
- Terminal operators
- Carriers
- (Liner) Agents
- Ship Brokers
- Intermodal operators (Rail, Truck, Feeder, River Barge)
- Border control
- Customs
- Water Police
- Authorities responsible of ship waste

The main stakeholders/actors in the inland waterway transport sector (cf. research question 2) are:

- Waterway Authorities (inland waterway infrastructure authorities)
- RIS organisations
- Ship owners
- Ship agents
- Terminal operators
- Forwarders
- Barge operators

Most of the main stakeholders/actors listed above could take advantage of a (further) integration of both information processes to increase the intermodal operation between the maritime and inland transport sector (cf. research question 3).

7.4.2.2 Analysis of RIS (and the RIS Directive) versus the RFD

The following paragraph provides background information on RIS (and the RIS Directive) and some significant remarks in relation to the RFD, important to interpret the analysis chapter and following conclusions and recommendations, especially research questions 4 and 5.

The EU RIS Directive is the framework for the implementation of RIS and includes some boundary conditions (cf. Art. 4 and Art. 5 of the RIS Directive).

The RIS Directive refers to intermodal transport with the maritime transport sector in Art. 1 ("Subject Matter"):

"Continuity shall be ensured with other modal traffic management services, ***in particular maritime vessel traffic management and information services***."

The RIS Directive and the RFD contain a lot of similar ideas regarding data harmonisation and data exchange by electronic transmission as shown below.

7.4.2.2.1 Status of RIS implementation

The status of the implementation of the 4 RIS Key Technologies and the different RIS Services are available on www.ris.eu and are published by the PLATINA project group in several PLATINA reports as well (see http://www.ris.eu/services/platina).

Most of the EU MSs:

- Have already implemented the RIS Key Technologies: Vessel Tracking and Tracing (i.e. Inland AIS) and Notice to Skippers (NtS);
- Are currently implementing Electronic Ship Reporting (i.e. ERINOT and ERIRSP) and Inland ECDIS (i.e. IENC charts);
- And have implemented following RIS services:
    - Fairway information services (FIS)
    - Traffic information services (TTI)
    - Traffic Management (TM) - Strategic Traffic Information (STI)

Moreover, for most of the MSs the next priority is to implement the Calamity Abatement Support (CAS).

The implementation of - and implemented - RIS Services in the EU MSs have been evaluated in the IRIS Europe II project. Within this project some recommendations were made to extend the RIS Services (see also http://www.ris.eu/projects/european-project-iris-europe-ii).

7.4.2.2.2 RIS Services versus RFD

The RIS Services can be visualised as a layered model. A comparison between the layered structure of the RIS Services (see Figure 6 below) on the one hand and the RFD, i.e. simplification and harmonisation of administrative procedures and reporting formalities and the items referred to in Art. 15 of the RFD on the other hand, shows that the scope of the RFD could match with the layers 5-ITL, 6-ILE and 7-ST of the RIS Service stack model:

- 5-ITL - Information for transport logistics/management - is related to:
    - Voyage planning
    - Traffic management
    - Transport management
    - Intermodal port and terminal management
    - Cargo and fleet management
- 6-ILE – Information for Law Enforcement - is related to:
    - Cross-border management (immigration service, customs)
    - Compliance with requirements for traffic safety
    - Compliance with environmental requirements
- 7-ST – Statistics – collecting of statistical information about for example:
    - Transport traffic
    - Cargo and fleet traffic
    - Transit of vessels and cargo at certain points (locks) of the waterway.

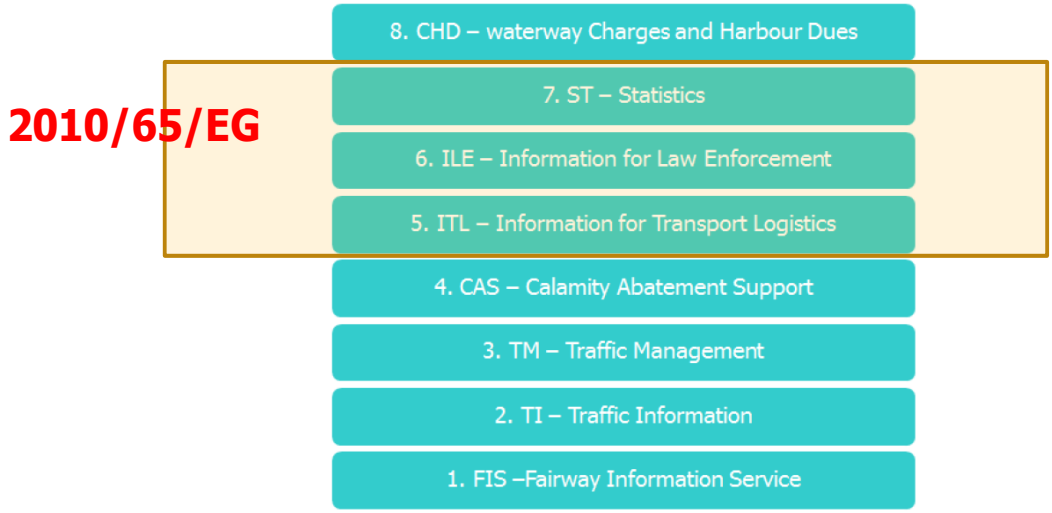

Figure 6: RIS stack model

7.4.2.2.3 Reporting formalities for Inland Waterway Transport (RIS)

Concerning ***reporting*** the Directive 2005/44/EC states in Art. 4 – 3(c):

"*…enable,* ***as far as ship reporting is required by national or international regulations****, the competent authorities to receive electronic ship reports of the required data from ships. In cross-border transport, this information shall be transmitted to the competent authorities of the neighbouring State and any such transmission shall be completed before arrival of the vessels at the border.*"

Concerning ***Electronic Ship Reporting***, the Directive 2005/44/EC states in Annex II – point 3:

"*The technical specifications for electronic ship reporting in inland navigation in accordance with Article 5 shall respect the following principles:*
(a) The facilitation of the electronic data exchange between the competent authorities of the Member States, between participants in inland as well as maritime navigation and in multi-modal transport where inland navigation is involved;

(b) The use of a standardised transport notification message for ship-to-authority, authority-to-ship and authority-to authority messaging in order to obtain compatibility with maritime navigation;

(c) The use of internationally accepted code lists and classifications, possibly complemented for additional inland navigation needs;

(d) The use of a unique European vessel identification number."

7.4.2.2.4 Reporting formalities for the Maritime Transport Sector (cf. RFD)

The Annex of the RFD contains a list of 14 reporting formalities that fall within the scope of the RFD, and which - if required in accordance with legislation applicable in a MS - are to be submitted through a NSW.

A. Reporting formalities resulting from legal acts of the Union

This category of reporting formalities includes the information which shall be provided in accordance with the following provisions:

1. Notification for ships arriving in and departing from ports of the Member States

Article 4 of Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system (OJ L 208, 5.8.2002, p. 10).

2. Border checks on persons

Article 7 of Regulation (EC) No 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code) (OJ L 105, 13.4.2006, p. 1).

3. Notification of dangerous or polluting goods carried on board

Article 13 of Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system.

4. Notification of waste and residues

Article 6 of Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues (OJ L 332, 28.12.2000, p. 81).

5. Notification of security information

Article 6 of Regulation (EC) No 725/2004 of the European Parliament and of the Council of 31 March 2004 on enhancing ship and port facility security (OJ L 129, 29.4.2004, p. 6).

Until the adoption of a harmonised form at international level, the form set out in the Appendix to this Annex shall be used for the transmission of information required under Article 6 of Regulation (EC) No 725/2004. The form can be transmitted electronically.

6. Entry summary declaration

Article 36a of Council Regulation (EEC) No 2913/92 of 12 October 1992 establishing the Community Customs Code (OJ L 302, 19.10.1992, p. 1) and Article 87 of Regulation (EC) No 450/2008 of the European Parliament and of the Council of 23 April 2008 laying down the Community Customs Code (Modernised Customs Code) (OJ L 145, 4.6.2008, p. 1).

B. FAL forms and formalities resulting from international legal instruments

This category of reporting formalities includes the information which shall be provided in accordance with the FAL Convention and other relevant 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. Any relevant national legislation

Member States may include in this category the information which shall be provided in accordance with their national legislation. Such information shall be transmitted by electronic means.

7.4.2.2.5 Information set defined by the RIS Directive

According to the RIS Directive the MSs have to (i) implement RIS according to the defined standards and (ii) provide following minimum set of services/information:

- Minimum dataset related to infrastructure and the operation of the locks, ports etc.;
- Inland Electronic Nautical Charts (IENCs) for fairway class Va and higher;

- Facilities for electronic reporting of vessels, their voyage and their cargo where reporting is regulated;
- Electronic publication of Notices to Skippers;
- Establish and operate RIS Centers - if required by the traffic situation.

The Electronic Reporting standard - Commission Regulation (EC) N° 164/2010 of 25.01.2010 concerning the technical specifications for electronic reporting contains a detailed information set for the messages that should be used for electronic ship reporting.

Another important information set for RIS is the RIS Reference Data like HULL data, RIS Index and ERDMS.

7.4.2.2.6 Information set defined by /reporting formalities referred to in the RFD

See above.

7.4.2.3 Analysis of the need for extending the simplification introduced by the RFD to cover inland waterway transport

Research questions 4 and 5 are focussing on the need for extending the simplification introduced by the RFD (cf. Art. 15(a)).

This issue has been approached from the point of view of the maritime transport sector and from the point of view of the inland waterways transport sector, which are two different and separate sectors with own specific needs and organisations and with an own point of view on the needs and how they should dealt with.

The main results of the analysis are the following:

- Currently there is no need to extend the simplification introduced by the RFD for land locked countries or areas with no connection to sea ports. Nevertheless, this issue is being followed up by the involved organisations because the RFD could have an impact on their organisation in the future (see Art. 15 of the RFD). E.g. when a cargo from a seagoing ship is loaded onto a river vessel to be transported to inland areas.
- But RIS becomes more important for the inland waterway customers (i.e. ship owners, barge operators, logistic chain partners...) who need the RIS Information to be unlocked and made available in a flexible way. The waterway authorities experience a growing need to foresee the following RIS:
    - Information for Transport Logistics (ITL);
    - Statistics (ST);
    - Waterway Charges and Harbour Dues (CHD).

  The need to exchange and integrate RIS Information between the different parties involved in the chain is growing and leads to the need for interfaces with e.g. the maritime transport sector in mixed mode environments (i.e. working areas where combination of sea going vessels and inland vessels like for example the Western Scheldt River or working areas where we have seagoing vessels arriving in and/or departing from ports of the MSs with the cargo that should be extended to areas inland of those ports particularly via inland river transport).
- Studies on e-commerce (logistic chain) for inland waterways show that the multi-modal transport between the maritime transport sector and the inland transport sector are very important in cases for which 'timing' is a very important issue. One continuous chain between the maritime transport and inland waterway transport is essential.

Currently a lot of trucks are being used for inland transport (instead of inland waterway transport) because of the limited and challenged exchange of information between the maritime transport sector and the inland waterway transport sector, but also due to the bigger administrative burden for inland waterway transport in comparison with trucks.

- There is also a need for extending the simplification introduced by the RFD for seagoing ships going via the rivers to inland ports/terminals.
- A specific type of vessels are the inland waterway vessels which are tuned (converted) to small sea vessels (estuary vessels) and are moving from seaport to seaport or from seaport to inland port via the coast and rivers. Some of these small sea vessels are equipped to reach inland waterway harbours, and should therefore comply with both different reporting formalities systems. Additionally the question arises whether some sort of 'translation/connection' system (between maritime and inland reporting formalities/data) exists, which could be used (for estuarine vessels) to comply with the RFD.

7.4.2.4 Analysis of the possibility of extending the simplification introduced by the RFD to cover inland waterway transport

Not only the need, but also the possibility of extending the simplification introduced by the RFD to cover inland waterway transport was analysed.

The list of reporting formalities are defined in Annex of the RFD (see above) and are referring to two aspects: 'information' and 'reporting'. There is an obligation to report and a report contains information. The information has to be collected via a NSW to reduce duplication of information and to provide the different stakeholders with their specific information.

Concerning the aspect 'reporting':

- The reporting formalities listed in the Annex of the RFD result from EU directives – e.g. the notification for ships arriving in and departing from ports of the MSs are defined by Art. 4 of Directive 2002/59/EC. In the maritime transport sector a set of reporting formalities is well defined in directives.

  This is not the case in the inland waterway transport sector (RIS): the only obligation on reporting for RIS is defined in Directive 2005/44/EC – Art. 4 – 3(c):

  *"…enable, **as far as ship reporting is required by national or international regulations**, the competent authorities to receive electronic ship reports of the required data from ships. In cross-border transport, this information shall be transmitted to the competent authorities of the neighbouring State and any such transmission shall be completed before arrival of the vessels at the border*."

  Reporting formalities for RIS are only mandatory if required by the national or international regulations. In that case, the content of the message/reporting formality is defined by the directive 164/2010 and the ship has to send its information to the waterway authority.
- In the maritime sector the RFD tries to bring some uniformity with regard to reporting formalities, whereas on inland waterways several different reporting obligations can be used for one purpose.

Concerning the aspect 'information':

- With regard to the type of information that is used and exchanged in the maritime transport sector and in the inland waterway sector (RIS), and how both information sets could be matched or harmonised:

  The basis of the information set for the maritime transport sector is listed in the Annex of the RFD (see above).

  The basis for the information set for RIS is listed in the Commission Regulation (EU) N° 164/2010 of 25.01.2010, on the technical specifications for electronic ship reporting in inland navigation referred to in Art. 5 of the RIS Directive.

  An overview of both information sets is shown below (Figure 7):

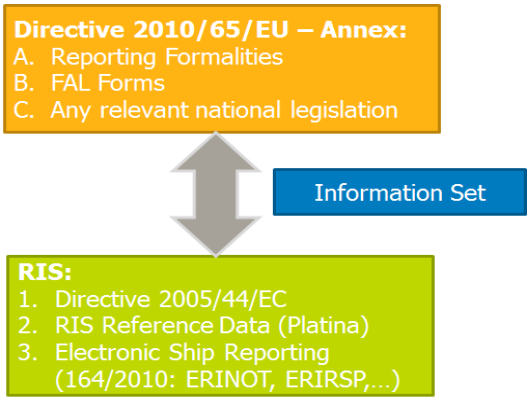

Figure 7: Comparison of the information sets

7.4.2.5 The most adequate RIS (expert) groups

There are 4 RIS Expert Groups:

- ***The Vessel Tracking and Tracing (VTT) Expert Group*** which focusses on the Tracking and Tracing standard - Commission Regulation (EC) N° 415/2007 of 22.03.2007 concerning the technical specifications for vessel tracking and tracing systems, i.e. especially Inland AIS;
- ***The Notice to Skippers (NtS) Expert Group*** which focusses on the Notice to Skippers standard - Commission Regulation (EC) N° 416/2007 of 22.03.2007 concerning the technical specifications for Notices to Skippers;
- ***The Electronic Reporting International (ERI) Expert Group*** which focusses on Electronic Reporting standard - Commission Regulation (EC) N° 164/2010 of 25.01.2010 concerning the technical specifications for electronic reporting;
- ***The Inland ECDIS Expert Group*** which focusses on Inland ECDIS - Commission Implementing Regulation (EC) N° 909/2013 on the technical specification for the Electronic Chart Display and Information System for inland navigation (Inland ECDIS) referred to in Directive 2005/44/EC.

The members of the expert groups work on a voluntary and unpaid basis.

The expert groups also work in Task Forces, i.e. subgroups that consist of a number of members of an expert group, which are investigating specific topics defined by the expert group.

The objective of the ERI expert group is to adapt the Electronic Reporting standard to technological developments and user requirements and to create an official platform that will draft and submit proposals for amendments of the technical specifications for electronic ship reporting of the Directive to the EC, the Central Rhine Commission and the Danube Commission. In accordance with the Directive 164/2010, the following principles will hereby be respected:

- Facilitation of the electronic data exchange between the competent authorities of the MSs, between participants in inland as well as in maritime navigation and in multimodal transport where inland navigation is involved;
- The use of a standardised transport notification message for ship-to-authority, authority-to-ship, and authority-to-authority messaging in order to obtain compatibility with maritime navigation;
- The use of internationally accepted maritime code lists and classifications, if possible extended to answer the needs of the inland waterway transport needs;
- The use of a unique European vessel identification number; ERI is authorised to initiate working agreements regarding the standardisation of reports to, from and between waterway managers and, were applicable, other authorities and to ensure the maintenance and use of harmonised reference tables and messages for this purpose.

Moreover, the ERI Expert Group will harmonise and coordinate developments regarding related exchange of information within other expert groups under RIS, such as Notices to Skippers, inland ECDIS, tracking & tracing. This coordination will encompass items such as codes and reference tables. As a result of Directive 2005/44/EC, the European RIS Committee was established in which all participating waterway authorities are represented.

As such the ERI Group operates directly under the European RIS committee and the RIS working group of the Central Rhine Commission.

7.5 Conclusions

7.5.1 Research questions 1, 2 and 3

Conclusions with regard to research questions 1, 2 and 3 are that:

- The maritime transport sector and inland transport sector (as well as their stakeholders/actors) are different and separate sectors/groups;
- The group of stakeholders/actors actively involved in both the maritime and the inland waterway transport sector is growing due to the requests of logistic partners for alignment and improvement of multimodal transport between seagoing vessels and inland barges.

7.5.2 Research Question 4 and 5

Conclusions with regard to research questions 4 and 5 are the following:

- In the maritime transport sector a well-defined set of reporting demands and information sets are described in several European directives.

  This is not the case in the inland waterway transport sector (RIS), where the only obligation on reporting for RIS is defined in Directive 2005/44/EC – article 4 – 3(c):

"*…enable,* ***as far as ship reporting is required by national or international regulations****…*".

- If electronic ship reporting is required for the inland waterway transport sector (RIS), the requirements referred to in Directive 164/2010 ought to be respected.
- The ERI Expert Group has defined the messages referred to in Directive 164/2010 on the basis of the messages used in the maritime transport sector. The most significant messages are ERINOT and ERIRSP.
- The messages referred to in Directive 164/2010 are a subset of the messages that are being used in the maritime transport sector, which means that not all messages referred to in the RFD are mentioned in Directive 164/2010. The ERI expert group is currently investigating how these messages could be harmonised (stepwise).
- The messages defined in Directive 164/2010 are similar to the ones used in the maritime transport sector - i.e. the meta data seem to be the same (e.g. the Ship number) - but the message content can have a complete different value and meaning: Seagoing ships have an IMO Ship number, whereas inland barges have an ENI Ship number The information sets (e.g. the code lists and classifications) are different. Harmonisation of the information sets used in the maritime and inland transport sector is therefore necessary.
- Simplification and harmonisation should also meet the user's (stakeholders'/actors') needs and reduce the administrative burden for these users.
- The existing demand/need for (more) harmonisation between the information/data sets used in the maritime transport sector and the ones used for inland waterway reporting formalities should be analysed together with - and faced with – the feasibility of actually harmonising both data/information sets (and the costs related thereto).
- Harmonisation should be realised at different levels, i.e. at the level of data, rules, signification of data (e.g. the term 'dangerous' (goods) does not have the same meaning in the inland waterway transport sector and in the maritime transport sector).
- Privacy should be treated with care since the information sets are composed of data sets coming from different organisations with different (commercial) interests, and therefor also responsibilities.

7.5.3 Research Question 6

The ERI Expert Group is the most important RIS Expert Group to consult and/or to involve with regard to the question referred to in Art. 15(a) of the RFD.

7.6 Recommendations

From a functional point of view it should be possible to extend the simplification introduced by the RFD to cover inland waterway transport. But a stepwise and well-structured action plan should therefore be set up. Apart from the technical component of the solution, the challenge will be to convince all concerned stakeholders to take part in - and become part of - the proposed action plan.

Stakeholders use different components of multimodal transport facilities. But the authorities limit these multimodal transport facilities, e.g. by limiting the load of trucks for environmental reasons. This will result in the need for a synergy between all the involved stakeholders/actors of the logistic chain to find a balance between economic needs on the one hand and environmental protection and the battle against climate change on the other hand.

The maritime and inland waterway transport sectors are still two different and separate sectors. The maritime transport sector is already strictly regulated by European and international rules and mandatory administrative procedures (including information sets and reporting obligations). The inland waterway transport sector on the other hand is less regulated (by some administrative procedures) and reporting formalities are only defined at MS level on the basis of a smaller information set.

The aforementioned action plan should contain at least the following actions and ideas:

- There is a need for a study concerning the harmonisation between the information set that is used in the maritime transport sector and the one used in the inland waterway transport sector (e.g. the code lists).
- It is necessary to determine whether the cost for the harmonisation of the information sets generates a positive *return on investment* (ROI) in a cost-benefit analysis.
- Reporting in the inland waterway transport sector should be mandatory and in line with the maritime transport sector, without reducing the competitiveness of inland waterway traffic (in comparison with for example truck traffic). The messages foreseen in Directive 164/2010 should be extended in order to make it possible to harmonise the messages in the maritime transport sector and inland waterways transport sector.
- There is a need to unlock the information between the different stakeholders/actors, (e.g. customs) and to solve the problems concerning the different privacy regulations applicable to the maritime transport sector and the inland waterway transport sector.
- An independent organisation for inland waterways supported and funded by the EU (e.g. within EMSA) should be established with a similar scope as what already exists for the maritime transport sector.
- The needs in the maritime transport sector and inland waterway transport sector cannot be mapped 'one-to-one'.

8. THE COMPATIBILITY OF THE RIVER INFORMATION SERVICES WITH THE ELECTRONIC DATA TRANSMISSION PROCESS REFERRED TO IN THE REPORTING FORMALITIES DIRECTIVE (ART. 15(B) RFD)

8.1 Context

The context for this issue is similar to the one for Art. 15(a) RFD (cf. before)

8.2 Issue clarification

Art. 1 of the RFD ("Subject matter and scope") - states:

"*The purpose of this Directive is to simplify and harmonise the administrative procedures applied to maritime transport by* ***making the electronic transmission of information standard*** *and by rationalising reporting formalities.*

This Directive shall apply to the reporting formalities applicable to maritime transport for ships arriving in and ships departing from ports situated in Member States.

This Directive shall not apply to ships exempted from reporting formalities."

In order to examine the compatibility of RIS with the electronic data transmission process referred to in the RFD, the compatibility between the electronic data transmission (Art. 5 of the RFD), and the electronic data transmission process used in RIS needs be analysed.

Art. 5 of the RFD defines "*electronic transmission of data*":

- MSs shall accept the fulfilment of ***reporting formalities*** in ***electronic format*** and their ***transmission via a single window*** (***SW***) as soon as possible and in any case no later than 1.06.2015.
- This ***SW***, linking SSN, e-Customs and other electronic systems, shall be the place where, in accordance with the RFD, all information is reported once and made available to various competent authorities and the MSs.
- Without prejudice to the relevant format set out in the FAL Convention, the format referred to in paragraph 1 shall comply with Art. 6.
- Where reporting formalities are required by legal acts of the Union and to the extent necessary for the good functioning of the SW established pursuant to paragraph 1, ***the electronic systems referred to in paragraph 1 must be interoperable, accessible and compatible with the SSN system established in accordance with Directive 2002/59/EC*** and, where applicable, with the computer systems stipulated in Decision N° 70/2008/EC.
- Without prejudice to specific provisions on customs and border control set out in Regulation (EEC) N° 2913/92 and Regulation (EC) N° 562/2006, MSs shall consult

economic operators and inform the EC of progress made using the methods stipulated in Decision N° 70/2008/EC.

8.3 Research questions

In order to analyse and answer the question mentioned in Art. 15(b) of the RFD, more detailed research questions need to be defined, analysed and answered:

- Research question 1: Is the NSW principle being applied within the maritime transport sector? If yes, how?
- Research question 2: Is the NSW principle being applied within RIS? If yes, how?
- Research question 3: How is information currently being exchanged in the maritime transport sector?
    - Is this a harmonised way of exchanging data within (a certain region within) Europe?
    - Is that on the basis of certain arrangements/protocol(s)?
- Research question 4: How is information currently being exchanged between the RIS authorities?
    - Is there a harmonised way of exchanging data within (a certain region within) Europe?
    - Is the existing (harmonised) data exchange based on certain arrangements or protocol(s)?
- Research question 5: Is there – according to the inland waterway transport sector – need for (more) information exchange/harmonisation between the maritime transport sector and vice versa?
- Research question 6: Could the use of SSN be a possible alternative (solution) for the exchange of RIS information?
- Research question 7: Which are the most adequate RIS expert groups to consult and/or involve with regard to the objectives/questions mentioned Art. 15(b) of RFD?

8.4 Analysis

8.4.1 Data transmission: the National Single Window principle

8.4.1.1 Research Question 1 – Data transmission in the maritime transport sector

With regard to data exchange in the maritime transport sector (SSN) a hierarchy in information transmission and data exchange is defined: SSN Local Competent Authorities (LCAs) are obliged to send their information to the NCA for SSN.

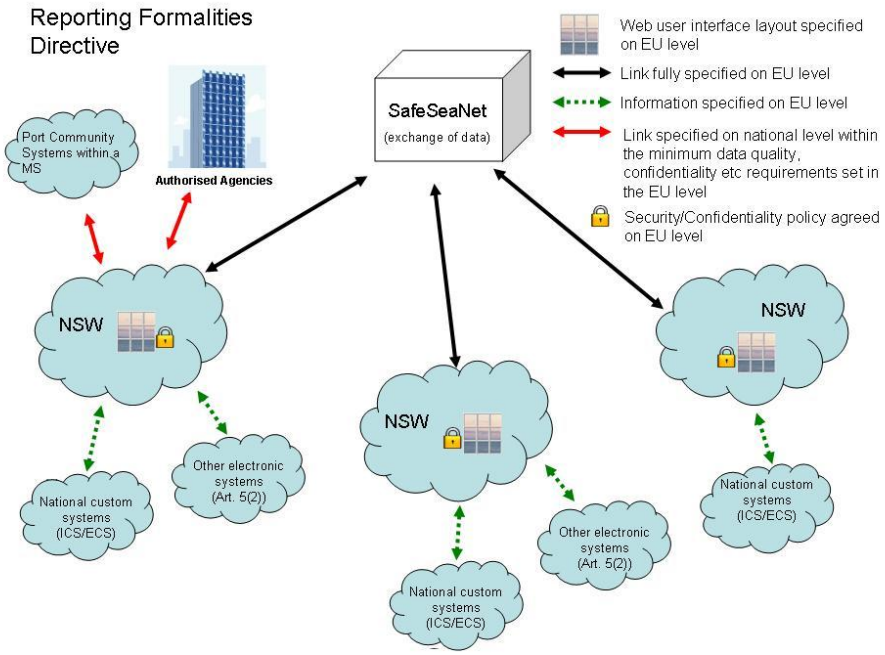

Figure 8: NSW Framework

The NCA is the single point responsible for - and with the authority to - exchange information with SSN. In this chain it is the Single Point of Contact (SPOC).

The NSW as well should be (will be) a logical SPOC to receive all required information, as defined in the annex of the RFD, once and to (re)distribute the relevant data to the different involved stakeholders/actors. The NCA for SSN logically is the primary – though, not the only possible – candidate for the NSW (Figure 8 above)[11].

The technical implementation of the NSW will in general be a distributed chain, i.e. a Distributed SW, due the fact that there are many stakeholders/actors involved in the information chain as shown for example in Figure 9 for Belgium.

[11] The NCA for SSN is not necessarily - but can be - the same authority as the one responsible for the management of the NSW (the NSW Authority'). Moreover, although MSs may develop a system to integrate both the SSN and NSW systems their functions are different - the NSW is the interface between the shipping industry and the MS authorities while the SSN system is the platform for the exchange of information between MSs.

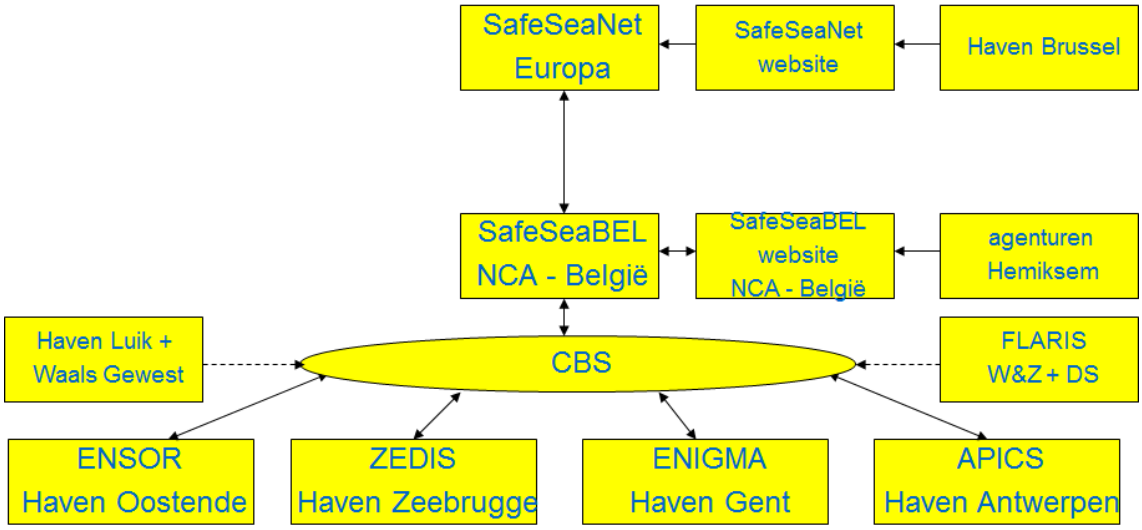

Figure 9: Organisation of the NCA & LCAs (SSN) in Belgium

An important issue is customs. In several MSs Customs administrations already have a closed network with their own "Customs SW". Customs information is very useful for a lot of the stakeholders and actors involved in the maritime transport sector.

According to the RFD cargo information has to be made available to the NSW either directly or through a link with the Customs systems. Moreover, in terms of Art. 6 of the RFD it may also be exchanged through the SSN systems if required by MSs - Discussions on this possibility are still on-going.

8.4.1.2 Research question 2 – The SW principle in the inland navigation transport sector

The implementation of RIS in the MSs is still work in progress. Most of the EU MSs have already implemented the 4 RIS Key Technologies, i.e.:

- VTT - Commission Regulation N° 415/2007;
- Notice to Skippers - Commission Regulation N° 416/2007;
- Electronic Ship Reporting - Commission Regulation N° 164/2010;
- Inland ECDIS – Commission Implementing Regulation N° 909/2013.

Most of MSs are using a Fairway Information Services (FIS) Portal, which contains fairway information – notice to skippers, the possibility to download IENC charts and in some cases Tactical or Strategic Traffic Information.

Sometimes FIS Portal is considered (or presented) as the SW for RIS, but this is actually a different concept from the SW concept defined in the RFD.

The principle of the SW as defined in the RFD is considered as a next phase for most of the RIS authorities/organisations. Some MSs are already working on a blueprint of the SW for RIS.

In the maritime transport sector concepts like NCAs and LCAs and NSW Authorities (which take part in a chain with a certain hierarchy) are being used. This is not the case in the inland waterways transport sector RIS - where in one country several different RIS authorities (organisations)- as defined in the Commission Regulation (EC) N° 414/2007 of 13.03.2007 - can be designated and operational, without any hierarchy between them. RIS authorities in several

different countries (e.g. in a cross-border situation) can exchange information if they wish and as far as ship reporting is required by national or international regulations.

8.4.2 Electronic data exchange

8.4.2.1 Research Question 3 – Electronic data exchange in the maritime transport sector

Electronic data transmission in the maritime transport sector is regulated by the RFD and supported by technology and methodology as defined in Directive 2002/59/EC d.d. 27.06.2002 establishing a Community vessel traffic monitoring and information system **(VTMIS)**.

The goals of the VTMIS Directive are:

- To establish a vessel traffic monitoring and information system in the Community with a view to enhancing the safety and efficiency of maritime traffic, improving the response of authorities to incidents, accidents or potentially dangerous situations at sea, including search and rescue operations, and contributing to a better prevention and detection of pollution by ships.
- To make all MSs monitoring and taking all necessary and appropriate measures to ensure that the masters, operators or agents of ships, as well as ship owners of dangerous or polluting goods carried on board such ships, comply with the requirements under the Directive.

The most important components of the **SafeSeaNet (SSN)** system are the following (see also Figure 10):

- **National Competent Authority (NCA)**, i.e. the body which assumes responsibility for a national SSN system and its management on behalf of a MS. It is responsible for the operation, verification and maintenance of the national SSN system, and for ensuring that the standards and procedures comply with the requirements described within the IFCD and with the agreed technical and operational documentation.
- **Local Competent Authority (LCA)**, i.e. the authorities or organisations designated by MSs to receive and transmit information pursuant to the SSN legal framework (e.g. port authorities, coastal stations, Vessel Traffic Services, shore-based installations responsible for a mandatory ship's routing system or a mandatory ship reporting system approved by the IMO and bodies responsible for coordinating search and rescue operations).
- **Central SSN system** – This comprises those SSN components (both technical and procedural) which act as the central/nodal point for the exchange of information between national SSN systems. Such components are the responsibility of the EC, in close cooperation with the MSs, and are administered by EMSA on their behalf.
- **National SSN system** – This comprises technical and procedural SSN elements which support the provision, retrieval and use of information required to implement the SSN legal framework within an MS. These elements are the responsibility of the relevant MS and can be administered either directly by the NCA, via the establishment of LCAs or by setting up other appropriate arrangements with third parties.
- **SSN system** – This comprises both the national and central SSN systems.

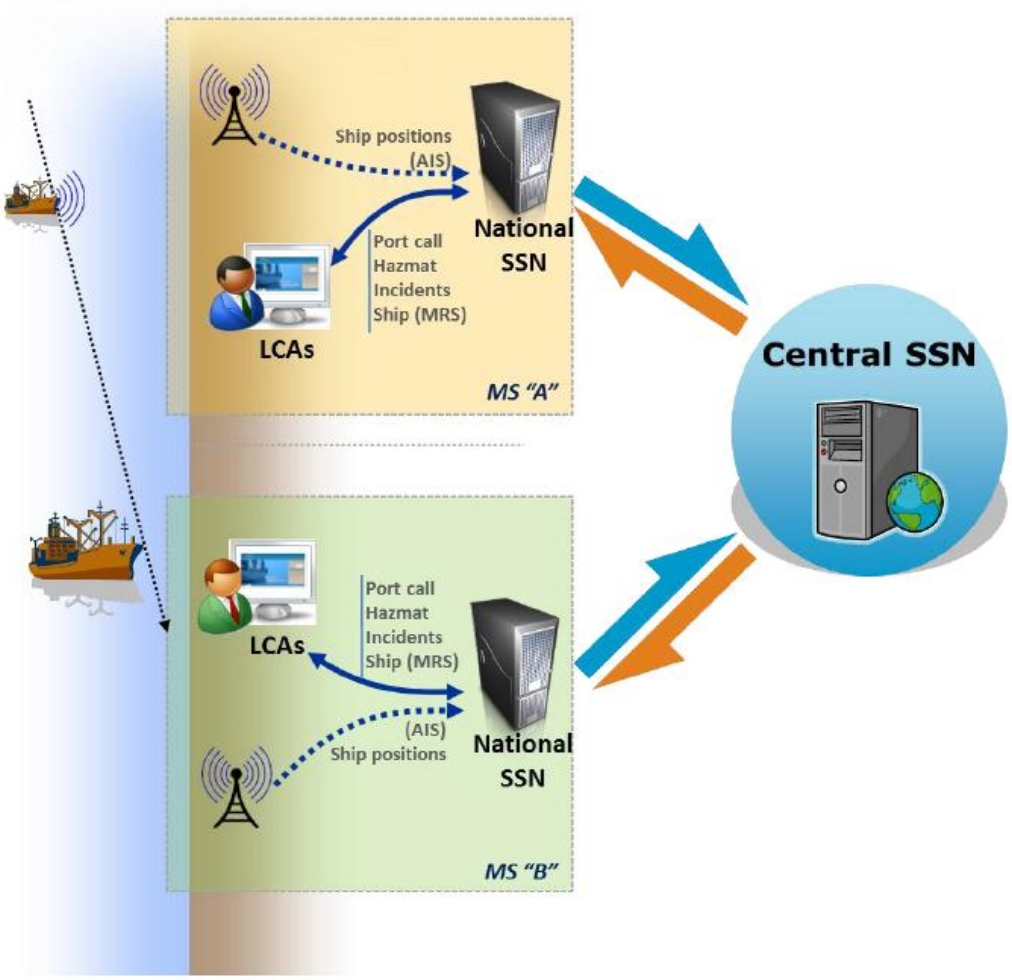

Figure 10: SafeSeaNet

The implementation for electronic data transmission in the maritime transport sector is well defined and regulated via EMSA and the SSN framework and SSN XML messages:

- Ship notification (request/response)
- Port notification (request/ response)
- Hazmat notification (request/response)
- Incident report notification (request/response)
- Security notification (request/response)
- Waste notification will also be added in view of the RFD requirements

8.4.2.2 Research Question 2 – Electronic data exchange in the inland navigation transport sector - RIS

The only reference to electronic data transmission or data exchange for RIS is made in the RIS Directive, in:

- Art. 4 (3.c):

  "... enable, as far as ship reporting is required by national or international regulations, the competent authorities to receive electronic ship reports of the required data from

ships. In cross-border transport, this information shall be transmitted to the competent authorities of the neighbouring State and any such transmission shall be completed before arrival of the vessels at the border; …"

- Annex II - 3. Electronic ship reporting – (a):

  "… the facilitation of the electronic data exchange between the competent authorities of the Member States, between participants in inland as well as maritime navigation and in multi-modal transport where inland navigation is involved."

The key organisations for inland waterways transport are the waterway authorities (who own the waterways) and their RIS organisation(s) (responsible for RIS) with sub RIS organisations e.g. the harbours.

Each waterway authority aims at having only one RIS organisation. In that sense the RIS organisations (for the inland waterways transport sector) are more or less similar to an NCA or NSW Authority (for the maritime sector).

But, unlike the maritime transport sector, the inland waterway transport sector/RIS:

- has no central organisation like EMSA;
- does not have a framework as SSN (as defined in Directive 2002/59/EU);
- is not regulated by a convention as the IMO FAL Convention;
- does not have regulations regarding the information that should be electronically transmitted - with the exception of the above mentioned Art. 4 (3.c) and annex II 3(a) of Directive 2005/44 on electronic ship reporting.

Within the scope of the IRIS Europe I project a first effort was made to define a data exchange scheme based on XML messages which are exchanged between RIS organisations. These messages and their content (exchanged between RIS organisations) are defined in a user matrix, see Figure 11 below. The information is distributed over/to different RIS organisations and not stored in a central point.

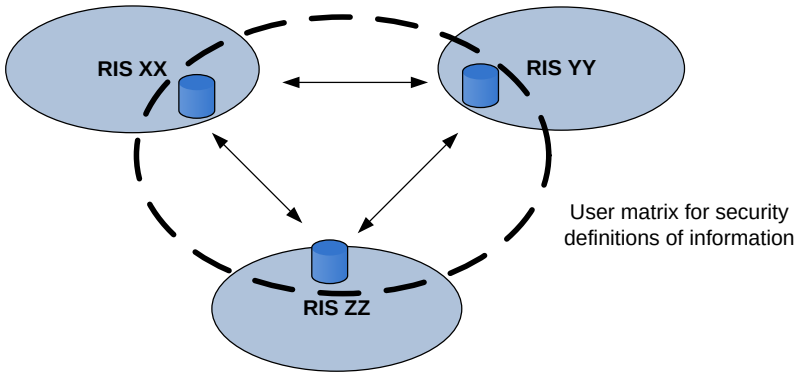

Figure 11: Principle of Information Exchange between RIS organisations

Figure 12 below is an example of the information transmission between the different RIS organisations involved in the sailing direction of a ship.

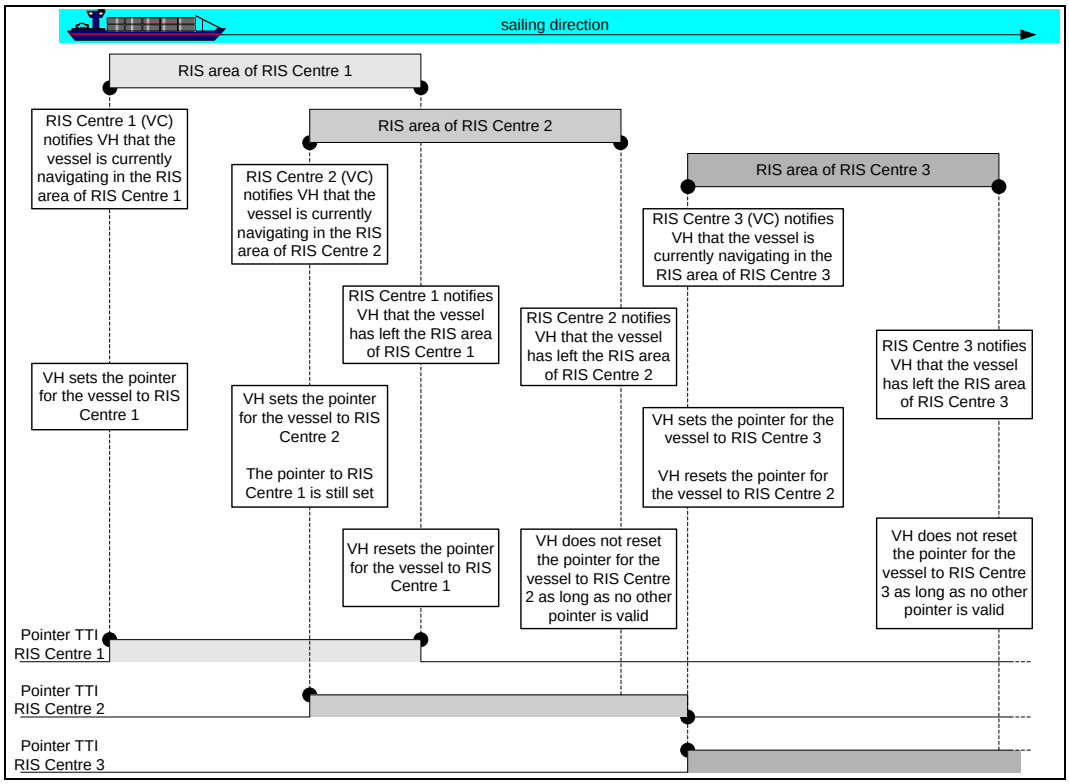

Figure 12: Information transmission between RIS organisations

A second possible solution for data exchange (see Figure 13), which is closer to the point of view of the SSN framework, is based on a number of central server systems for:

- the European RIS Reference Data Management Service (ERMDS) server, which contains the reference data concerning RIS;
- EPIS, the central position server who keeps the overview of a Strategic Traffic Information (STI) of the location of the inland waterways barges;
- The exchange of ERINOT messages;
- The Notice to Skipper messages.

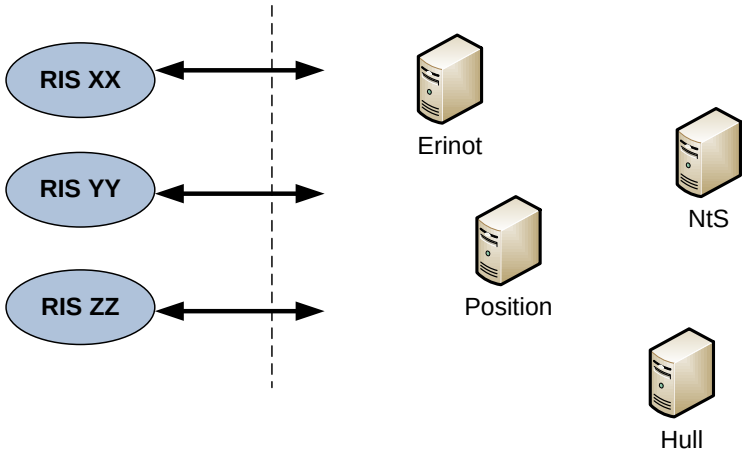

Figure 13: Data Exchange on the basis of centralised servers

Currently only the ERDMS (Figure 14) is developed within the scope of the PLATINA project and is accessible by means of a Graphical User Interface (GUI). After users login 'mutations' (i.e. new records or modification) can be specified and requested manually, and information (adata) can be retrieved.

Accessing the data and specifying mutations is also possible via external systems and software, using the Web services (API) functions as described in the document of the RIS Data Management Service (see www.ris.eu). The ERDMS is a SPOC for different types of Reference Data.

The codes maintained by the RIS Data Management Service (ERDMS), at this moment, are related to:

- The RIS Index, describing several RIS objects on waterways (such as junctions, locks, bridges, berths, gauges etc.);
- ADN codes, as specified in Directive 2008/68/EC;
- Harmonised System (HS) codes from the Customs organisation (non-dangerous goods);
- ERI Locations (also known as SRS codes) as used in ERI, electronic reporting using the ERINOT 1.2 message; At the moment these codes have an overlap with the RIS Index, but this ERI location set also includes all the international locations outside of Europe;
- Container Types to identify the type of container (ISO 6364);
- Country codes: the several country codes for all the countries (ISO 3166);
- Inner Package type (these are codes for the type of cargo package and package materials) (UN Rec 21);
- Ship type: to describe the type of transport (UN Rec 28);
- Notices to Skippers codes.

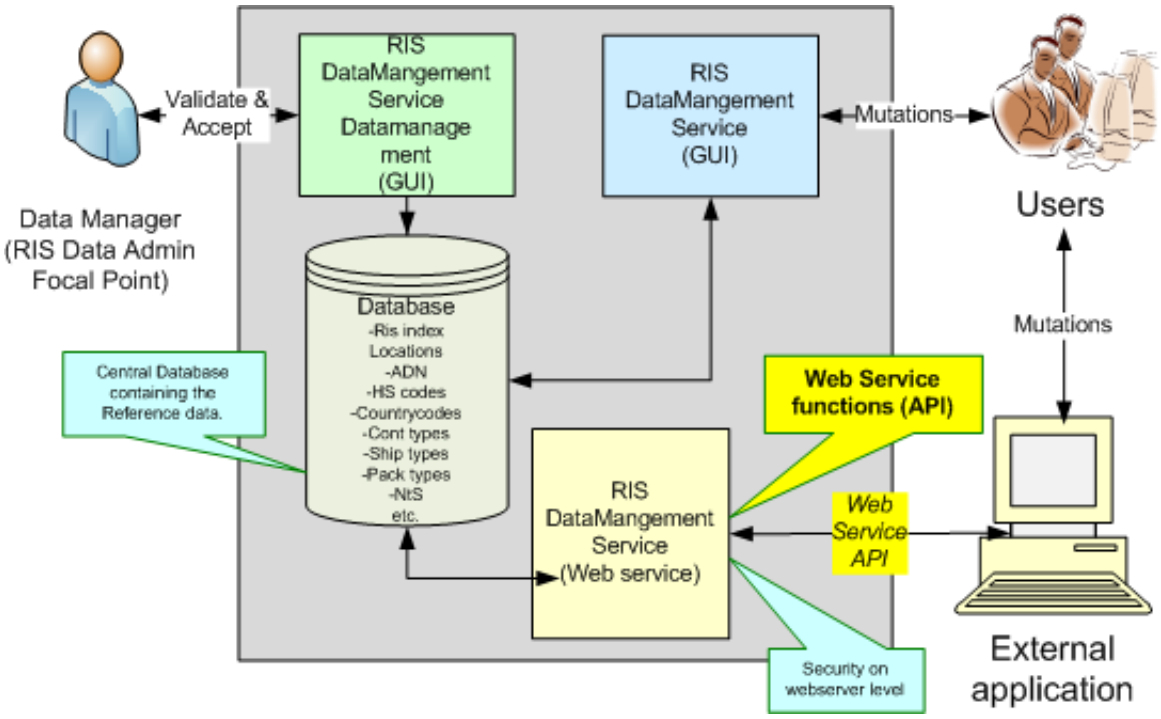

Figure 14: European RIS Reference Data Management Service (ERDMS)

Due to the fact that inland waterway traffic already existed long time before the EU Directives and Technical Guidelines were issued, several MSs already implemented ICT infrastructures for their inland waterways with dedicated point-to-point data exchange channels with their cross border neighbours. Therefore it was too expensive for a number of MSs to adjust their ICT infrastructures to comply with the above described method of data exchange.

Another important reason for not following the data exchange on the basis of the principles defined in the IRIS Europe I Project is that the aforementioned methodology of the IRIS Europe I Project is a result of a project and not of a Directive. Consequently there is no obligation to implement it.

The integration between the point-to-point data exchange and the central point for information storage is shown in the example below (Figure 15) for the corridor Rine-Scheldt-Seine. This point-to-point data exchange is not based on the above mentioned results of IRIS Europe I project but on bilateral agreements.

Currently there are 2 types of methods in RIS to exchange information between RIS authorities, i.e.:

- The Rhine-Scheldt-Seine corridor
- The Danube corridor.

In the future, the information exchange between both corridors is foreseen via an Enterprise Service Bus (ESB), as shown in Figure 16, via the RIS/IRIS-Europe layer. This concept still has to be approved by the different MSs.

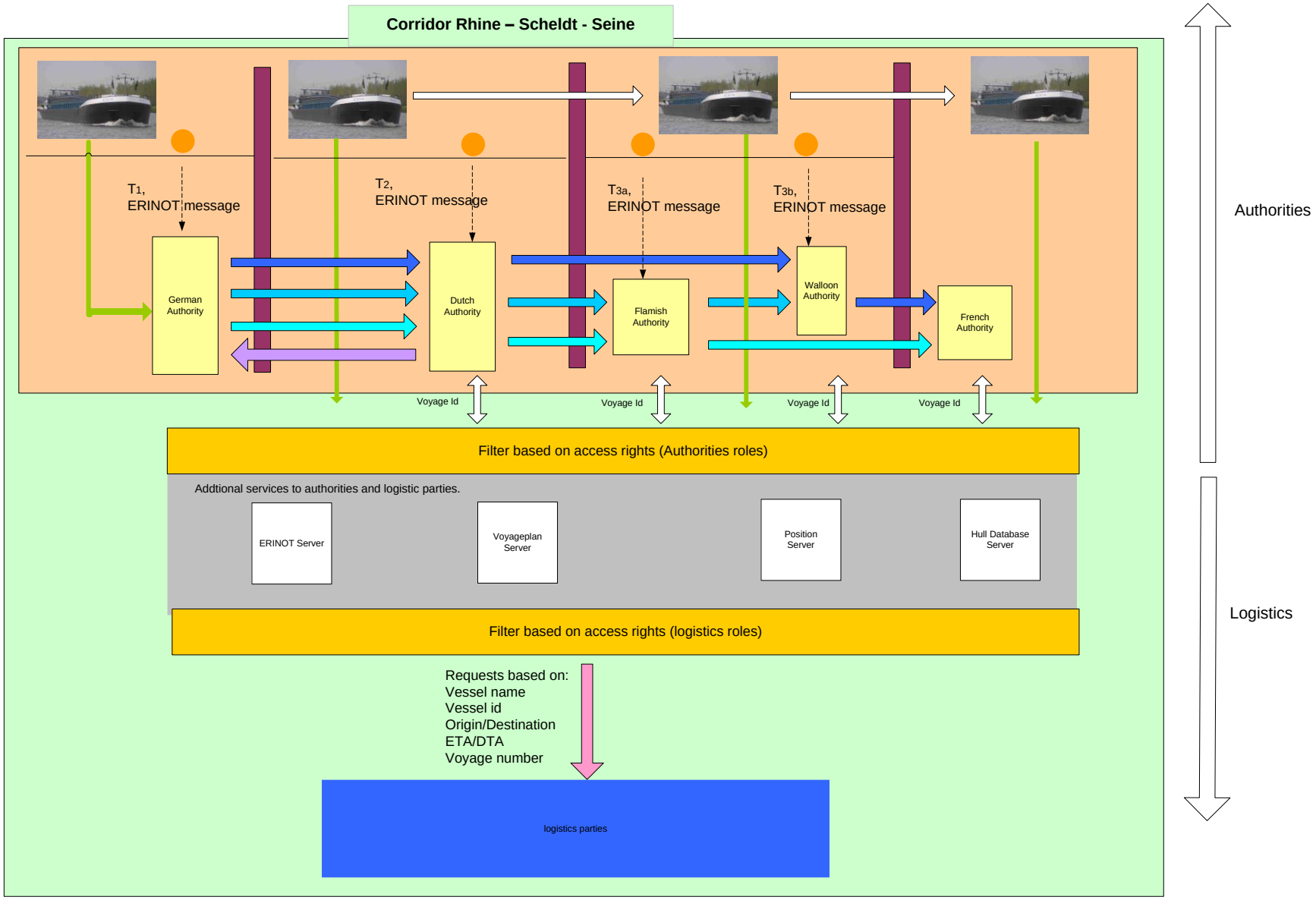

Figure 15: Example of Data Exchange in a Corridor

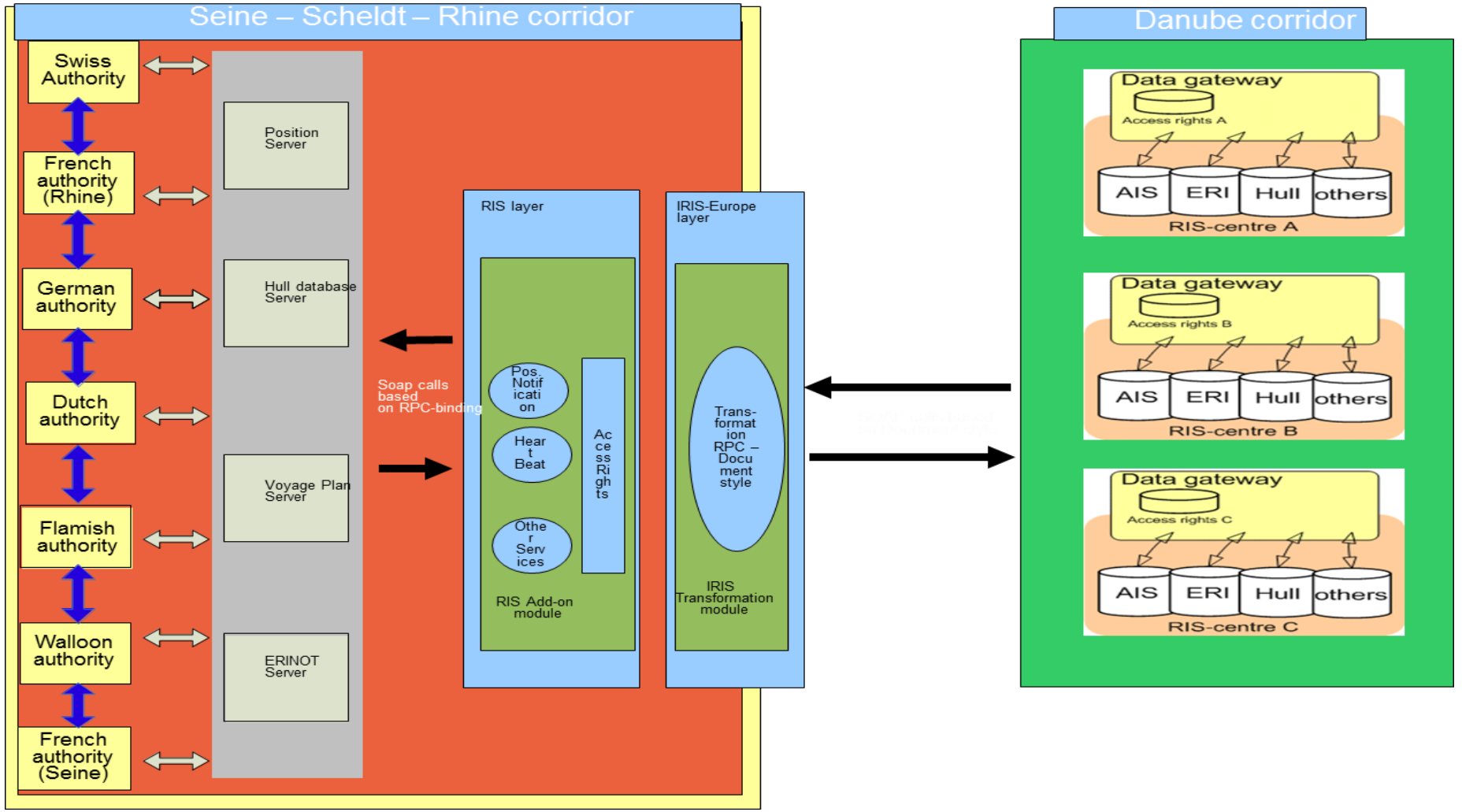

Figure 16: Data Exchange E-W versus N-S

8.4.3 Research question 5: Information exchange/harmonisation between the maritime transport sector and inland waterway transport sector, and vice versa

As described above, there is a growing need for interfaces between multimodal transport modes, especially between the maritime transport sector and inland transport sector.

Information exchange and harmonisation for the maritime transport sector is regulated win the RFD and supported by technology and methodology as defined in the Directive 2002/59/EC.

8.4.4 Research question 6 – The SSN as alternative for data exchange in RIS?

The table below shows an overview and possible comparison between SSN and the RFD (maritime transport) on the one hand and the RIS Directive (inland navigation transport sector) on the other hand in relation to data exchange and possible systems.

Maritime navigation: SSN (Directive 20002/59/EC)) Directive 2010/65/EU	**Inland navigation:** RIS Directive / RIS Technical Specifications
Each MS exchanges information concerning seagoing vessels and their voyages to SSN via their NCA. The NCAs are interconnected via SSN and can exchange information with each other.	Only the RIS Directive refers to the necessity of exchange information in a harmonised way. Besides this, there are no EU directives/regulations that impose information exchange about RIS between MSs. Most of the information is being exchanged on the basis of (bilateral) cross-border initiatives, e.g. the Central Broker System (*CBS*) of the *Schelderadarketen*. A number of (mostly 'project-based') initiatives are supported by the EU, though, e.g. the ERDMS system for the collection and distribution of reference data concerning RIS and the EPIS server for the collection and distribution of STI.
EMSA is a permanent European organisation which supports the information exchange in the framework of SSN.	There is no such (similar) permanent European organisation to (technically) support information exchange between RIS authorities.
The RFD requires each MS to create one Maritime SW) for the fulfilment of reporting formalities in electronic format and their transmission via one single window in order to reduce the administrative burden for shipping companies.	There is no EU Directive or Commission regulation for RIS that defines a (i) standardised way of data exchange between RIS organisations, nor the principle of a mandatory SW.

	The need for a standardised way of data exchange of RIS information and for a SWfor data transmission for inland waterway transport is recognised, though. Several waterway authorities are investigating this issue and some even have the intention, to implement a 'RIS SW pilot'.

8.4.5 Research question 7 – RIS Expert Groups

Research question 7 concerns the most adequate RIS Expert Groups to consult and/or involve with regard to the objectives/questions of Art. 15 (b) of the RFD:

4 RIS Expert Groups are operational:

- ***The Vessel Tracking and Tracing (VTT) Expert Group*** which focus on the Tracking and Tracing standard - Commission Regulation (EC) N° 415/2007 of 22.03.2007 concerning the technical specifications for vessel tracking and tracing systems, i.e. especially Inland AIS;
- ***The Notice to Skippers (NtS) Expert Group*** which focus on Notice to Skippers standard - Commission Regulation (EC) N° 416/2007 of 22.03.2007 concerning the technical specifications for Notices to Skippers;
- ***The Electronic Reporting International (ERI) Expert Group*** which focus on Electronic Reporting standard - Commission Regulation (EC) N° 164/2010 of 25.01.2010 concerning the technical specifications for electronic reporting;
- ***The Inland ECDIS Expert Group*** which focuses on Inland ECDIS - Commission Implementing Regulation (EC) N° 909/2013 on the technical specification for the Electronic Chart Display and Information System for inland navigation (Inland ECDIS) referred to in the RIS Directive.

The members of the expert groups work on a voluntary basis.

The expert groups also work with Task Forces, i.e. subgroups with a number of members of the expert groups, which are investigating special topics defined by the expert group.

The ERI Expert Group is the most important RIS Expert Group to consult and/or to involve with regard to the objectives/questions of Art. 15 (b) of the RFD (see before).

A lot of work on RIS data exchange was done within the scope of the IRIS Europe I project - see also http://www.iris-europe.net.

8.5 Conclusions

8.5.1 Research questions 1 & 2 – The NSW principle

Conclusions with regard to research questions 1 and 2 are the following:

The need for a NSW is recognised and expressed by the maritime transport sector and inland waterway transport sector. The conclusion is:

- The MSs that are only involved with the inland waterways transport sector, for example land locked countries, are in the stage of the design phase for a SW. The usefulness for a SW is recognised and is a next step in the implementation of RIS.

- The MSs that are involved in both the maritime transport sector and inland waterways transport sector currently prioritise the implementation of a NSW for the maritime transport sector due the requirements of the RFD. Implementation of a NSW for the inland waterways and/or integration with the SW for the maritime transport sector will be dealt with in a next phase.
- The realisation for a SW in the maritime transport sector is more obvious due the existence of several existing EU directives and initiatives which resulted in NSWs and NSW Authorities, NCAs, LCAs, SSN, etc. and supporting organisations like EMSA. This is less obvious in RIS due to the lack of similar EU directives.

8.5.2 Research questions 3 & 4 - Electronic data exchange

Conclusions with regard to research questions 3 and 4 are the following:

- The maritime transport sector has been using harmonisation, regulations and rules for a long time, and has already developed organisations like EMSA with a data exchange network like SSN (the European Platform for Maritime Data Exchange – cf. Directive 2002/59/EU). Similar ideas or initiatives with regard to inland waterways are still being discussed by Sub Task Forces of the RIS expert groups, e.g. the ERI expert group, and within EU projects like the IRIS Europe III project.
- In the maritime sector there is a well-defined system for data exchange, i.e. the SSN system.
- In RIS only the RIS Directive refers to electronic data transmission, in:
    - Art. 4 (3.c):

      "… enable, as far as ship reporting is required by national or international regulations, the competent authorities to receive electronic ship reports of the required data from ships. In cross-border transport, ***this information shall be transmitted to the competent authorities of the neighbouring State*** *and any such transmission shall be completed before arrival of the vessels at the border;"*
    - Annex II - 3. Electronic ship reporting – (a):

      "… the facilitation of the ***electronic data exchange*** *between the competent authorities of the Member States, between participants in inland* ***as well as maritime navigation and in multi-modal transport*** *where inland navigation is involved."*
- Most of the data which are currently being exchanged between RIS organisations, i.e. cross-border data exchange, is based on a point-to-point communication based on bilateral agreements.
- There is no EU directive for RIS on how electronic data transmission should be organised and implemented. This is a major obstacle for making a unified method of electronic data transmission between the RIS partners, and certainly for data exchange with other transport modes e.g. the maritime transport sector.

8.5.3 Research question 5: Information exchange/harmonisation between the maritime transport sector and inland waterway transport sector, and vice versa

Conclusions with regard to research question 5 are the following:

- There is a need for information exchange/harmonisation between the maritime transport sector and the inland waterway transport sector and vice versa.

- The logistic chain partners, as already mentioned before, will not wait to exchange information until information exchange and harmonisation between the maritime and inland transport sector is realised: They build their own systems in the meantime - e.g. PCSs - and try to feed their systems with information from different data sources.
- Currently, EU directives to streamline information exchange in RIS - and especially with other transport modes (cf. Art. 15 (b) of the RFD) are non-existing.

8.5.4 Research question 6 – SSN as a possible solutions for data exchange in RIS?

The philosophy, principals and methodology used for SSN (cf. Directive 2002/59/EU) is a solution that also could be used for data exchange in RIS. There are some differences, though:

The SNN uses the principle of a central index system. This means that the information of Party A is available for Party B via a pointer to the information, and not by transferring the information from Party A to B. In RIS the actual data of Party A is send to Party B, and Party B can to store this information in its own system. This is the typical situation in cross-border data-exchange. Mostly, when Party B sends the information to Party C, Party B will enrich the information. The principle of storing the information for a longer period or on a permanent basis is required for example to produce statistics or in the case of Calamity Abatement Support (CAS) RIS service. This also implicates a different interpretation and handling of the information with regard to the privacy regulations between the maritime sector versus the inland waterway sector. Privacy issues for the maritime transport sector are dealt with in Directive 2002/59/EU. Whereas concerning RIS information can be transferred from party A to B. Party B can transfer the information to party C. Party A trusts party B, but wants to know the possible parties C to be sure that the trust relation between Party A and Party B is also being respected in the relation between Party A and Party C.

8.5.5 Research question 7 – RIS Expert Groups

The ERI Expert Group is the most relevant and important group to consult and/or to involve with regard to the objectives/questions of Art. 15(a) of the RFD. On http://www.iris-europe.net the research concerning RIS data exchange within the IRIS Europe I project can be consulted.

8.6 Recommendations

As mentioned before both Art. 15(a) and Art. 15(b) of the RFD are related to RIS, but both research topics should be approached in a different way: The possibility of extending the simplification introduced by the RFD (Art. 15(a)) is approached from a functional point of view, whereas the compatibility of RIS with the electronic data transmission process referred to in the RFD (Art. 15(b)) is investigated from a more technical point of view. This also means that the recommendations for Art. 15(a) (see above) should also be taking into account when reading the recommendations regarding Art. 15(b). The question on what is needed (see Art. 15(a)) should be solved first, before dealing with the question how it should/will realised/implemented, (see Art. 15(b)).

The recommendations with regard to Art. 15(b) are the following:

- If (i) it is possible to harmonise the information set used in the maritime transport sector and the inland waterway transport sector and (ii) there are more strict rules for reporting formalities in the inland waterway transport sector, then it is still required to define how the electronic data transmission will be organised. This requires a new Directive that defines/regulates data exchange in the inland waterways transport sector.

- The World Customs Organisation (WCO) data model[12] should be used as a reference framework for the harmonisation of information sets and data exchange between the maritime transport sector and inland waterway transport sector.

12 "*The WCO Data Model is a set of carefully combined data requirements that are mutually supportive and which will be updated on a regular basis to meet the procedural and legal needs of cross-border regulatory agencies such as Customs, controlling export, import and transit transactions. It is consistent with other international standards such as the United Nations Trade Data Elements Directory (UNTDED).*

WCO Data Model not only includes data sets for different customs procedures but also information needed by other Cross-border Regulatory Agencies for the cross-border release and clearance at the border. The WCO Data Model supports the implementation of a Single Window as it allows the reporting of information to all government agency through the unique way it organizes regulatory information. This instrument is already 10 years old and is seeing increased use by WCO members."

http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/pf_tools_datamodel.aspx

9. THE PROGRESS TOWARDS HARMONISATION AND COORDINATION OF REPORTING FORMALITIES THAT HAS BEEN ACHIEVED UNDER ARTICLE 3 OF THE REPORTING FORMALITIES DIRECTIVE (ART. 15(C) RFD)

9.1 Context

The existing situation regarding reporting formalities for ships - administered by the Master or Ship's Agent - has arisen from a combination of Port State Control (PSC) inspections, IMO FAL forms, the International Ship and Port Security (ISPS) code, the VTMIS Directive (SSN Notifications) and customs (import/export) declarations. Although the content of the forms is standardised, there are several issues that still need to be addressed:

- The interpretation of timing rules - i.e. the requirements for the information which needs to be submitted at 72, 24 and 2 hours before arrival may differ from MS to MS (in practice, combinations of forms are often used);
- There may be additional national or local port specific requirements that should be communicated efficiently and accurately to the reporting party;
- In many countries, ship formalities are still discharged manually and on paper; In other cases, information is submitted electronically through various channels;
- Authorities responsible for processing various forms and the associated 'clearances' differ from country to country and therefore the necessary flexibility must be built into interoperable solutions.[13]

[13] *E-Freight 'Next Generation Single Window' for Trade and Transport'* - Paper for the e-Freight 11 Conference, T. Cane (BMT) & T. Katsoulakos (INLECOM), 18.04.2010

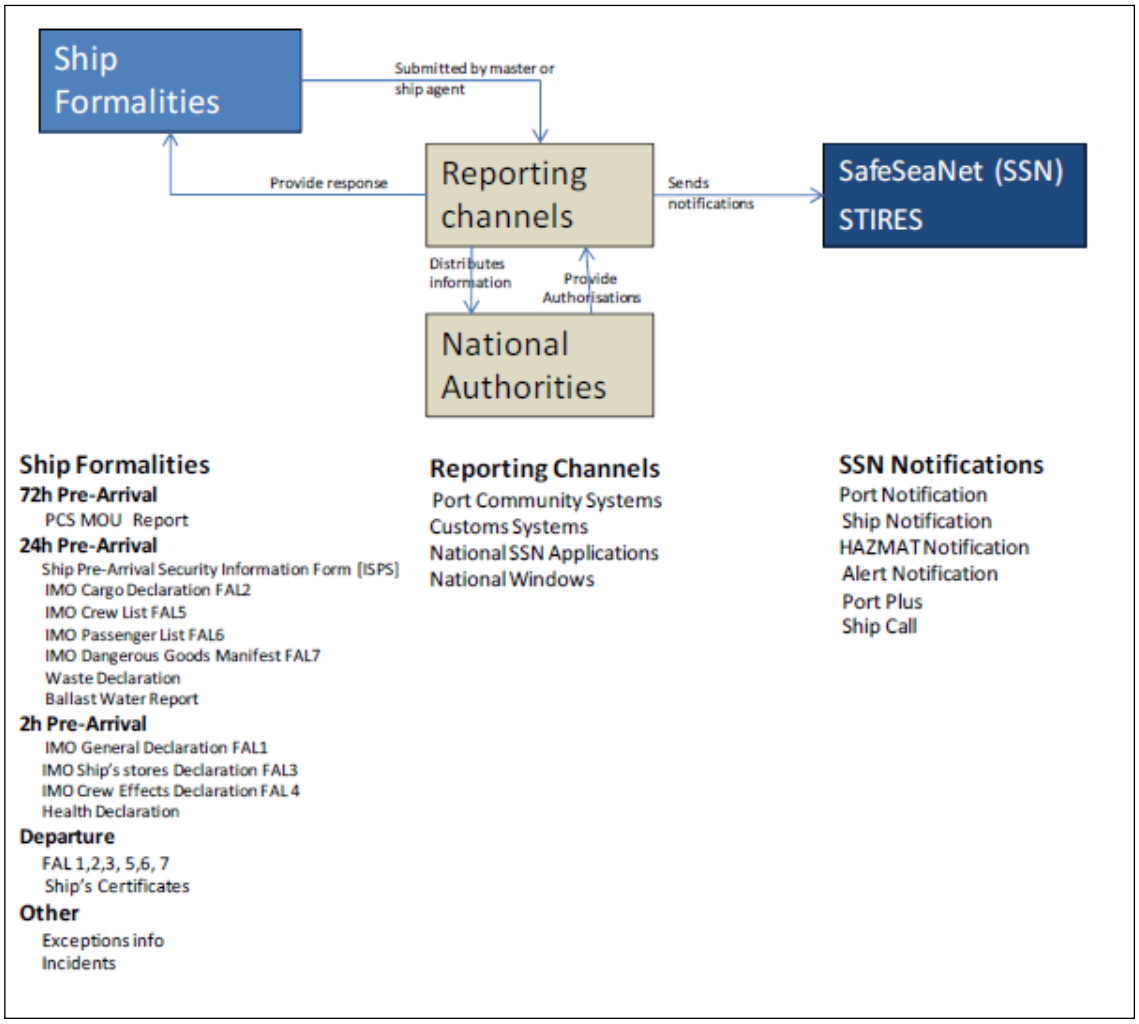

Figure 17: Single Window / Overview of ship formalities and corresponding information flows (Source: The e-Freight 'Next generation Single Window' for Trade and Transport – Paper for the e-Freight 11 Conference)

In the maritime transport sector, in parallel to the trade related use of SWs, the concept of a SW has been used for some time now. Initially, Port Single Windows (PSWs) were implemented to facilitate PSC reporting and to provide a national maritime traffic database. More recently, NSW implementations provide a single national interface for mandatory reporting by ships in European waters (cf. RFD).

Development pathways of NSWs for maritime transport differs from country to country but invariably were linked to PSWs which in turn are increasingly linked with PCSs. The RFD, which requires all MSs to provide NSWs for maritime transport, has created a new impetus to developments in this area, a key dimension of which is cooperation at both EU and international level.[14]

PSWs and PCSs have been developed in many countries since the beginning of the 1990s. Common features included:

[14] *Thematic report. Vessel Traffic Monitoring Information Systems*, MARSUNO pilot project 2011

- Combining electronic import/export clearances (customs) and port clearances; use of EDI, UN/EDIFACT and UN LOCODE standards;
- For import procedures, the key benefit is reduction in cargo release time and paperwork cost, as well as improved accuracy of information;
- For port related procedures, messages are sent once resulting in reduced communication and personnel cost and improved data quality;
- The key success factor is cooperation between the parties that are responsible for cargo logistics and customs and for transportation safety, security, and environmental issues. [15]

The maritime SW concept is the main requirement for the implementation of the RFD. It aims to meet the generic goals of simplification and harmonisation of the administrative procedures applied to maritime transport, by making the electronic transmission of information standard and by rationalising reporting formalities.

According to the latest version of the *SW and data flow definition* document agreed at the 5th eMS group meeting, "*the SW consists of the user web interface and interfaces requirements, harmonised on the EU level in regard to a common set of services and specific layout, semantics, for submitting the information"*; in addition, "*...the business activity flows used by the Shipping industry for submitting notifications, updating data in the notifications and receiving feedback by the Authorities concerned via the NSWs should be harmonised at EU level*." [16]

The (draft) *National SW Guidelines* document drafted at the 9th eMS group meeting provides the definition of the minimum required functionalities that the NSW shall support. It may also provide the definition of optional functionalities that may be implemented by MSs depending on their national legislative provisions. Minimum requirements are qualified as mandatory in the document and the others are optional.[17]

9.2 Issue clarification

Art. 15(c) of the RFD aims at measuring the progress towards harmonisation and coordination of reporting formalities that has been achieved under Art. 3 of the directive.

Since the SW concept is the main requirement for the implementation of the RFD, this will be an essential element to measure the progress made in each MS towards harmonisation and coordination of reporting formalities.

The RFD was supposed to be transposed into national law by the 19th of May 2012. Neither the transposition status of the RFD in the MSs, nor the evaluation whether or not the transposition measures taken are either comprehensive or in conformity, fall within the scope of this study.

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[15] *E-Freight 'Next Generation SW' for Trade and Transport'* - Paper for the e-Freight 11 Conference, T. Cane (BMT) & T. Katsoulakos (INLECOM), 18.04.2010

[16] *Meeting document: SW and data flow definition* – Submitted by MOVE D.1 and EMSA (5th eMS group meeting, 12.07.2012)

[17] *National SW Guidelines*, revised draft - Version 0.4 Draft (3.06.2013)

9.2.1 Art. 3.1 - Measures taken by the MSs to ensure a harmonised and coordinated request for reporting formalities within each MS

Art. 3.1 of the RFD states that "*each MS shall take measures to ensure that the reporting formalities are requested in a harmonised and coordinated manner within that MS*".

Reporting formalities supported by the National Single Window

According to Art. 1(2) of the RFD the Directive applies to the reporting formalities applicable to maritime transport for ships arriving in, and ships departing from, ports situated in MSs. By the definition in Art. 2(a) of the RFD, *reporting formalities* are the information set out in the Annex which, in accordance with the legislation applicable in a MS, must be provided for administrative and procedural purposes when a ship arrives in, or departs from, a port in that MS. According to the Annex of the RFD, the reporting formalities are the information required by three different categories:

A. Reporting formalities resulting from the legal acts of the Union:

- Notification for ships arriving in, and departing from, ports of the MS (Art. 4 Directive 2002/59/EC)
- Border checks on persons (Art. 7 Regulation (EC) N° 562/2006)
- Notification of dangerous or polluting goods carried on board (Art. 13 Directive 2002/59/EC)
- Notification of waste and residues (Art. 6 of Directive 2000/59/EC)
- Notification of security information (Art. 6 Regulation (EC) N° 725/2004)
- Entry summery declaration (Art. 36a Council Regulation (EEC) N° 2913/92 and Art. 87 Regulation (EC) N° 725/2004

B. *FAL forms and formalities resulting from international agreements (such as International Maritime Organisation - IMO or International Health Regulation (IHR))*:

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

C. *Information to be provided in accordance with the relevant national legislation of the MSs transmitted by electronic means*.

Therefore, the common data sets will have to be aligned according to the RFD.

Among reporting formalities resulting from the RFD (Annex - Part A) the information from the notifications resulting from Directive 2002/59/EC is already exchanged through SSN. There is a need to ensure that the reporting formalities are requested in a harmonised and coordinated manner avoiding duplication of the information requested related to the ship arrival or departure. Therefore, the information required in FAL form 1 (*General Declaration*) and FAL form 7 (*Dangerous Goods*) needs to be harmonised with the information resulting from Directive 2002/59/EC described above. These comprise the *general maritime information*.[18] The entry summary declaration, FAL form 2, FAL form 3 and FAL form 4 - specifically dealt with in the eMS Customs sub-group (managed by DG MOVE with DG TAXUD) - need to be harmonised with the information resulting from the Community Customs Code; the security notification -

[18] General Maritime Sub-Group: General Maritime Information – Business Rules (Version 1.00 – 23 January 2013)

specifically dealt with in the eMS Security sub-group - needs to be harmonised with the information resulting from the Regulation 725/2004 of the EP and of the Council of 31.03.2004 on enhancing ship and port facility security; the border checks on persons, FAL form 5 and FAL form 6 specifically dealt with in the *Border Control sub-group* – (formed by DG MOVE and DG HOME) – need to be harmonised with the information resulting from the Schengen Borders Code; etc.

The RFD does not aim at making applicable or creating additional reporting formalities.

Request for reporting formalities in a harmonised and coordinated manner – National Single Window

Art. 5(1)§1 of the RFD specifies that MSs shall accept the fulfilment of reporting formalities in electronic format and their transmission via their NSW no later than the 1st of June 2015. Art. 5(1)§2 indicates that this SW, linking SSN, e-Customs and other electronic systems, shall be the place where all information is reported once and made available to various *competent authorities*. This requirement means that on the one hand the information submitted through this national single window should be made available to relevant authorities. On the other hand, the relevant information not provided directly to the NSW but provided through e-Customs, SSN and other electronic systems should be accessible / available through or sent to this national SW service. The data to be exchanged is already partly regulated by the Directive 2002/59/EC or requirement of ICS and ECS according to the Community Customs Code, which could set technical boundaries. The additional data set to be exchanged with those systems must be defined, if necessary, in order to fulfil the objectives of the RFD. Art. 7 of the RFD about information in FAL forms denotes that MSs have to consider/adopt FAL form as the standard set for the data to be submitted. The adoption of FAL forms will indirectly have an effect for the data set and require the MSs to harmonise this set of data. Art.8 highlights the issue of confidentiality on commercial and personal data and must be concerned in particular. Therefore, the SW needs to include this aspect for the implementation.

All the reporting formalities should be accepted by the NSW. Only one NSW should be set up per MS. The SW is an environment for collection, dissemination and exchange of vessel reporting information with a structured and commonly defined data structure, and rules and rights management of information, which are in accordance with relevant international, national and local legal requirements. The minimum requirements for the quality, the content and the submission time frame of the data are or can be defined and regulated by EU legislation and other international agreements. Individual data elements should be only submitted once. The SW consists of the user web interface and interfaces requirements, harmonised on the EU level in regard to a common set of services and specific layout, semantics, for submitting the information or, where applicable by legislation, by a party with delegated rights. Addition to this user web interface, the NSW can provide optional data transmission means as long as they do not compromise the minimum requirements on the data stated above. The NSW should be able to exchange information with SSN. The PCSs could be included under the NSW umbrella, respecting the same requirements (harmonised layout, information, validation rules, etc.). The business activity flows used by the Shipping industry for submitting notifications, updating data in the notifications and receiving receipt and acknowledgement messages from the Authorities concerned via the NSWs shall be harmonised at EU level. The transmission of the data to the NSW may be made either directly through business entities / governmental agencies or via a trusted-third-party (certified and authorised party).[19]

[19] *National Single Window Guidelines*, revised draft - Version 0.4 Draft (3th June 2013)

9.2.2 Art. 3.2 – Mechanisms developed by the EC for harmonisation and coordination of reporting formalities within the Union

Art. 3.2 of the RFD states that "*The Commission shall, in cooperation with the MS, develop mechanisms for the harmonisation and cooperation of reporting formalities within the Union*".

The Directive does not specify which (type of) mechanisms for harmonisation and coordination should be developed by the EC.

With regard to this issue the EC referred to the initiatives and activities of the EC through – and in cooperation with – the (members of the) *Expert Group on Maritime Administrative Simplification and Electronic Information Services* (the *eMS group*). This expert group was established by the EC in order to support MSs to implement the RFD in a coordinated matter.

Furthermore, at a European level (several aspects of) the reporting formalities referred to in the RFD could be harmonised on 3 levels:

- Harmonisation of the use of data: Full (100%) harmonisation at EU level is aimed at;
- Harmonisation of the requirements for national SW interfaces between the administration and other actors: The EC aims at issuing guidelines in order to strive for a maximal harmonisation at EU level;
- Harmonisation of a number of other processes (e.g. clearance): The EC aims at issuing guidelines in order to strive for a maximal harmonisation at EU level.

9.3 Research questions

9.3.1 Art. 3.1 - Measures taken by the MSs to ensure a harmonised and coordinated request for reporting formalities within each MS

The research questions are mainly focused on the national SW (the main requirement for the implementation of the RFD), its concept, its status of development, the involved and responsible parties, etc.:

- Who are the currently involved national parties and authorities (i) in the processing of reporting formalities submitted for ships arriving at or departing from ports and/or (ii) needing or having rights to access the reported information?
- Which reporting formalities are applicable / which data and information is (and/or will be) exchanged through the NSW (with reference to Part A, B and C of the Annex of the RFD)?
- Who is the NSW Authority? Does the NSW Authority have specific tasks/responsibilities regarding the RFD?
- Are there – and who are the – Local Competent Authorities (LCAs)?
- Is a SW already being developed? What is the SW concept? What is the current phase of development? Who are (or will be) the involved private actors and (public) authorities (i) in the processing of reporting formalities submitted for ships arriving at or departing from ports in the SW and/or (ii) needing or having rights to access the information in the SW? What language(s) is (are) being used? Is (will) the SW (be) interoperable with SSN?
- Do MSs experience implementation difficulties with regard to the RFD?

9.3.2 Art. 3.2 – Mechanisms developed by the EC for harmonisation and coordination of reporting formalities within the Union

The research questions bear on the coordination and harmonisation initiatives taken by the EC – in cooperation with the MSs, EMSA, etc. - with regard to implementing the RFD in a coordinated matter:

- Which mechanisms for harmonisation and coordination have been – and are being – developed and are operational?
- Who participates in these mechanisms?
- Do participants experience any difficulties with regard to this participation / collaboration?

9.4 Analysis

9.4.1 Analysis approach and purpose

Several (semi-)public stakeholders in each MS have been interviewed by telephone using a questionnaire. This questionnaire consisted of 4 standard sets of questions, tailored to survey information held by specific target groups:

- Two sets of questions with regard to Art. 15(c) of the RFD - i.e. progress made towards harmonisation & coordination of reporting formalities achieved under Art. 3 of the Directive), including a limited number of questions regarding Art. 15(d) and Art.15(e).
  One larger set of questions was meant for the relevant national administration; A smaller set of questions was specifically used – where relevant - to interview the NSW Authority.
- A set of questions with regard to Art. 15(a) and Arty. 15(b) of the FD - i.e. the possibility of extending the simplification introduced by the Directive to cover inland waterway transport, and the compatibility of the RIS with the electronic data transmission process referred to in the Directive).
  Some interviewees in a limited number of MSs were also being interviewed on the RIS related issues of Art. 15(a) and Art. 15(b) of the RFD. The output of these interviews is used for the analysis of these specific issues.
- A set of questions with regard to Art. 15 (d) and (e) - i.e. the feasibility of avoiding or simplifying formalities for ships that have called data port in a third country or free zone and available data concerning ship traffic/movement within the Union, and/or calling at third country ports or in free zones.
  A selection of harbours and EPCSA has been asked for information as well. The output of this consultation is used for the analysis of these specific issues.

A copy of the questionnaire is attached to this report, as well as a list of the contacted stakeholders.

The stakeholders were interviewed by telephone. Prior to the interviews contacts with the respondents were established and appointments for interviews were made first by telephone and confirmed by e-mail. Notes were made during the interviews, which were reworked afterwards into full text. The time needed to take one interview varied between 30 and 90 minutes.

The purpose of the interviews in all MSs is to have an overview of a set of standard information with regard to the progress made in each MS towards harmonisation and coordination of reporting formalities (cf. Art. 3.1 RFD).

9.4.2 Analysis at MS level – Progress made towards harmonisation and coordination of reporting formalities achieved under Art. 3.1 of the Reporting Formalities Directive

Within the scope of the RFD Austria, the Czech Republic, Hungary, Luxembourg and Slovakia are considered as landlocked countries and are therefore excluded from the analysis in this chapter.

For each MS that is required to establish a national SW on the basis of the RFD, one standard table containing summary information is provided below. These tables summarise the main parts of the completed interview questionnaires.

The implementation difficulties mentioned by some of the interviewees in several MSs are described below (cf. chapter re conclusions).

9.4.2.1 Belgium

BELGIUM	
Involved stakeholders	The Federal Public Service (FPS) Mobility & Transport - DG Maritime Transport is responsible administration for - and in charge of - (and is coordinating) the implementation of the Reporting Formalities Directive (RFD): The other administrations involved in the coordination/harmonisation of ship reporting formalities are: FPS Finance (Customs), FPS Home Affairs, FPS Economy, FPS Public Health, Ministry of Defence, Federal Police, Immigration Office, Crisis Center, Federal Agency for the Safety of Food Chain, Federal Agency for Nuclear Control, Privacy Commission, Shipping Assistance Division, Flemish Ministry of Transport and Public Works (MOW), Flemish agency for waste management (OVAM), nv De Scheepvaart, Waterwegen en Zeekanaal nv, Antwerp Port Authority, Seabruges Port Authority, Ghent Port Authority, Ostend Port Authority, Brussels Port Authority, Liege Port authority, the Public Service of Wallonia and the Ministry of the Brussels Region. There is no coordination (regarding reporting formalities) at local level (i.e. not at a national level, for example at province level/harbour level, …)
Reporting formalities	Formalities used in Belgium and exchanged through the Maritime National SW - Notification for ships arriving in and departing from ports of the Member States - Art. 4 of Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system - Border checks on persons - Art. 7 of Regulation (EC) No 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code) - Notification of dangerous or polluting goods carried on board - Art. 13 of Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system) - Notification of waste and residues - Art. 6 of Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues

	- Notification of security information - Art. 6 of Regulation (EC) No 725/2004 of the European Parliament and of the Council of 31 March 2004 on enhancing ship and port facility security - Entry summary declaration (*Remark: This need further details from EC considering the future implementation of the e-Manifest and the use of the ICS in place of the MSW for the lodgement of this formalities*) – Art. 36a of Council Regulation (EEC) No 2913/92 of 12 October 1992 establishing the Community Customs Code and Article 87 of Regulation (EC) No 450/2008 of the European Parliament and of the Council of 23 April 2008 laying down the Community Customs Code (modernised Customs Code) - FAL form 1: General Declaration - FAL form 2: Cargo Declaration (*Remark: This need further details from EC considering the future implementation of the e-Manifest and the use of the ICS in place of the maritime NSW for the lodgement of this formality*) - FAL form 5: Crew List - FAL form 6: Passenger List - Maritime Declaration of Health <u>Not requested to be lodged electronically but kept on board for controls</u> - FAL form 3: Ship's Stores Declaration - FAL form 4: Crew's Effects Declaration (<u>Remark</u>: Not used in Belgium is FAL form 7: Dangerous Goods (Note: the IFTDGN message is used instead to submit dangerous goods information))
	<u>Specific/additional national reporting formalities (cf. Annex Part C of the RFD)</u> ATA + ATD + 72-hour pre-arrival notifications according to - Art. 4 of Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system - Art. 9 of Directive 2009/16/EC of the European Parliament and of the Council of 23 April 2009 on port State control Other potential formalities subject to the outcome of the ANNA project.
Competent authorities	<u>NSW Authority</u> The Federal Public Service Mobility & Transport is managing and coordinating a forum (an "*assemble*") in which a number of stakeholders (the regional governments, the harbours, SSN, customs...) participate: this forum will (in the future) function as the NSW Authority for the purposes of the RFD. The interfederal forum was set up in line with the organisational structure of the Belgian National Authority for Maritime Safety, also an interfederal forum which is made up of representatives of the federal and regional governments and experts re safety in general and nautical aspects in particular. In the forum/assemble all concerned governments and entities work together and discuss on several issues (e.g. the management of the NSW) on a transversal basis: they all keep (and stay within) their own competence. The forum will be further formalised and institutionalised by a legal act/official regulation in which the competences and roles of all involved partners are clarified, as well as the budget is allocated and

	divided. Also a cooperation agreement will be signed between all concerned parties. The Federal Public Service Mobility & Transport is directing and coordinating the interfederal forum ('assemble') in which a number of stakeholders (the regional governments, the harbours, etc.) participate. This forum will have to make decisions re the Belgian NSW. (Another administration, the Belgian Shipping Assistance Division (*Afdeling Scheepvaartbegeleiding*) functions as the NCA within the scope of the SSN Directive.)
	<u>Specific tasks/responsibilities of the NSW Authority regarding the RFD</u> The NSW Authority (group) has a coordination role, tasked by government, to implement Directive 2010/65/EU. Each participating authority keeps its own competence. In other words, if a regulation needs to be issued, the authorities respectively take appropriate measures according to their field of competence.
	<u>LCAs</u> The Seaports (Antwerp, Seabruges, Ghent and Ostend) have been designated as LCAs for the purposes of the RFD. The LCAs do not communicate with each other unless a ship makes a call in another of these ports. The appropriate information is then exchanged through the Central Broker System (CBS).
NSW	<u>Concept / system</u> The NSW has not been developed yet, and is still under development, in a conceptual phase. Two main options (with some variations) are still considered: (i) keep existing systems (PCS's and back end systems) with adaptation or (ii) build a new system - The assessment is still on-going. According to the SW Guidelines (as it by 10 September 2013), the SW should have both interfaces (web GUI and system to system interface). The reporting formalities that will be exchanged in accordance with the RFD through the NSW are the same as listed higher (cf. 'Reporting Formalities'). All Belgian seaports will be connected to the future NSW.
	<u>Involved parties</u> The NSW Authority will manage the SW but FPS M&T would be responsible for coordinating and organising the work of NSW Authority. Authorities using the NSW according to the formalities (data providers (clearance) data receivers and data processors) are: FPS Finance (customs), FPS Public Health, Federal Police, Shipping Assistance Division, Flemish agency for waste management (OVAM), nv De ScheepvaartWaterwegen en Zeekanaal NV, Antwerp Port Authority, Seabruges Port Authority, Ghent Port Authority, Ostend Port Authority, Brussels Port Authority, Liege Port authority Authorities who will have a need to use information exchanged by the MSW or who

	will have the opportunity to get access to the information provided (data receivers and data processors): The Federal Public Service Mobility & Transport (Port State Control, HAZMAT, ISPS), FPS Home Affairs, FPS Economy (Statistics), Ministry of Defence, State Security, Immigration Office, Crisis Center, Federal Agency for the Safety of Food Chain, Federal Agency for Nuclear Control, Flemish Ministry of Transport and Public Works (MOW), Public Service of Wallonia and the Ministry of the Brussels Region (Remark: The Authority requested to control the data quality on privacy issues is the Belgian Privacy Commission.) The private actors (data providers and data receivers (clearance) are: the shipping companies, shipping agencies, and shipmasters.
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data Once operational the languages used today will be used in the NSW: Dutch & French (the official Belgian languages) but also English is quite common - there are no legal obstacles to use the English language. No languages are excluded. (Lodging/interface) language used in the NSW system/environment Dutch and French
	Interoperability with SSN Once operational, the SW will be interoperable with SSN.

9.4.2.2 Bulgaria

BULGARIA	
Involved stakeholders	The Bulgarian Ports Infrastructure Company is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD. The other administrations involved in the coordination/harmonisation of ship reporting formalities are: Bulgarian Customs, Bulgarian Maritime Administration, the Bulgarian Border Police, and the Bulgarian Ministry of Health. There is some coordination (regarding reporting formalities) at local level (i.e. not at a national lever, for example at province level/harbour level…): Coordination at local level is foreseen in each town (Varna, Bourgas, ...).
Reporting formalities	The information referred to in Part A and Part B of the Annex of the RFD required when ship calling at ports of Bulgaria is the following: - Ship managers, captains of a ship or ship's agents of a ship calling at the port of Bulgaria send a notification of arrival; The notification includes the following information: 1. Vessel identification: a) name of the vessel, b) call sign (call sign), c) IMO identification number ("IMO number"), d) the maritime mobile identification number ("MMSI number"); 2. Port of destination;

	3. Estimated time of arrival at the port of destination or pilot station; 4. Estimated time of departure from the port; 5. Total number of persons on board; 6. Evidence of valid insurance against maritime claims. - All the FAL forms (on arrival) - Waste notification (according to Art.6 of Directive 2000/59/EC) - Maritime Declaration of Health - Sanitation Exemption Certificate Ships arriving from outside EU and carrying dangerous and pollution goods report also: - Class of vessel, as defined by INF Code, if any; - Confirmation that a list or manifest or appropriate loading plan giving details of the dangerous or polluting goods carried and of their location on the ship is on board; - For the substances referred to in Annex I to the Marpol Convention, the safety data sheet detailing the physico-chemical characteristics of the products, including, where applicable, their viscosity expressed in cSt at 50 °C and their density at 15 °C and the other data contained in the safety data sheet in accordance with IMO Resolution MSC 150 (77); - The emergency numbers of the shipper or any other person or body in possession of information on the physico-chemical characteristics of the products and on the action to be taken in an emergency. On departure: - All the FAL forms (on departure) Ships leaving ports of Bulgaria and carrying dangerous and pollution goods report also: - Ship name; - Port of destination; - Estimated time of departure from the port of departure or pilot station; - Estimated time of arrival at the port of destination; - Total number of persons on board; - The correct technical names of the dangerous or polluting goods; - The United Nations (UN) numbers where they exist; - The IMO hazard classes in accordance with the IMDG, IBC and IGC Codes; - Class of vessel, as defined by INF Code, if any; - The quantities of dangerous and polluting goods; - Location of dangerous and polluting goods on board; - The identification number of cargo units if they are being carried in cargo transport units other than tanks; - Confirmation that a list or manifest or appropriate loading plan giving details of the dangerous or polluting goods carried and of their location on the ship is on board; - Address from which detailed information on the cargo may be obtained.
	<u>Specific/additional national reporting formalities (cf. Annex Part C of the RFD)</u> In Bulgaria following additional (national) "Annex Part C"- reporting formalities are applicable: - The Ship manager, master, or agent of the ship subject to mandatory expanded inspection under port state control when visiting the port or anchorage of the Republic of Bulgaria shall notify the Executive Agency "Maritime Administration" its arrival. The notification is according to Art. 9(1) and annex III of Directive

	2009/16/EC and contains: 1. identification of the ship (Name, call sign, IMO identification number or identification number of the maritime mobile service - MMSI number); 2. planned duration of stay; 3. for tankers: a) configuration: single hull, single hull with segregated ballast tanks (SBT), double hull; b) the condition of the cargo and ballast tanks: full, empty, inerted; c) the amount and type of cargo; 4. planned operations at the port or place of anchorage (loading, unloading, other); 5. planned statutory survey inspections and substantial maintenance and repair work to be carried out at the port; 6. date of last expanded inspection under the Paris MOU region. - The ship manager, master, or agent of the ship to which apply Chapter XI – 2 of the International Convention for the Safety of Life at Sea (SOLAS 74/78) when visiting a port of the Republic of Bulgaria shall submit: 1. information under Rule XI - 2/5 of the International Convention for the Safety of Life at Sea (SOLAS 74/78) (this information is according to SOLAS XI-2/9 and Art. 6.3 of EC Reg. No725/2004); 2. information about persons who are on board the ship as a result of search and rescue operation and refugees; 3. continuous synopsis record; 4. evidence of the existence of insurance or other financial security of liability for damages caused by oil pollution; 5. evidence of the existence of insurance or other financial security of liability for damage caused by bunker oil pollution. - The ship manager, master or agent of the ship visiting the port of the Republic Bulgaria, sent: 1. absence / presence of stowaways; 2. presence / absence of arms and ammunition; 3. presence / absence of drugs and other items prohibited or limited of ownership; 4. presence / absence of livestock and poultry; 5. origin of food and waste - This information is given in free form text declaration. - The Bulgarian Food Safety Agency (BFSA) requires declaration about kitchen waste (in line with Regulation (EC) No 1069/2009), foodstuff of animal (in line with Regulation (EC) No 206/2009) etc. - Ballast water report form (IMO Resolution A.868(20)) - - On departure: The captain of the ship or ship agent of a ship leaving port of the Republic of Bulgaria, sent to the Executive Agency "Maritime Administration" statement containing information on the type and volume of submitted waste - result of shipping activities and cargo residues.
Competent authorities	<u>NSW Authority</u> The Bulgarian Ports Infrastructure Company has been designated as NSW Authority for the purposes of the RFD.
	<u>Specific tasks/responsibilities of the NSW Authority regarding the RFD</u> The NSW Authority has a coordination role, tasked by government, to implement the RFD, but it cannot issue specific regulation in this respect. It can issue operating and interconnecting instructions for coordination on technical level. The Bulgarian Maritime Administration is the entity that can issue specific regulation and should approve any instructions issued by the NSW Authority within the scope of the RFD related to interconnecting and interoperation between various administrations.
	<u>LCAs</u> No LCAs for the purpose of the RFD.
NSW	<u>Concept / system</u>

	A completely new system will be built by the Bulgarian Ports Infrastructure. The NSW is still under development (conceptual phase). At present stage it looks like it will be a system with web user interface for users as well there will be interface to connect M2M for administrations with own developed information systems i.e Customs. In the future M2M capabilities might be developed and provided for agents/ship owners - It depends on various factors and should be decided after careful analysis. The reporting formalities that will be exchanged in accordance with the RFD through the NSW are the same as listed higher (cf. 'Reporting Formalities'). All Bulgarian seaports serving international voyages will be connected to the future NSW.
	Involved parties The Bulgarian Ports Infrastructure Company is (and will be) responsible for managing the SW. The involved administrations and other (private or public entities) who will be using (receiving/sending) ship reporting formalities via the NSW are: - The Bulgarian Ports Infrastructure Company - who is (and will be) responsible for managing the SW (data processor & data receiver) - Bulgarian Customs (data receiver – remark: still needs to be clarified re data processing role) - The Bulgarian Maritime Administration (data receiver) - The Bulgarian Border Police (data receiver) - The Bulgarian Ministry of Health (data receiver) - Bulgarian Food Safety Agency (data receiver) - Ship's agent/master/owner (data providers)
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: Bulgarian and English (Lodging/interface) language used in the NSW system/environment: The first language is English. Translation in Bulgarian is provided as well.
	Interoperability with SSN The NSW will be interoperable with SSN.

9.4.2.3 Croatia

CROATIA	
Involved	The Ministry of Maritime Affairs, Transport and Infrastructure (Maritime Safety

stakeholders	Directorate) is officially the responsible administration for, in charge of, and is coordinating the implementation of the RFD. The other administrations involved in the coordination/harmonisation of ship reporting formalities are Port authorities, Ministry of Interior (Border control), Ministry of Health (Sanitary inspection), Customs, Bureau of statistics. Other involved parties: shipping companies, maritime agents, port operators, pilots
Reporting formalities	Pre-arrival notification, Notification of dangerous or polluting goods, ISPS information, Paris MoU expanded inspection notification, Waste and residues reporting, Border control of crew and passengers, Sanitary permission of arrival (MDH), Customs control of ships cargo
	<u>Specific/additional national reporting formalities (cf. Annex Part C RFD)</u> Ballast water reporting formality, which is already implemented through Croatian NSW.
Competent authorities	<u>NSW Authority</u> The Croatian Ministry of Maritime Affairs has been designated as NSW Authority with the purpose of the RFD (i.e. the same authority as the NCA for the Croatian SSN).
	<u>Specific tasks/responsibilities of the NSW Authority regarding the RFD</u> The NSW Authority has a coordination role, tasked by government, to implement the RFD, but it cannot issue specific regulation in this respect.
	<u>LCAs</u> Harbour master's offices and Branch offices (which are the local branch offices of the NSW Authority) will be designated as LCAs for the purpose of the RFD.
NSW	<u>Concept / system</u> A Maritime National Single Window (as required by the RFD) is still under development. Some reporting formalities referred to in the RFD are already implemented (Waste, ISPS, crew and passenger lists) The Maritime NSW will be an "upgraded" national Croatian SSN system: The Croatian integrated maritime information system (CIMIS) – i.e. the national SSN (also the future NSW) is a Web based system with central Oracle Database, Oracle APEX user interface and Web services implemented on Microsoft BizTalk platform that provide both web interface as well as machine to machine services. The reporting formalities that are being (and will be) exchanged in accordance with the RFD through the NSW are listed above ("reporting formalities"). All Croatian seaports will be connected to the (future) NSW. (Ports do not have LCA role, though).

	At this stage Croatian Ministry of Maritime Affairs envisages to establish a single delivery for the purposes of Customs only for existing FAL forms until "eManifest" is competed. The Croatian Border police is already integrated in the NSW. A study on the Croatian NSW was published in 2012: http://www.mppi.hr/UserDocsImages/NSW%20Studija%2012_11.pdf
	Involved parties - Data providers: Maritime agents, Port authorities, port operators, Ship owners, Ship operators, masters, pilots - Data processor(s): Port authorities, Harbourmasters offices, Ministry of Interior (Border control), Ministry of Health (Sanitary inspection), Bureau of statistics - Data receivers: Port authorities, port operators, Harbourmasters offices, Ministry of Interior (Border control), Ministry of Health (Sanitary inspection), Customs, Bureau of Statistics, pilots
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: Croatian and English (Lodging/interface) language used in the NSW system/environment Which 'lodging' / interface language will be used in the (new/future) NSW system: Croatian and English
	Interoperability with SSN The future NSW will be operational with SSN. Croatian integrated maritime information system (CIMIS) as the national SSN (also being NSW) has been developed on the available specs of the SSN (IFCD…) so high interoperability is expected once SSN extension specs are completed.

9.4.2.4 Cyprus

CYPRUS	
Involved stakeholders	The Cyprus Ports Authority (being the Port Community System (PCS) operator) is coordinating the matters regarding reporting formalities and the involved administrations. The other administrations involved in the coordination/harmonisation of ship reporting formalities are: Customs and the Department of Merchant Shipping. There is no coordination (regarding reporting formalities) at local level (i.e. not at a national lever, for example at province level/harbour level…)
Reporting formalities	Data/information exchanged through the SW All relevant data requested by the FAL forms and Custom data.

	Specific/additional national reporting formalities (cf. Annex Part C of the RFD) Cyprus does not require additional (national) reporting formalities.
Competent authorities	NSW Authority No NSW Authority for the purpose of the Reporting Formalities Directive was (explicitly) designated, but the Cyprus Ports Authority "de facto" acts as NSW Authority with regard to the RFD. (The Department of Merchant Shipping is the NCA within the scope of SSN only.)
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The *de facto* NSW Authority - the Cyprus Ports Authority - has a certain coordination role, tasked by government, to implement the RFD. (Remark: The responsibilities of the NCA are the implementation, operation and maintenance of the SSN system. Its coordination role is limited to the SSN system. It does not issue regulations and it does not coordinate the harmonisation of requested reporting formalities.)
	LCAs In Cyprus no LCAs have been designated for the purpose of the RFD.
NSW	Concept / system The existing and operational Port Community System (PCS) - operated by the Cyprus Ports Authority - will (in the future) function as the SW, since (i) Cyprus is not a big nation, (ii) there are not that many ports, and (iii) the Cyprus Ports Authority is the single organisation responsible for all Seaports. (The Cyprus Ports Authority will eventually function as the SW, since it is the most common/frequent maritime information provider and receiver.) A Cypriot NSW (which is the existing Cypriot PCS) is already in place and operational; it is called *CyPOS* (Cyprus Ports Operation System) and is acting as a 'Connected Port' System. This is to be replaced by a new PCS. The SW (PCS) will provide functionality for both Machine to Machine and Web interface. For example, for stakeholders that have existing systems in place (i.e. customs), Machine to Machine interface will apply. For other small stakeholders (i.e. sanitary department) web interface will apply. The FAL forms 1, 3, 4, 5, 6, 7 and the manifest are the reporting formalities that are being (and will be) exchanged in accordance with the RFD through the NSW/PCS. All seaports are connected to the NSW/PCS - since the Cyprus Ports Authority is the single Organisation responsible for all Seaports: the PCS (will) cover all Cypriot seaports.
	Involved parties The Cyprus Ports Authority (the PCS operator) will be responsible for managing the SW.

	The involved administrations and other (private or public entities) who will be using (receiving/sending) ship reporting formalities via the NSW are: - The Cyprus Ports Authority (the PCS operator) which is responsible for managing the SW - Cypriot Customs - The Department of Merchant Shipping - All Cypriot seaports - The Ministry of Health - The Ministry of Agriculture - The shipping agents - The forwarding agents - The Police and Fire Department
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: Greek and English (Lodging/interface) language used in the NSW system/environment Also Greek and English: Greek and English
	Interoperability with SSN The new NSW/PCS will be interoperable with SSN: Information required by the SSN will be interfaced with the NSW.

9.4.2.5 Denmark

DENMARK	
Involved stakeholders	The Danish Maritime Authority/Danish Defence Command is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD. The other administrations involved in the coordination/harmonisation of ship reporting formalities are: The Danish Maritime Authority, the Danish Defence Command, the Danish Police, the Danish Coastal Authority, the Danish Environmental Protection Agency, the Danish Health and Medicines Authority, the Danish Nature Agency, Admiral Danish Fleet, and the Danish Tax Agency. There is no coordination (regarding reporting formalities) at local level (i.e. not at a national lever, for example at province level/harbour level, …) (*Remark: The involved sector authority involves relevant private interests when needed.)*
Reporting formalities	Data/information exchanged through the SW All data/information (ship reporting formalities) according to the RFD.
	Specific/additional national reporting formalities (cf. Annex Part C of the RFD)

	In Denmark no additional (national) reporting formalities are required (for now).
Competent authorities	NSW Authority The Admiral Danish Fleet has been designated as NSW Authority for the purpose of the RFD.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The NSW Authority operates the SW platform and coordinates the implementation through the Danish Defence Command. The NSW Authority does not issue regulation in this respect.
	LCAs The Admiral Danish Fleet (which is also the NSW Authority) has been designated as LCA for the purposes of the RFD.
NSW	Concept / system The National SW is still to be established. (Remark: There already was some harmonisation and/or coordination of maritime reporting formalities through the VTMIS directive.)
	Involved parties How – and by whom - the SW will be managed, still has to be decide upon. The involved administrations and other private and public entities that will be using (receiving/sending) ship reporting formalities through the future NSW: - The Danish Maritime Authority/Danish Defence Command (responsible administration for - and in charge of - (and is coordinating) the implementation of the Reporting Formalities Directive (RFD) - The Danish Maritime Authority - The Danish Defence Command - The Danish Police - The Danish Coastal Authority - The Danish Environmental Protection Agency - The Danish Health and Medicines Authority - The Danish Nature Agency - Admiral Danish Fleet - The Danish Tax Agency
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: English (Lodging/interface) language used in the future NSW system/environment: English
	Interoperability with SSN

	Interoperability between NSW and SSN will be established through the fixed protocols.

9.4.2.6 Estonia

ESTONIA	
Involved stakeholders	The Estonian Maritime Administration is officially responsible for - and in charge of - (and is coordinating) the implementation of the RFD. (The Ministry of Economic Affairs and Communications - with its own Aviation and Maritime Department - is responsible for the legislative aspects of the RFD in Estonia, and works closely together with the Estonian Maritime Administration.) Other involved administrations/entities are (1) the Estonian Tax & Customs Board, and (2) the Estonian Ports - which both ((1) and (2)) have their own systems, and (3) the Estonian Veterinary and Food Board, (4) the Estonian Health Administration, (5) the Estonian Agricultural Board, (6) the Estonian Statistics administration (who also has some interest in the application of the NSW), (7) the Estonian Police and Boarder Guard Board, (8) the Estonian Environmental Inspectorate, (9) Estonian Environment Agency and (10) Estonian Pilot. There is no coordination (regarding reporting formalities) at local level (i.e. not at a national lever, for example at province level/harbour level, …)
Reporting formalities	Data/information exchanged through the SW With regard to the information in FAL Form n°2 (Customs information): there is a connection between the Custom Clearance information system and the NSW; but the agents still have the possibility to submit the information OR in the Customs system OR in the Maritime NSW. Connection means IT-connection over the so called X-Road middleware, which is the implementation of secure data exchange in the Estonian public sector. Delivery of cargo manifest has exception: till 01.06.2015 agent could choose, which system to use, is it National Single Window or Custom Clearance IS. With regard to SSN: all info in NSW, that is necessary to submit to SSN, will automatically be transferred from the NSW to SSN (and this according to the SSN/Monitoring Directive and to the RFD). In this way, all data that should be covered by the RFD will be exchanged through the NSW by 2015. About the list of ship reporting formalities: as RFD has already been transposed to Estonian national legislation, all reporting formalities according to Annex of RFD are applicable in Estonia.
	Specific/additional national reporting formalities (cf. Annex Part C of the RFD) Some bigger ports have their own demands/requests for notification e.g. the Port of Tallinn wants to be notified about the measurements of the vessel (before the ship enters and departs from the ports under the jurisdiction of holding company Port of Tallinn).

	These specific reporting formalities requested by the ports can be lodged in the first version of the NSW (operational as from 1/07/2013). To be precise: set of rules for connecting port systems to the NSW are the rules, which are binding to every public administration or private company, which are sending or receiving information from public sector databases, this set concerns the X-Road middleware, which is described at http://e-estonia.com/components/x-road. Technical assistance is provided by Estonian Information Systems Authority.
Competent authorities	NSW Authority The Estonian Maritime Administration (which is also the NCA for SSN) has been designated as the NSW Authority for the purposes of the RFD.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The Estonian Maritime Administration is officially responsible for the (implementation of the) RFD. The Maritime Administration offers a certain kind of set of rules for connecting the port systems to the maritime NSW. A specific person within the NSW Authority was designated to administrate the first version (dd. 1.07.2013) of the SW.
	LCAs Officially Estonia declared (within the framework of SSN) that there are no LCAs, but Estonia will probably (in the future) designate its ports as LCAs (for the purpose of the Reporting Formalities Directive) because then they have the possibility to log into SSN and to find info regarding e.g. port calls.
NSW	Concept / system As from 1.07.2013 a first version of the maritime SW (which has been under development the last 2 years) will be operational in Estonia. An appropriate infrastructure on national level has been installed. The same technology as in SSN is being used (which has now moved to a machine-machine interface). The machine-machine interface will be functioning in the first version of the NSW on 1/07/2013 only for systems, which have capabilities to connect through the X-Road middleware.. (± 70% of the project money came from EU funding.) On 1.07.2013 not all other existing systems (Customs Clearance information system and the ports' system) will be fully harmonised yet, though. It is not known exactly what kind of 'changes' Estonian Customs will have to make to be able to connect to the NSW, but Customs has promised that they will be able to connect to the maritime NSW by 1.06.2015. By 01.12.2013 however the needs for development from Customs side have alrady been specified, namely being 1) retrieval of the ship call status;

	2) retrieval of various statuses of declarations; 4) retrieval of the error messages; 3) list of the EORI numbers with meanings. From NSW side it is absolutely crucial to have above mentioned developments completed within 2014, in order to implement the e-Customs interface by 01.06.15 (Training courses for agents and representatives from different administrations were already organised in May 2013.)
	Involved parties The Estonian Maritime Administration is responsible for managing the SW. Other involved parties in the functioning of the NSW are: - The Ministry of Economic Affairs and Communications (with its own Aviation and Maritime Dept.), which is responsible for the legislative aspects of the RFD in Estonia, and works closely together with the Estonian Maritime Administration; - The Estonian Tax and Customs, Ports (which both have their own systems) + the Veterinary and Food Board, the Health Board, Agricultural Board, the Estonian Statistics (who also has some interest in the application of the SW), Police and Boarder Guard Board; - Private stakeholders, which are PCSs/harbours, shipping companies but always through the shipping agents because according to Estonian law every ship call should be initialized by an agent - captains could in principle also act as an agent but agents are the key players in this system. All harbours can be connected directly and immediately - seaports that have no machine-machine interface (yet) can submit information using the NSW-web-interface. Except the ports all above mentioned administrations / entities belong to public sector. All above mentioned are the data receivers and senders of verification data as data verifiers. All private stakeholders are data providers and receivers of verification data.
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: English and Estonian (Remark: At first they even thought about using Russian as well, since a lot of vessels are coming from Russia.) (Lodging/interface) language used in the NSW system/environment: English and Estonian
	Interoperability with SSN The NSW will be fully interoperable with SSN by 1.06.2015.

9.4.2.7 Finland

FINLAND	
Involved stakeholders	The Ministry of Transport and Communications is responsible for the implementation of the RFD in Finland. The Finnish Transport Agency is responsible of technical implementation and is coordinating the implementation of the RFD. The other administrations involved in the coordination/harmonisation of ship reporting formalities are: the Finnish Customs administration, the Finnish Transport Safety Agency, and the Finnish Boarder Guard. There is no coordination (regarding reporting formalities) at local level (i.e. not at a national lever, for example at province level/harbour level, …)
Reporting formalities	Applicable ship reporting formalities: All information in accordance with the RFD (cf. Annex - Part A and - Part B Of the RFD), as well as the information required by national reporting formalities (cf. Annex - Part C of the RFD): - 24 hour advance notification (all port calls) - 72 hour advance notification for ships eligible for extended inspection at the next port of call - Security notification 24 hours in advance - Dangerous cargo notification 24 hours in advance for non-EU arrivals and for EU and non EU departure - Schengen border control information (border checks on persons) - Waste notification 24 hours in advance - Entry summary declaration for non-EU arrivals - Arrival notification (ATA) - Departure notification (ATD) - Cargo notification for all international and domestic voyages for maritime statistics and for some Customs purposes - Information regarding maritime declaration of health, not collected but collection possible - Entry summary declaration, ENS, collection through Customs ICS system AREX, reference of the RFD port call number must be mentioned in the presentation notification of the goods declared in the ENS
	Specific/additional national reporting formalities (cf. Annex Part C of the RFD) In Finland additional national formalities for the Finnish fairway dues are applicable. Finnish Customs is in charge of - and collects - all fairway dues - since 2002 – by the Portnet-system. These formalities can be lodged in the NSW. Information in FAL form 1, general declaration included in 24 hours advance notification for national purposes; Information in FAL forms 3 and 4 attached to 24 hour advance notification for national purposes; Information in FAL forms 5 and 6 attached to 24 hour advance notification for national purposes.
Competent authorities	NSW Authority Both the Finnish Transport Agency and Customs have being designated (together)

	as the NSW Authority in Finland for the purpose of the RFD. The Finnish Transport Agency is acting as the NSW Authority (operating the system) and Finnish Customs as the NSW ship clearance authority (receives the notifications and checks the information notified). The tasks of the Transport Agency and Customs are defined in the national legislation; authorities have also a MoU on the cooperation.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The NSW Authority is responsible for the management and all practical matters related to the NSW. (Remark: But the Ministry of Transport and Communication (i.e. the administration) is responsible of the overall coordination (e.g. EU (eMs) work groups) and for the legislative and political aspects.) The competency of NSW authorities is defined in the legislation and Transport Agency and Customs can issue more detailed instructions as specified in the legislation. Instructions of the Customs are written down in national legislation "Decision by the National Board of Customs on the declaration procedure concerning vessels arriving at and departing from Finnish ports" , 16.5.2012, 65/010/12.
	LCAs No LCAs have been designated in Finland for the purpose of the RFD, there is only 1 competent authority (the NSW Authority). (Remark: All the ports and shipping agents are connected to Portnet(2) - the NSW - but they are considered or designated as LCAs in technical sense (LOCODES) but not in legal sense with the purpose of the RFD
NSW	Concept / system Finland is a pioneer in the deployment of this kind of national infrastructure implementing the SW concept. The original Finnish system "*Portnet*" has been operational since 1993. The PortNet concept was developed by the Ministry of Transport and Communications with the Finnish Maritime Administration in collaboration with Finnish Customs and 20 Finnish Ports in the '90ies. The Finnish SW is more or less in place already, the existing system "Portnet(2)" - operational since 2002 - will function as the maritime NSW: Portnet needs to be adapted a bit in order to become a real 'NSW' (in accordance to the RFD), e.g. some modifications are necessary for the new datasets that need to be incorporated on the basis of the RFD (e.g. security notification); but the authorities are still waiting for the "technical specifications" (to be defined at European level - EC) in order to be able to take decisions on which adaptations/modifications will be necessary. But the requirements for the SW are more or less ready. The Finnish "NSW-system" will comprise at least: Portnet (Ship's reporting, national SafeSeaNet), VTS, SRS system GOFREP and IBNet system (Icbreakers' communication system) operated by Finnish Transport Agency, Import Control System (ICS) operated by Customs, data systems operated by the ports, National SHIP-database (incl. Ice class register) operated by Finnish Transport Safety

	Agency, Ship list with regular updates (i.e. IHS Fairplay), EU/EMSA systems (SSN, LRIT, THETIS, CleanSeaNet). The Finnish Transport Agency and the Finnish Customs administration have been using Portnet since 2002: All VTM directive related formalities (SSN) and Customs related formalities have been registered in this system too.
	<u>Involved parties</u> The Finnish Transport Agency is responsible for managing Portnet(2) - the NSW. The Finnish Transport Agency is also acting as system operator in technical issues. Other involved parties in the functioning of the NSW are (or should be) Finnish Customs, the Finnish Transport Safety Agency Flag state, PSC, the Finnish Border Guard, Finnish Ports, Port authorities and Port operators, Ships Agents, Shipping companies, Ship's agents and forwarding agents, Carriers, haulers, logistics centers and shippers, (intermediate) warehousing, e.g.: - The Finnish Customs is acting as helpdesk for SW users. - Ship brokers and ship managers are obliged to send all port call related notifications regarding vessels in foreign trade using the Portnet User Web Interface (UWI) or message based interface (XML/EDI) - The Finnish Transport Agency is forwarding all port and hazmat notifications to the SSN EIS-server and compiles all basic information to maritime shipping statistics from the Portnet database. Portnet has hundreds of daily users and thousands of user accounts. About 110 port calls per day in Finland, annually approx. 40.000 port calls – <u>Users are divided into following user groups</u>: - Data providers: mainly ship agents or ship managers - there are about 300 registered ship agencies in Finland; - Data managers: Finnish Customs reviews all information that is provided to Portnet as part of the integrated customs declaration process; - Data utilizers: Port authorities receive port call related data as XML-messages; - Forwarding agents retrieve Portnet reference numbers and ship ID information for customs clearance purposes; - Coastal stations (VTS) are supplementing their maritime situational picture (MSP) by information that is retrieved from Portnet via message based interface; - The Transport Safety Agency maintains SHIP-database for Portnet that consists information of 6.000 vessels plus a distinct Ice class register.
	<u>Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data</u> Finnish and Swedish (and English (demo)) <u>(Lodging/interface) language used in the NSW system/environment</u> Finnish and Swedish will be used (+ "demo version" in English)
	<u>Interoperability with SSN</u> Portnet is interoperable with SSN; it provides direct input to SSN without involving any other actors.

9.4.2.8 France

FRANCE	
Involved actors	The Ministry of Ecology, Sustainable Development and Energy, "Direction Générale des Infrastructures des Transports et de la Mer" ("DGITM") is officially responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD. The other administrations involved in the coordination/harmonisation of ship reporting formalities are the Ministry of Ecology, Sustainable Development and Energy, as well as all maritime port authorities. Different Ministries services as the Border police, health Ministry, Customs Services and many others actors (ports, ship owners, etc.) have been consulted as well by the Ministry department in charge of coordination of the implementation of the RFD - The final French NSW architecture takes account of all these departments' requests and opinions. Customs also attends this coordination process, but they manage by themselves the problematic of FAL N°2 implementation - French Customs are members of e-Maritime, Blue Belt, etc. and, with Border police and Ministry of Ecology, experts groups. There is some coordination (regarding reporting formalities) going on at local level and at national level with the French administrations: l'Union des Ports de France (UPF) is the professional federation of the French ports – its members are the big French ports, the independent maritime and river ports, the chambers of commerce/trade and industry, the mixed economy companies ('Sociétés d'Economie Mixte' (SEM)) and the local mixed economy incorporated companies ('Sociétés Anonymes d'Economie Mixte Locales' (SAEML)) - A sub group of UPF is (involved as a representative of the ports) is working on the NSW.
Reporting formalities	Data/information exchanged through the SW Data required by the directives 2002/59 CE, 2009/16 CE, 2009/17 CE in the future, FAL forms 1 to 7 except FAL forms 3 to 4 (ship's stores declaration and crew's effect declaration), FAL form 2 and goods information, IMS group, waste notice, security notice, insurance effectiveness, safety information, departure, arrival messages...
	Specific/additional national reporting formalities (cf. Annex Part C of the RFD) In the port of le Havre for instance dangerous goods submitted to special authorisation have to be noticed before loaded (local notice to ensure safety). Some information is locally compulsory to allow ships inside the port: e.g. nautical and safety information, draft at arrival, tanks states (free gas, inerted, gassed), and services requested (bunker…), etcetera.
Competent authorities	NSW Authority DGITM has been designated as the NSW Authority in France for the purpose of the RFD.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The NSW Authority is responsible for the management and all practical matters related to the NSW, e.g.:

	The NSW Authority defines the 'national strategy' with the others actors (other administrations, ports, ship owners, etc.) for implementing the NSW, improves the software used by small harbour authorities that should comply with the requirements of the NSW (as defined by the French government), and follows up - and if necessary - coordinates main harbour works to adapt their software, defines the format of the message between PSC and NSW. Builds the software to receive data from PCS and then to send these data to SSN.
	<u>LCAs</u> The harbour masters (Port Authorities) and the Leaders of the Port Information Systems Departments have been designated as LCAs for the purpose of the RFD. LCAs have to adapt their own PCSs to deal with/connect to the NSW; this adaptation will be managed by DGITM for all the ports (for smaller harbours using the "Escale Port software", it's the DGITM who develops this software). (PCS are connected to the national SSN software (Traffic 2000): this is a 'one way' connection since PCS do not receive information from SSN (they only proved SSN with data. In the future a way should be developed to receive the previous waste notice - this is currently being investigated.
NSW	<u>Concept / system</u> PCSs are the "entrance gate" to the French NSW (managed by DGITM): PSCs receive all data from the ships, consolidate them and re-send these data to the NSW; The NSW receives data from PCSs and (i) makes it available to the administrations who need these data (Border police, Health Ministry...), and (ii) sends all the required data to SSN. The reporting formalities that are (will) being (be) exchanged in accordance with the RFD are the following: the reporting formalities according to Directive 2002/59: general notice (Arrival and departure), FAL form N°7, Waste notice, security notice, 72Hprior, 24Hprior ARR +DEP. The "system" itself has not been defined yet. At this moment already, all harbours are connected to Traffic2000 (SSN), but this connection will be improved before/by June 2015 (deadline NSW/RFD). At this moment, there is also data exchange on port level of data according to European Directive 2002/59: i.e. General notice (Arrival and departure), FAL N°7, Waste notice, Security notice, 72Hprior and 24Hprior arrival and departure. The harbours of Le Havre, Marseille, and Dunkerque use their Port Single Window (PSW) for this; the Port of le Havre, Nantes and Dunkerque use the same software (PSW) for FAL N°7 (founded on Protect message for dangerous goods). Small ports used the same software as PCS (i.e. "Escale port"), but this software will be adapted in view of the RFD (SW). (This means that before 2010 (before the RFD was issued) some 'coordination' of ship reporting formalities was already in place – i.e. at port level.)
	<u>Involved parties</u> The Ministry of Ecology, Sustainable Development and Energy, "Direction Générale des Infrastructures des Transports et de la Mer" ("DGITM") is officially responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD.

	The other administrations involved are the Ministry of Ecology, Sustainable Development and Energy, as well as all maritime port authorities. Different Ministries services as the Border police, health Ministry….. have been consulted as well by the Ministry department in charge of coordination of the implementation of the RFD - The final French NSW architecture takes account of all these departments requests and opinions.
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: French and English (Lodging/interface) language used in the NSW system/environment: French, and probably also English.
	Interoperability with SSN The SW will be interoperable with SSN; the SW has to send the required data to SSN (Traffic 2000 will be updated for this).

9.4.2.9 Germany

GERMANY	
Involved stakeholders	The Ministry of Transport Germany is officially responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD: The Ministry of Transport Germany created a forum for coordination purposes (e.g. for coordination with the German federal states - which are responsible for their own reporting requirements). Other stakeholders/parties/administrations are or will be involved in communication processes with the forum for coordination purposes, like Port Community Systems, the shipping industry, the Association of German Ship owners, the German Ship Brokers' Association, etc. The coordination (regarding reporting formalities) at local level will be done by the German federal states.
Reporting formalities	Only the data that are (legally) required to be exchanged are covered, i.e. B2G and G2G - Reporting formalities resulting from legal acts of the Union: 1. Notification for ships arriving in and departing from ports of the Member States – Art. 4 of Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system 2. Border checks on persons – Art. 7 of Regulation (EC) No 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code) 3. Notification of dangerous or polluting goods carried on board – Art. 13 of Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system. 4. Notification of waste and residues - Article 6 of Directive 2000/59/EC of the

	European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues 5. Notification of security information – Art. 6 of Regulation (EC) No 725/2004 of the European Parliament and of the Council of 31 March 2004 on enhancing ship and port facility security 6. Entry summary declaration – Art. 36a of Council Regulation (EEC) No 2913/92 of 12 October 1992 establishing the Community Customs Code and Art. 87 of Regulation (EC) No 450/2008 of the European Parliament and of the Council of 23 April 2008 laying down the Community Customs Code (modernised Customs Code) 7. Maritime Declaration of Health regarding Art. 37 International Health Regulations (IHR, 2005)
	<u>Specific/additional national reporting formalities (cf. Annex Part C RFD)</u> Germany asks for a set of requirements on the basis of the German Internal Waters (Entering Requirements) Ordinance; also each German federal state has its own legislation on Annex Part C-information - the federal states will harmonise their requirements with the requirements of the German federal republic An example for Annex - Part C information is: for entering German waters (e.g. river Elbe) or German ports the actual draft of the vessel is important information for a safe passage of the vessel on the waterway (tide influence) and to allocate the vessel to his berth. This information has to be given by the master or the agent to the relevant administrations. The obligation is laid down in several ordinances. These additional national reporting formalities will be lodged in the NSW.
Competent authorities	<u>NSW Authority</u> The NSW Authority in Germany is the Federal Ministry of Transport, Building and Urban Development irrespective of the fact that other domains like customs are govern by other ministries.
	<u>Specific tasks/responsibilities of the NSW Authority regarding the RFD</u> The NSW Authority has entrusted an organisation to organise implementation and this organisation is acting as a project manager. The NSW Authority is in the position to issue national legislation in this respect, but only within its own domain (transport), not for e.g. customs etc.
	<u>LCAs</u> At this moment no LCAs are designated.
NSW	<u>Concept / system</u> The existing national core system "Central German reporting system for dangerous cargo on sea and shipping (ZMGS)" with its interfaces to the national parties involved (authorities, private sector) will be used as a conceptual basis for the NSW; it will be a modular concept with interfaces through which data from different domains can be exchanged. All authorities concerned and the relevant national modules will be integrated. One requirement is to integrate as much as possible the existing systems in the

	NSW concept in order to not waste the investments in existing infrastructure (e.g. national SSN module, systems that have been set up in/by ports, authorities...). The current state of the NSW is in a 'concept' phase to be able to integrate the guidelines of the eMS group that are not finalized yet (e.g. minimum requirements, business rules, …) and to adjust the NSW concept to the results of the communication processes with the national stakeholders.
	Involved parties All competent authorities of the Federal Republic of Germany and the federal states dealing with the reporting formalities, the private sector who is responsible to declare and exchange the information's with the competent authorities and PCS if they are used by the private sector to fulfil the requirements and designated by the federal state.
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data German and English With regard to the exchange of information (content): xml-messages are being exchanged and English is the language that is being used the most. But for most of the 'attributes'/reporting formalities, no language is needed (e.g. ETA, estimated time of arrival, is a time, or certain codes/numbers which are the same in any language. (Lodging/interface) language used in the NSW system/environment German is the language used in the system (interface/description of the fields)
	Interoperability with SSN The NSW will be interoperable with SSN

9.4.2.10 Greece

GREECE	
Involved stakeholders	The Ministry of Shipping, Maritime Affairs and the Aegean / Hellenic Coast Guard Headquarters (Maritime Administration) is officially the coordinating administration for the implementation of the RFD: The other administrations involved in the coordination/harmonisation of ship reporting formalities are Hellenic Customs, Hellenic Police and the Hellenic Health Authorities There is no coordination (regarding reporting formalities) at local level (i.e. not at a national level, for example at province level/harbour level, …)
Reporting formalities	Data/information exchanged through the SW All data required according to the Annex I and II of the RFD (according to the outcome of the eMS group), with the exception of the FAL form 2 which has been replaced by a more extended document including cargo data and FAL 7 which is mostly covered by Hazmat notifications for SSN.

	Specific/additional national reporting formalities (cf. Annex Part C of the RFD) Greece has no own additional national reporting formalities.
Competent authorities	NSW Authority The Hellenic Coast Guard/Vessel Traffic Monitoring Directorate is the NCA for SSN purposes (according to Directive 2002/59) - The Hellenic Coast Guard is the competent authority for the SW and responsible for the coordination of the implementation of the NSW, but according to the national legal text the Hellenic Coast Guard is not officially designated as NSW Authority for the purpose of the RFD.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The NCA for the purpose of SSN (i.e. the Hellenic Coast Guard/Vessel Traffic Monitoring Directorate) assumes responsibility for the Greek SSN system and its management. It is responsible for the operation of the system at national level and for the issue and verification of the relevant procedures in place (e.g. circulars, describing operational procedures and orders to the local port authorities for enforcement purposes). But with regard to the Reporting Formalities Directive, the Hellenic Coast Guard/Vessel Traffic Monitoring Directorate has no specific tasks or responsibilities (e.g. 'powers' to actually take coordinating measures, e.g. to issue regulations - for example 'protocols' – (or give fines) to effectively coordinate (and maintain) the harmonisation of requested reporting formalities within the Member State).
	LCAs Not with the purpose to the RFD, but with regard to SSN the Port Authorities are the designated as LCAs – Under the Hellenic Coast Guard Hierarchy, which receive or/and input information in the SSN system, pursuant to the SSN legal framework. Currently, information which is included in the SSN is being exchanged among the LCAs and between the SSN NCA and the SSN LCAs – This information exchange is carried out via the national SSN application/system.
NSW	Concept / system The NSW is still under development: it is still just a 'concept' (in design phase), and its final structure is not finalised yet; a new system will be developed, which is supposed to be connected with the existing systems (i.e. the system of customs, the SSN system and the Schengen system). The new system will provide at least a Man to Machine graphical web interface for manual data input by the entities involved to the MSW. A Central System Node (data repository) and interfaces for the Interoperability with existing information systems will be implemented. The reporting formalities related to customs procedures that will be lodged in the NSW will be determined in the beginning of the next year, after the finalization of the relevant business rules. All Greek seaports will also be connected to the future SW: the NSW will be interoperable with the reporting formalities systems currently used by the Hellenic Port Authorities.
	Involved parties

	The involved administrations and private actors using (receiving) ship reporting formalities, sent by ships, are: - The Hellenic Coast Guard (Maritime Administration – as coordinator/NSW Authority of the RFD, Vessel Traffic Monitoring Directorate – as NCA for SSN) - Hellenic Customs - Hellenic Police - The Hellenic Health Authorities
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: Greek and English (Lodging/interface) language used in the NSW system/environment: Greek and English
	Interoperability with SSN The future NSW will be interoperable with SSN.

9.4.2.11 Ireland

IRELAND	
Involved actors	The Marine Survey Office – i.e. a division of the Dept. Of Transport, Tourism and Sport - is the main 'driver'. The Marine Survey Office is officially the responsible administration for, is in charge of, and is coordinating the implementation of the Reporting Formalities Directive (RFD). The other involved administrations and private entities who will be using (receiving/sending/processing) ship reporting formalities are: (1) a lot of different administrations (Irish Customs, Irish Health administration, etc.) , (2) ports (which are private organisations, controlled by the Minister) and (3) other private stakeholders (shipping owners and shipping agents association) There is <u>some coordination (regarding reporting formalities) at local level</u>: There are many one-to-one engagements with key stakeholders as driven by the eMS Sub-Groups along with the use of the existing SafeSeasIreland framework which covers the main stakeholders.
Reporting formalities	All the required reporting formalities (IMO FAL forms1 to 7, Maritime Declaration of Health, as well as ATA (actual time of arrival) and ATD (actual time of departure), Dangerous or polluting goods (DPG) notifications, International Ship and Port Security (ISPS) notifications, Waste notifications, Reporting requirements in an event of accident or incident
	<u>Specific/additional national reporting formalities (cf. Annex Part C RFD)</u> In Ireland specific/additional national reporting formalities are applicable: Already in SafeSeasIreland a tick box was/is foreseen for e.g. (i) specific reporting formalities on port level or driven by local legislation, for (ii) the reporting formalities regarding a valid pollution insurance on board, regarding EU Directive 2005/33/EC (sulphur content of marine fuels), an indication that 0.1% sulphur fuel is on board (EU Directive 2005/33/EC Article 4b), an indication that a SAR Co-operative plan is on-board (SOLAS V Reg. 7.3). These specific national ship reporting formalities will be lodged in the SSI (SafeSeasIreland)
Competent authorities	<u>NSW Authority</u> The Dept. Of Transport, Tourism and Sport – and more specifically the Irish Marine Survey Office – has been designated as the NSW Authority with the purposes of the RFD (i.e. also the NCA for SSN).
	<u>Specific tasks/responsibilities of the NSW Authority regarding the RFD</u> Everything is set out in the Irish national law (transposing the RFD) – Statutory Instrument (S.I.) No. 166 of 2012: The NSW Authority was/is responsible for implementing the RFD. There already was an established framework through the SSN-Directive (2002). The NSW Authority works closely together with the colleagues in the other departments (Health Dept., etc.)

	But with regard to the RFD, the NSW Authority has no specific tasks or responsibilities (e.g. 'powers' to actually take coordinating measures, e.g. to issue regulations - for example 'protocols' – (or give fines) to effectively coordinate (and maintain) the harmonisation of requested reporting formalities within the MS).
	LCAs In Ireland no LCAs have been designated for the purpose of the RFD.
NSW	Concept / system The existing "SafeSeas Ireland" system will be used - and amended – in order to create a proper maritime NSW: Safe Seas Ireland is Ireland's implementation of the EU Dir 2002/59 Vessel Traffic Monitoring Information System, which was delivered in co-operation with the European Maritime Safety Agency (EMSA). Safe Seas Ireland facilitates the exchange of messages between Irish maritime authorities, authorised users and other Member States. Safe Seas Ireland is the only national authority in contact with the European Union Institutions for matters related to SafeSeaNet - as such it takes part in management and development of the system at EU level and participates in periodical reviews. A lot of the 'groundwork' in reaching out to the key stakeholders, the ports, customs…was already done in 2002 (SSN Directive: VTM Directive 2002 - When this Directive was implemented a lot of national legislation was already in place. Already in 2002 the "SW concept" was being embraced; it was known that the VTM Directive was going to be amended further, so a lot of work was done in anticipation. The current reporting SafeSeasIreland system is already receiving the waste notification and the security notification in a structured form (i.e. the EU template for waste, IMO template for security). The development of the NSW is still a work in progress. There is unknowns with the development requirements of the Custom's Blue Belt initiative and timelines to deliver their eManifest. For now we are working on the basis of a system to system approach with SSi and eManifest with some form of web front end. The new NSW/updated SafeSeas Ireland will provide for the electronic notification of: - Ship arrival and departure notifications (ATA (actual time of arrival) and ATD (actual time of departure)) - Dangerous or polluting goods (DPG) notifications - International Ship and Port Security (ISPS) notifications - Waste notifications - Reporting requirements in an event of accident or incident - International Maritime Organisation FAL forms (1 to 7) - Maritime Declaration of Health Information that comes in SafeSeasIreland is automatically being disseminated (through a web application) to the various users (i) based on their roles and access rights, or (ii) by default. The NSW will be a connected to SSN (obviously), and also to the existing Customs'

	reporting formalities system. (Remarks: - There is a push towards a B2B feed. - The challenge will be to get data going into the customs system and the SSN system. - The Marine Survey Office hopes that it will possible to move towards a structured format within SafeSeasIreland for the FAL forms. - The lessons learnt from the correct identification of Business processes that are aligned to regulatory needs.)
	Involved parties The involved administrations and private actors using (receiving/sending) ship reporting formalities are: - The Irish Marine Survey Office – NSW Authority and responsible for managing the SW - The Maritime Safety Policy Division and a lot of different administrations (Customs, Health, etc.) - Ports (which are not data submitters/providers to SafeSeasIreland) - Other private stakeholders (shipping owners and shipping agents association).
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: English (Lodging/interface) language used in the NSW system/environment English
	Interoperability with SSN The Irish "NSW" will be interoperable with SSN: The existing SafeSeasIreland system will be used - and amended – in order to create a proper maritime SW. The NSW will be a connected to SSN (obviously). The connection of the NSW to SSN is not obvious. Why would an interface between the NSW and SSN be developed when an interface mandated by 2002/59 already exists. There might be a connection between the NSW and SSI.

9.4.2.12 Italy

ITALY	
Involved stakeholders	The Ministry of infrastructures and transport and the Italian Coast Guard are officially responsible administration for - and in charge of - (and are coordinating) the implementation of the RFD. The other involved administrations and entities are the Ministry of Internal Affairs, the Ministry of Health, the Ministry of Economy and Finance (Custom Agency), Ports (PSCs). The coordination (regarding reporting formalities) at local level towards Shipping

	Agencies and Port Authorities is in progress (i.e. not at a national level, for example at province level/harbour level, …)
Reporting formalities	Data/information exchanged through the NSW All data/reporting formalities referred to in Part A, Part B (IMO FAL forms – Maritime Declaration of Health) and Part C of the Reporting Formalities Directive. (Remark: The listing of reporting formalities is still on-going in Italy and has not yet been completed. It will in any case certainly be necessary to integrate the formalities provided for in Part A and B of the Directive and those laid down by national needs and/or port (part C).)
	Specific/additional national reporting formalities (cf. Annex Part C RFD) The investigation and harmonisation of formalities at national level (Appendix RFD, part C) is not concluded yet. There are "Annex C"-reporting formalities, but that they are not harmonised (yet) it is being evaluated which ones will be kept (and which ones not). These "Annex C" formalities be able to be lodged in the NSW, once there is clarity regarding this issue.
Competent authorities	NSW Authority The Italian Coast Guard has been designated as NSW Authority for the purpose of the RFD. Within the customs formalities framework the Italian Coast Guard is strictly coordinated with the Italian Customs agency in order to implement a coherent architecture of the NSW based on the interoperability between both their systems, in respect of the eMS and ECG working groups tasks.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The NSW Authority is currently in charge of maritime safety, security and traffic monitoring. It has currently a coordination role for the implementation of the directive. The NSW Authority will propose - in agreement with other involved authorities - the adoption of The National legal acts/regulations needed to take coordinating measures comply with the RFD.
	LCAs The LCAs authorities for the VTMIS Directive have been designated as LCAs for the purpose of the RFD. The LCAs are centrally coordinated by the NSW Authority (a coordination mechanism that was as already in place for the VTMIS Directive). The VTMIS system is mainly centralised and it is available to the LCAs by means of web applications. Servers and databases are mainly centrally managed.
NSW	Concept / system Currently Italy does not have an operational NSW in place yet. The Italian SW Legal framework could be shortly pointed out using a 3 legal

	phases approach: Phase 1: Provisional Law n.179 on 18 October 2012 (Art.8 par.10 to 17) Phase 2: National Law n.221 on 17 December 2012 laying "Further urgent measures for the country's growth" Phase 3: Implementing decree (to be issue) As established by Phase 1 and Phase2, the national PMIS (Port Management and Information System) is the Italian NSW even if, currently, it is not fully compliant with the RFD because:- Manage only part of the reporting formalities required by RFD; - Data format and data entry is not fully compliant with technical specifications defined by the eMS working group; - Interoperability with other systems is not implemented (Customs, PCS, Health and other national competent Authorities). In order to ensure PMIS compliance with RFD, the italian Coast Guard (NSW Authority), with respect to the directions of the eMS WGs, is involved in the following activities: - Technical Working group with Customs, aimed to ensure interoperability between the PMIS and the Customs information system; - Technical Working group with Port Authorities, aimed to ensure interoperability between the PMIS and the PCS (Venezia, Genova, Bari, etc.); - IMP project aimed to design a first prototype of a NSW (part A and B of the RFD without custom formalities) Italy will not build a "system", rather an "environment" where the existing relevant Italian systems of the Italian Customs Agency, the Maritime Authority (PMIS) and Port Authorities (PCS) will be able to exchange information. The information will only be transmitted once, as interoperability among systems is already in place. The responsibilities for the (functioning of the) NSW are shared among several authorities (i.e. the Maritime Authority, Customs, Port Authorities, Health administration, Border Control etc.). As pointed above, the NSW is still under development (conceptual phase). The reporting formalities that will be exchanged in accordance with the RFD are all data/reporting formalities referred to in Part A, Part B (IMO FAL forms – Maritime Declaration of Health) and Part C of the Reporting Formalities Directive. A few ports (for example the port of Venice) have Port Community System (PCS) that could partially be in compliance with the RFD, but they are Local Systems and NOT a National Single Window. Furthermore, all Italian seaports will be connected to the future NSW.
	Involved parties The involved administrations and (private) entities using (receiving/sending) ship reporting formalities are: the Ministry of Internal Affairs, the Ministry of Health, the Ministry of Economy and Finance (Custom Agency), the Port Authorities (PCSs):

	The future NSW will receive data: - From the Maritime Shipping Agencies who act on behalf of the ships - From Customs Agency The future NSW will send out data to: - Competent Authority (i.e. the Maritime Authority, Customs, Port Authorities, Health administration, Border Control etc.) - The Shipping Agency
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: Mostly Italian and also English (Lodging/interface) language used in the NSW system/environment Which 'lodging' / interface language will be used in the NSW environment/cloud: Maybe only English from June 2015.
	Interoperability with SSN The SW will be interoperable with SSN.

9.4.2.13 Latvia

LATVIA	
Involved actors	The Ministry of Transport of the Republic of Latvia (hereinafter – MoT) is officially responsible administration for - and in charge of - and coordinates the implementation of the RFD, hereby assisted by its Maritime Dept. and by the Latvian Naval Forces Coast Guard Service (hereinafter – Coast Guard Service), which falls under the Ministry of Defence of the Republic of Latvia. Authorities, which control observance of the port formalities: Coast Guard Service, State Border Guard, customs authority of the State Revenue Service (hereinafter – customs authority), Food and Veterinary Service, State stock company "Maritime Administration of Latvia" (hereinafter – MAL), State Environmental Service, Centre for Disease Prevention and Control, port authorities. Private stakeholders, responsible for providing of information: Ship agents or shipping companies or ship masters/ship owners or their authorised persons; goods owners or possessors or their authorised persons. Other involved actors – waste reception companies, port facility security officers, terminals, State Emergency Medical Service (in special cases).
Reporting formalities	All data/information (ship reporting formalities) according to the RFD: - Security-related Information Declaration (contains ship pre-arrival security information form (SOLAS Regulation XI-2/9 and Article 6.3 of Regulation (EC) No. 725/2004); - FAL 1 form (IMO General Declaration);

	- Ships manifest; - FAL 3 form (IMO Ship's stores declaration); - FAL 4 form (IMO Crew's effects declaration); - FAL 5 form (IMO Crew list); - FAL 6 form (IMO Passenger list); - Notification of Dangerous and Polluting Goods (equivalent or in conformity with FAL 7 form); - Maritime Declaration of Health; - Notification of Waste Delivery. For the cargo agents also: - Discharging order, and - Loading order.
	<u>Specific/additional national reporting formalities (cf. Annex Part C RFD)</u> Some additional requirements are asked by ports, e.g. information about validity of following certificates: 1. Int. Tonnage Certificate; 2. Classification Certificate; 3. Cargo Ship Safety Construction; 4. Cargo Ship Safety Equipment; 5. Int. Oil Pollution Prevention; 6. Int. Load Line Certificate; 7. Ship Safety Radio Certificate; 8. Annual Inspection (Paris MoU); 9. Ship Sanitation Control Exemption Certificate; 10. Documents of Compliance; 11. Safety Management Certificate; 12. Int. Ship's Security Certificate; 13. I.C.L.O.P.D. Certificate; 14. Passenger Certificate. This information can be lodged in the NSW.
Competent authorities	<u>NSW Authority</u> Coast Guard Service (also NCA for SSN) is designated as the NSW Authority for the purposes of the RFD. Coast Guard Service takes part at international activities regarding RFD (eMS working group, EMSA etc.) and coordinates matters regarding reporting formalities at local level, by organising working groups at port level and responsible authorities meetings at national level.
	<u>Specific tasks/responsibilities of the NSW Authority regarding the RFD</u> The NSW Authority is responsible for (coordination of the) practical implementation of the RFD (concept NSW etc.) and managing the national SSN system, including monitoring of data quality and availability, providing IT and engineering support, administration of user accounts and access rights. A service is provided 24/7 via Maritime Rescue Coordination Centre Riga (MRCC Riga).

	The NSW Authority is also responsible for penalties (regarding the reporting formalities): the agents of the Coast Guard Service can punish the (ship) agents, i.e. to give fines if the applicant provides misleading information or refuses to provide the required information (e.g. about dangerous and polluting goods). All "legal" aspects with regard to RFD fall within the competence of the MoT.
	<u>LCAs</u> See below
NSW	<u>Concept / system</u> The (current) idea/concept of the NSW is to develop it on the basis of the existing national SSN system. <u>Actors, involved in the operation of the national SSN system:</u> - National competent authority (NCA): Coast Guard Service: - Local competent authorities (LCAs): port authorities, MAL, State Environmental Service, State Border Guard, customs institutions of the State Revenue Service, Food and Veterinary Service, Health Inspectorate, Centre for Disease Prevention and Control, State Fire and Rescue Service, State Police, Security Police and Transport Accident and Incident Investigation Bureau (TAIIB); - Authorised system users: ship owners, possessors or authorised persons thereof, cargo owners, possessors or authorised person thereof, commercial companies, which provide agency services of ships, commercial companies, which provide agency services of cargos, commercial companies, which provide other services in the port (e.g. ensure cargo transfer and storage, accept and manage ship-generated waste, ensure the protection of ports and port facilities). <u>How the national SSN system runs:</u> All users have to be registered in a SW database. Before they start to work with the SSN system (SW Database), they have to authorize themselves. After successfully logging in, users submit the required information (which is to be reported) into the system. Further, the information is sent by the system to the responsible institutions (i.e. the authorized users of the SW system). The authorities, which control the observance of port formalities (listed above in "Involved actors") have to approve or reject the received information. They have also a possibility to make comments. The NCA compiles the SSN messages and forwards them to the EU SSN system. The NSW provides a number of additional functions: - International Ship and Port Facility Security (ISPS) module for terminal security officers; - Secondary or reference data sources Data Base (e.g. location codes, SSN users contact details, ship particulars, black list, banned vessels etc.); - Information on departing vessel submitted by the Waste receiving companies. Following the access rights requirements, the national SW Web browser-based mechanism offers two interfaces:

	- Textual interface: provides direct access to SW system using a textual layout; - Graphical interface: uses geographical information system technology to provide access to ship positions enriched with the data in national SW system. The National SW system supports LCAs users access to: - Vessel related information; - Port logistics information; as well as gives the possibility of: - Monitoring of the ships having potential risks to safety, security and environmental issues, efficient and timely response to maritime incidents at sea including search and rescue operations. National SW users have access only to the information they have been authorized to use in accordance with the roles and access rights. The system's confidentiality service ensures that information is not disclosed to unauthorized users when transmitted to the system. The confidentiality is guaranteed by Secure Socket Layer (SSL) and 2 ways SSL with ECSS. The Coast Guard Service and information providers/users sign the agreement according to which each user receives his unique user identification (ID). The issued ID is equal to the electronic signature and the users' performance can be monitored and held accountable. <u>Further development of the national SSN System</u> The NSW is still "under development" and not fully operational yet. At national level data will be exchanged with the State Boarding Guard system REISS, E-Customs and other systems (e.g. terminal systems - Baltic container terminal, Riga central terminal and shipping companies MSC etc.). Exchange mechanisms with XML format ASAP are planned to be used not later than the end of 2014.
	<u>Involved parties</u> MoT (and its Maritime Dept.), Coast Guard Service and other institutions mentioned in previous sections are involved in the functioning of the SW. Latvian sea ports are involved as well. The difficulty regarding the ports is that ports use old systems and it is still not decided whether to update their systems or use the SW only (once in place).
	<u>Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data</u>: Latvian and English <u>(Lodging/interface) language used in the NSW system/environment</u>: Latvian and English
	<u>Interoperability with SSN</u> The NSW will be interoperable with SSN: The (current) idea/concept of the NSW is to develop the NSW on the basis of SSN

9.4.2.14 Lithuania

LITHUANIA	
Involved stakeholders	The Klaipeda State Seaport Authority is the main actor regarding reporting formalities (and the NSW), and is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the Reporting Formalities Directive (RFD): The other administrations involved in the coordination/harmonisation of ship reporting formalities are Lithuanian Customs, Lithuanian Boarder Guard, Klaipeda Health Center, the Lithuanian State Veterinary Service, the Lithuanian State Plant Protection Service, and the Lithuanian Fishery Dept. There is no coordination (regarding reporting formalities) at local level (i.e. not at a national lever, for example at province level/harbour level, …)
Reporting formalities	Data/information exchanged through the SW IMO FAL, BoL's, loading/unloading orders, etc...
	Specific/additional national reporting formalities (cf. Annex Part C RFD) Lithuania does not require additional (national) reporting formalities.
Competent authorities	NSW Authority The Lithuanian Maritime Safety Administration has been designated as the NCA with regard to the SSN, but by law there is no NSW Authority designated specifically for the purpose of the RFD: The Klaipeda State Seaport Authority considers itself as the de facto NSW Authority with regard to the RFD since they are taking care of all practical matters regarding the NSW (they manage the system, receive all info and (re)distribute it, .etc.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD (1) as an NCA with regards to SSN is mainly a coordination role (the reporting (itself) to SSN is done directly by LCAs) (2) de facto with regard to the RFD: taking care of all practical matters regarding the NSW (manage the system, receive all info and (re)distribute it, ...) But the de facto NSW Authority does not have 'powers' to actually take coordinating measures, e.g. to issue regulations - for example 'protocols' – (or give fines) to effectively coordinate (and maintain) the harmonisation of requested reporting formalities within the MS.
	LCAs The Klaipeda State Seaport Authority (KSSA) - which is actually also the NCA and the NSW Authority – and the Butinge terminal are considered as LCAs with the purposes of the RFD. The LCAs do not collaborate among each other. The LCAs PCSs are directly linked

	to Lithuanian Maritime Safety Administration's system: providing actual data on ship movements within port area (and the LCA are also reporting directly to SSN (via XML messaging)).
NSW	Concept / system The existing SSN-system will be used as a basis for the maritime SW; but the NSW (which will be a complex infrastructure, a 'modular' system) is still 'under development': it will be an integrated interface through which data from different domains can be exchanged. All existing PCS's (ports) will be integrated, as well as all concerned authorities, and SSN. The purpose is to integrate as much as possible the existing systems in order to not waste the investments that have been made in the past (e.g. SSN, and the systems that have been set up in/by the big ports as Hamburg, Bremen, ...). As Lithuania only has one (sea)port, which is Klaipeda (the private owned Butinge terminal, is only a very small port in terms of ship arrivals) a role of SW is played by the Port of Klaipeda Authority. The Port Authority operates as an "advanced PCS" which has a SW concept. Klaipeda could be considered as LCA, but since it's the only port, it actually (de facto) is the NSW Authority. On the basis of an order adopted by Minister of Transport and Communications (in 2010/2011) a national system (a sort of 'SW') was created in 2010: It is quite a complex system, but already operational. And the purpose of setting up this system was to let the shipping agents submit all the IMO FAL forms, Health declarations, and ISPS declarations (declarations of security) in order to distribute them to the relevant authorities (The Health administration, Customs, the State Border Control). Additionally there are two other existing system: (i) The Port Traffic Management System. This system is being used 10 years already in Klaipeda port, and was created for the Klaipeda Port Authority and the shipping agents to exchange documents (e.g. IMO FAL forms). This system is also used for SSN purposes (there is no separate SSN system). (ii) KIPIS: a Freight and Goods Information System, which is designed for transferring and processing information on freight movement via the port of Klaipeda. The system is available to present by more than 150 companies operating in the Port and state enterprises and for the authorities mentioned below. These 2 systems are connected to each other. http://www.portofklaipeda.lt/kipis-freight-and-goods-information-system Remark: Already before the RFD was issued some harmonisation/coordination of reporting formalities took place (on Ministry level): By a national Order adopted (by the Minister of Transport and Communications - in 2010/2011): a national system (some sort of 'NSW') was created in 2010; it is quite a complex system. And the purpose of setting up this system was to let the shipping agents submit the IMO FAL forms, Health declarations, ISPS declarations (declarations of security) in order to distribute them to the authorities (Health administration, Customs, the State Border Control).

	Involved parties The other involved administrations using (receiving/sending) ship reporting formalities are: - The Klaipeda State Seaport Authority is the main actor regarding reporting formalities and is responsible for managing the system. - - Other parties involved in the functioning of the NSW are Customs, Boarder Guard, Klaipeda Health Center, State veterinary service, State plant protection service, and the Fishery department.
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: Lithuanian and English (Lodging/interface) language used in the NSW system/environment: It is not known yet which languages will be used.
	Interoperability with SSN The NSW is interoperable with SSN: cf. Port Traffic Management system - see above - It has a direct XML messaging interface implemented (message from ports are sent automatically to SSN.

9.4.2.15 Malta

MALTA	
Involved stakeholders	The Maltese Authority for Transport is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD. The other administrations involved in the coordination/harmonisation of ship reporting formalities are Customs, Ship agents, the Health Department, and the Police Department. There is no coordination (regarding reporting formalities) at local level (i.e. not at a national lever, for example at province level/harbour level, …)
Reporting formalities	Data/information exchanged through the SW All reporting formalities according to the Reporting Formalities Directive and the FAL Convention (IMO FAL forms).
	Specific/additional national reporting formalities (cf. Annex Part C RFD) Malta does not require additional (national) reporting formalities.
Competent authorities	NSW Authority The Maltese Authority for Transport has not officially been designated as the NSW Authority in Malta for the purpose of the RFD, but is acting de facto as the NSW Authority.

	Specific tasks/responsibilities of the NSW Authority regarding the RFD The Authority for Transport in Malta is responsible for: - the coordination between the relevant local authorities and private stakeholders regarding ship reporting formalities - issuing regulations concerning the ship reporting formalities (e.g. regulation transposing the EU Directives and transposing and complying with the international conventions) - monitoring (non)compliance with national laws transposing international legislation and enforcing these national laws - requesting that deficiencies are addressed and corrected - administering administrative penalties in case of non-compliance with national laws - initiating legal proceedings in court in case of severe non-compliance (i.e. when administrative sanctions are considered too light) - taking the necessary measures to ensure the quality and completeness of data - gathering statistics - coordinating with EMSA - managing and taking responsibility for the NSW and taking care of system errors or upgrades that need to be carried out.
	LCAs The LCAs that have been designate for the purpose of the Reporting Formalities Directive are (i) the Authority for Transport in Malta and (ii) Customs. The LCAs regularly meet and communicate with each other through SSN, NSW, and via e-mails.
NSW	Concept / system The Maltese Authority for Transport already operates the PortnetMalta system, an IT system for the submission of documents in electronic format. This system is used by shipping agents and allows them to monitor the progress of their notice and enhance the work of the service providers when providing service to the ships. PortnetMalta system is also connected to SafeSeaNet, the European database of the European Maritime Safety Agency (EMSA) for marine and environment protection. A NSW according to the RFD has not been developed yet (still under development). It is not known yet whether or not a complete new system/environment will be set up, or if an already existing system will be used or 'rebuild' in order to make a proper NSW. No information is available yet on how the SW will look like from a 'technical/IT point of view (machine to machine interface, web interface...), or which reporting formalities will be exchanged through the future NSW, or if all Maltese seaports be connected to the future NSW.
	Involved parties The parties using (receiving/sending) ship reporting formalities are: - The Maltese Authority for Transport (officially responsible administration for - and in charge of - (and is coordinating) the implementation of the Reporting Formalities Directive (RFD)) - Customs (data processor)

	- Ship agents (data providers) - Ports (data processors) - EMSA (data receiver) - The Police (data processors) - The Health Department (data processors)
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: English (Lodging/interface) language used in the NSW system/environment: English
	Interoperability with SSN The future NSW will be interoperable with SSN

9.4.2.16 Netherlands

NETHERLANDS	
Involved stakeholders	"Rijkswaterstaat", the Dutch Government Waterways Authority (part of the Dutch Ministry of Infrastructure and the Environment and responsible for the design, construction, management and maintenance) is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD. The other administrations involved in the coordination/harmonisation of ship reporting formalities are Customs, the Port Authorities and the Coast Guard, Environmental and Transport Inspection, Health Service, Seaport Police, the "Royal Marechaussee", PCSs, ... All involved stakeholders are working closely together in making the most appropriate choices for the future Maritime SW environment. There is no specific coordination (regarding reporting formalities) at local level.
Reporting formalities	Data/information exchanged through the SW All reporting formalities according to the Reporting Formalities Directive and the FAL Convention (IMO FAL forms).
	Specific/additional national reporting formalities (cf. Annex Part C RFD) The Netherlands do not require additional (national) reporting formalities.
Competent authorities	NSW Authority "Rijkswaterstaat", the Dutch Government Waterways Authority has been designated as the NSW Authority for the purpose of the RFD.

	Specific tasks/responsibilities of the NSW Authority regarding the RFD The NSW Authority is responsible for the coordination between the involved authorities and private stakeholders regarding ship reporting formalities
	LCAs No LCAs have been designated for the purpose of the RFD.
NSW	Concept / system A Dutch Maritime SW is being developed (design phase) – the developers are waiting for the EU functional requirements. The Dutch Government Waterways Authority and Dutch Customs are cooperating and working closely together to implement the Maritime NSW: The Dutch Government Waterways Authority takes on the role of project manager, while Customs is responsible for setting up the required ICT-provisions. The NSW will be based on – and connected to – as much existing systems (e.g. PCSs, SSN – SPOC NL, the Coast Guard system "MIK", the Customs system "SAGITTA", the Seaport police system "PARDEX", ...) as possible. (In case existing systems should need to be adapted to the future NSW, the concerning organisations will have to take care of the necessary amendments themselves). The 'WCO data model' will be used for incoming SW messages (B2G, from the Industry to the Maritime SW) and outgoing SW messages (G2G, from the Maritime SW to the administrations): incoming GOVCBR & "GOVXML" – outgoing "GOVXML" The Maritime SW will function as the 'processing mail room' in between the data providers (captains, shipping companies and agents) and data receivers/processors (Customs, Coast Guard, ...): - the data providers send data directly to the NSW or via the existing Customs system, Fishery system or PCs (via which the data will be further transmitted to the NSW) - the systems of the data receivers/processors (e.g. SSN – SPOC NL, the Coast Guard system "MIK", the Customs system "SAGITTA", the Seaport police system "PARDEX", ...) receive the data from the NSW Remark: In parallel with the Maritime SW development, an 'Inland Waterway Single Window' is being developed as well. Both the Maritime SW and the Inland Waterway SW will become part of the (already existing) broader 'SW Trade & Transport', which supports data exchange via one single window between the Industry and the government with regard to all transport modalities.
	Involved parties The parties using (receiving/sending) ship reporting formalities are: - Data providers: Ship captains, ship agents, shipping companies - Data processors/receivers: Dutch Government Waterways Authority, Customs, the Port Authorities, the Coast Guard, Environmental and Transport Inspection, Health Service,
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data:

	English and Dutch (Lodging/interface) language used in the NSW system/environment: English en Dutch
	Interoperability with SSN The future NSW will be interoperable with SSN

9.4.2.17 Poland

POLAND	
Involved stakeholders	The Ministry of Infrastructure and Development is officially the responsible administration for - and in charge of the implementation of the RFD. The other involved administrations are Directors of Maritime Offices, Customs, Border Guard, National Sanitary Inspection, Port Authorities. There is no coordination (regarding reporting formalities) at local level (for example at province level/harbour level) (Remark: The national Polish legislation transposing the RFD was widely consulted with the social partners and private stakeholders. Also technical meetings were organised with the Port Authorities to discuss the possibility of linking the port community systems with the NSW. Regular trainings are arranged as well in order to inform agents about new/changed legislation and following changes in applications. The bilateral meetings with customs administration had taken place.)
Reporting formalities	Data/information exchanged through the SW For the time being, the following formalities are exchanged through the Polish NSW: FAL forms 1-7, Maritime Declaration of Health, security information, waste and residues information, HAZMAT information, pre-arrival and pre-departure information. (Remark: The list above concerns obligations in scope of maritime reporting formalities mentioned in the Annex to the directive 2010/65/EU. Works on dedicated reporting procedures for inland shipping are in progress. Recommendation of the EU RIS expert forum in terms of ERI (Electronic Reporting International) notes are taken into account. That is not decided so far, if the ERI standard will be incorporated to the NSW architecture.)
	Specific/additional national RPF (cf. Annex Part C RFD) No specific national formalities are required.
Competent authorities	NSW Authority Deputy Director for Marine Inspection, Maritime Office in Gdynia has been designated as the SSN Coordinator. As the NSW is part of the National SSN System it is clear that the role of the NSW Authority should be covered by the SSN Coordinator (SSN NCA).

	Specific tasks/responsibilities of the NSW Authority (SSN Coordinator) SSN coordinator maintains the SSN Service operating 24h/7days a week. The SSN coordinator may authorise the administrators of the communication subsystems of the National SSN System to grant access rights to these subsystems. NCA coordinates the work of Maritime Offices in the respect of SSN System. The powers of the NCA are mentioned in the national Polish legislation: The NCA does not issue regulations. However, the NSW Authority can make proposals for changes/new legislation if necessary.
	LCA's The following entities are considered as LCAs: Directors of Maritime Offices*, Maritime Search and Rescue Service, Hydrographic Office of the Polish Navy, Maritime Operation Center, Border Guard, Customs, Marine Fisheries Authorities, Pomeranian Voivodeship, Warmian-Masurian Voivodeship, West Pomeranian Voivodeship, Port Authorities, Marine Pilots, National Sanitary Inspection, Entities competent in matters of national security and public order and safety, as well as entities responsible for crisis management, master, ship's representatives. The LCAs exchange information through the National SSN System applications: MARSIES and PHICS. All required surveillance and formal reporting information is delivered to the Central SafeSeaNet/Thetis by MARSIES. The PHICS portal is dedicated for ship's representatives to fulfill reporting formalities. Tracking and tracing data comes from VTS systems and after post processing (by MARSIES) are available for European SSN users via Central SSN System. (* The ISO system is implemented in all Maritime Offices. In addition, every year special agreements between NAVY Hydrographical Office and Polish Border Guard are signed.)
NSW	Concept / system No new system for the NSW purpose was built. NSW has been developed on the basis of already functioning Polish SafeSeaNet sub-system PHICS and is expected to fulfil obligations imposed by the RFD. The NSW design and implementation on the national level is still pending in reference to the interoperability with the customs system. Works on common recommendations are on-going and coordinated by the EC. Poland is waiting for a final outcome in the field of Data Mapping and Functionalities especially ones referring to the customs data. There is no final information available yet on how the SW will look like from a technical/IT point of view in reference to the interoperability with the customs system. The reporting formalities enlisted in the Annex to the RFD that are already exchanged through the NSW are: FAL forms 1-7, Maritime Declaration of Health, security information, waste and residues information, HAZMAT information, pre-arrival and pre-departure information. (Remark: Before the RFD was issued in 2010 some coordination concerning ship

	reporting formalities was already in place. It was transposed through port regulations and implemented through PHICS (Polish Harbour Information and Control System which was launched in 2004.)
	Involved parties The involved administrations and private entities using (receiving/sending) ship reporting formalities are: - The Ministry of Infrastructure and Development (officially the responsible administration for - and in charge of the implementation of the RFD) - Other involved administrations and (public or private) entities using (receiving/sending) ship reporting formalities: Directors of Maritime Offices, Customs, Border Guard, Port Authorities, Hydrographic Office of the Polish Navy, Maritime Operation Center, Marine Pilots, National Sanitary Inspection and all other LCAs mentioned higher – Remark: Possibly other stakeholders may be identified during the further implementation.
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: Polish and English (Lodging/interface) language used in the NSW system/environment: The Data Mapping and Functionalities Working Group (coordinated by EU Commission) is going to recommend at least two versions of the NSW interface: the national (local) language and English Polish SSN sub-systems MARSIES and PHICS are equipped in Polish and English user interface.
	Interoperability with SSN The NSW is interoperable with SSN: the NSW is part of National SSN System. The existing national system PHICS is considered as NSW.

9.4.2.18 Portugal

PORTUGAL	
Involved stakeholders	The *Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos* (i.e. the General Directorate for Maritime Natural Resources, Safety and Services – "DGRM")) is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD. Other entities that are expected to be involved in the implementation of the RFD in Portugal are the Portuguese Customs, the Portuguese Port and Maritime Authorities, The Portuguese Borders Control Services and the Portuguese Health and Phyto/Vet Authorities. There is no coordination (regarding reporting formalities) at local level (i.e. not at a national lever, for example at province level/harbour level, …)
Reporting	Data/information exchanged through the SW

formalities	No National Single Window has been implemented yet. All the ship reporting formalities are nowadays reported by all ports by electronic data change between the ship and the port authority using each one of the Port Management Systems.
	Specific/additional national reporting formalities (cf. Annex Part C RFD) According to the Portuguese Decree-Law 218/2012, complementary data that might be feed regarding national legislation shall also be transmitted by electronic means. Its definitions will be addressed in an ordinance that will settle the administrative and technical procedures for the implementation of the referred Decree-Law 218/2012.
Competent authorities	NSW Authorities The Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos (DGRM) has been designated - and acts - as the NSW Authority for the purpose of the RFD.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The harmonisation, coordination and definition of procedures regarding to reporting formalities now fall within the competence of NSW Authority (DGRM) - in cooperation with the other national authorities involved. No (coordination) internal measures regarding the harmonisation of reporting formalities have been taken yet. The NSW Authority does not officially have 'powers' to actually take coordinating measures, e.g. to issue regulations - for example 'protocols' – (or give fines) to effectively coordinate (and maintain) the harmonisation of requested reporting formalities within the Member State. (Remark: Currently the coordination of the National SSN procedures is also a task of DGRM.)
	LCAs The Port Authorities (or other entities responsible for port management) have been designated as LCAs for the purpose of the RFD. The local port management system is used by local authorities, like Portuguese Customs, the Portuguese Port and Maritime Authorities, The Portuguese Borders Control Services and the Portuguese Health and Phyto/Vet Authorities. Collaboration between LCAs must be arranged in the "ordination" (regulation) regarding the administrative and technical procedures for the implementation of the Decree-Law 218/2012: Currently, the information (reporting formalities) coming from ships are submitted by the ship representatives (usually shipping agents) in the port management systems (one per port authority), and then electronically forwarded to the Coastal VTS System (operated by DGRM), which - on its turn - is sent by to the electronic notifications to SafeSeaNet - EMSA. Therefore, there are procedures defined between DGRM (Mainland VTS Control Center) and the Port Authorities regarding the SSN data interchange.
NSW	Concept / system Presently, the national SPOC for SSN is DGRM and the interface used is the National Maritime Navigation Database, integrated in the Coastal VTS System, is operated by DGRM. The future model regarding the implementation of SW still

	needs to be clarified in the ordinance that will settle the administrative and technical procedures for the implementation of the referred Decree-Law 218/2012 (Currently, the national SPOC for SSN is DGRM as national competent authority for SSN; and the interface that is being used therefore is the National Maritime Navigation Database (integrated in the Coastal VTS System, is operated by DGRM).) Remark: At this moment there is already some harmonisation and/or coordination regarding ship reporting formalities though: Portugal established national procedures for dealing with SafeSeaNet messages and sending them to EMSA (as required by Directive 2002/59/EC - updated by Directive 2009/17/EC - establishing a Community Vessel Traffic Monitoring and Information System). This harmonisation/coordination takes place at national level (IPTM and now DGRM) and at local level (Port Authorities), regarding Port and Hazmat notifications in the scope of SSN.
	Involved parties The involved entities using (receiving/sending) ship reporting formalities are: The Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos (i.e. the General Directorate for Maritime Natural Resources, Safety and Services – "DGRM")) - officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD. Other involved administrations and other (public or private) entities using (receiving/sending) ship reporting formalities: Portuguese Customs, the Portuguese Port and Maritime Authorities, The Portuguese Borders Control Services and the Portuguese Health and Phyto/Vet Authorities.
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data? No information with regard to this issue is available yet. (Lodging/interface) language used in the NSW system/environment No information with regard to this issue is available yet.
	Interoperability with SSN The NSW will in principle be interoperable with SSN, as there is an effort to approach the established national SSN; although the details will depend on the ordinance that will define the administrative and technical procedures for the implementation of the referred Decree-Law 218/2012.

9.4.2.19 Romania

ROMANIA	
Involved stakeholders	The Romanian Naval Authority is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the Reporting RFD. The other involved administrations are Border Control, Medical Control, Customs, the Harbours (Port master, which are 'branches' of the Romanian Naval Authority),

	are involved as well.
Reporting formalities	Data/information exchanged through the SW No information could be provided yet.
	Specific/additional national reporting formalities No information could be provided yet.
Competent authorities	NSW Authorities The Romanian Naval Authority will be the NSW Authority (this authority is also the NCA for SSN) (Remark: The Romanian Naval Authority is also the RIS-authority (which is operating the RIS system). The Naval Authority consulted all the operators (port operators), owners, and companies... all the stakeholders involved in the inland waterway transport.)
	Specific tasks/responsibilities of the NSW Authority regarding the RFD No information could be provided yet.
	LCAs In Romanian no LCAs have been (nor will be) designated for the purpose of the RFD.
NSW	Concept / system Romanian Naval Authority is part of AnNa Consortium which is an EU Member States driven project - in close co-operation with the EC - to support the effective implementation of the EC Directive 2010/65/EU (Reporting Formalities for Ships arriving in/departing from EU ports). Romania is waiting with the actual building of the NSW for the progress being made by - and output from - the Data Mapping Expert group. The NSW has not been developed yet, and is still under development. It will be a new system, but most likely be based on the existing SSN system. No information is available yet on how the SW will look like from a 'technical/IT point of view (machine to machine interface, web interface...), or which reporting formalities will be exchanged through the future NSW. The Romanian sea ports will probably be connected to the future NSW (because the harbours/port masters, some of them with their own IT systems, are working together with the Naval Authority, and are already exchanging information within the scope of SSN. (Remark: The RFD is transposed in national Romanian law by Law 162/15.05.2013 regarding the reporting formalities applicable to vessels entering or leaving Romanian ports.)
	Involved parties The involved administrations and other private and public entities that will be

	using (receiving/sending) ship reporting formalities through the future NSW: - The Romanian Naval Authority (who coordinates the matters regarding reporting formalities and will be responsible for managing the NSW - Border Control, Medical Control, Customs, the Harbours (Port master, which are 'branches' of the Romanian Naval Authority) - The national sea ports
	Language used Language used by/in the data providers (e.g. ship masters, agents) and processors (e.g. the NSW) - while providing/receiving data: English (Lodging/interface) language used in the NSW system/environment: English
	Interoperability with SSN The NSW will (most likely) be interoperable with SSN, because it is likely that the NSW will be based on the existing SSN system.

9.4.2.20 Slovenia

SLOVENIA	
Involved stakeholders	The involved administrations are: - Slovenian Maritime Administration - Customs Administration of the Republic of Slovenia - Police and Security Authorities - Health Administration/Inspection - Port of Koper - National Maritime Facilitation Committee
Reporting formalities	Data/information exchanged through the NSW - All according to RFD (Entry Summary Declaration excluded) - Maritime statistics
	Specific/additional national reporting formalities (cf. Annex Part C RFD) Maritime statistics
Competent authorities	NSW Authority The Slovenian Maritime Administration
	Specific tasks/responsibilities of the NSW Authority regarding the RFD - Maritime traffic control - MRCC/MAS - PSC

	- Port Authority - Security Authority (for ships only, not for the ports)
	LCAs N/A due Slovenian NCA covers all LCA
NSW	Concept / system - Web interface (existing public portal) - Xml services under development - Exchange between administrations - Machine-Machine interfaces and NSW-PCS interfaces
	Involved parties - Slovenian Maritime Administration - Customs Administration of the Republic of Slovenia - Police and Security Authorities - Health Administration/Inspection - Port of Koper - Agents
	Language used Language used by/in the data providers (e.g. ship masters, agents) and processors (e.g. the NSW) - while providing/receiving data: Slovenian/English (Lodging/interface) language used in the NSW system/environment: Slovenian/English
	Interoperability with SSN Full interoperability with SSN

9.4.2.21 Spain

SPAIN	
Involved stakeholders	The Spanish Port administration is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD. The other involved entities are Spanish Customs, the Spanish Police (border control and protection), the Spanish sanitary and veterinary administration, the Spanish fisheries administration, the Spanish maritime administration, the Spanish search & rescue administration, Port Authorities and PCSs, Ministry of Defence. There is some coordination (regarding reporting formalities) going on at local level (i.e. not at a national level, for example at province level/harbour level, …): Ports are being coordinated through the Port Authorities
Reporting formalities	Data/information exchanged through the SW All data - except DPG and pre arrival notification (ISPS), Passenger and Crew list, Maritime Declaration of Health, and waste notification that still being reported in

	paper or by a scanned document (Pdf).
	Specific/additional national RPF (cf. Annex Part C RFD) In Spain some additional national formalities are applicable: Mainly information necessary to management of port operations and port calls. These formalities/data can be lodged in the NSW.
Competent authorities	NSW Authority The *Puertos del Estado* (Spanish Port administration) has been designated as the NSW Authority in Spain for the purpose of the RFD.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The NSW Authority is responsible for the management of the NSW system, and can define protocols, procedures, business rules and take decisions about the structure and messages for reporting - for example the ship call ID format, or the data that can be changed before arrival or departure of a vessel.
	LCAs The Port Authorities (acting as a local point of entry to NSW) have been designated as LCAs for the purpose of the RFD. There is a group '*GAP*' (*Grupo de Armonización de Procedimientos*) for the coordination between the NSW Authority and the LCAs.
NSW	Concept / system In Spain there already is a (1) 'Customs SW (since 1995) and a (2) Maritime administration SW ('MSW') (since 2000). Both the Custom SW and the MSW are operated by Port Administration, so there is a one integrated SW which will function as a 'NSW' for the purpose of the RFD. (It is foreseeable that the Spanish relevant legislation will be adapted in order to clarify this situation a bit more.) The NSW for the purpose of the RFD is still under development because DPG, waste, pre-arrival notification and passenger and crew lists are not reported by electronic means. With regard to how the NSW will look like from the technical/IT point of view, there are the two possibilities: machine to machine and web interface. The web interface is for small ports and small agents. In any case the web interface is at a LCA level so the NSW always operate machine to machine. The National Port Administration (Puertos del Estado) is responsible for the NSW-system. The reporting formalities that are being - and will be - exchanged through the NSW are all reporting formalities except DPG and except pre arrival notification (ISPS): General Declaration (Call Application), DPG notification (HAZMAT and FAL 7), Waste notification, List of Passengers and Crew, Pre-Arrival Notification, Maritime Declaration of Health, Manifest and Summary Declaration for Temporary Storage (Customs). All Spanish seaports with commercial activity will be connected to the future NSW. Remark: There already is/was (before 2010) some degree of harmonisation and/or coordination at national level through a working group among competent

	authorities, the Procedures Harmonisation Group (Grupo Armonización Procedimientos "*GAP*").
	Involved parties The involved administrations who will be using (receiving/sending) ship reporting formalities via the NSW are: - The Spanish Port administration (who is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the Reporting Formalities Directive (RFD). - Other involved administrations or other private or public parties: Spanish Customs, the Spanish Police (border control and protection), the Spanish sanitary and veterinary administration, the Spanish fisheries administration, the Spanish maritime administration, the Spanish search & rescue administration, Port Authorities and PCSs. The data providers are the Masters, Shipping Companies, and Agent; the data processors are the Puertos del Estadoa and the Port Authorities; and the data receivers are Port Authorities, Customs, Police, Ministry of Defence, Sanitary and Veterinary, Maritime Administration, SAR Administration.
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: Spanish (Lodging/interface) language used in the future NSW system/environment: The EDIFACT standard is being used (Remark: Data providers won't probably want to change if they are not sure of a complete European level harmonisation.)
	Interoperability with SSN The SW will be interoperable with SSN: all the messages as defined by EMSA will be sent from the NSW to SSN and the NSW will be able to receive form SSN too.

9.4.2.22 Sweden

SWEDEN	
Involved stakeholders	The Swedish Maritime Administration (SMA) is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the Reporting Formalities Directive (RFD). Other administrations involved in the coordination/harmonisation of ship reporting formalities are the Swedish Coast Guard, the Swedish Customs and the Swedish Transport Agency (STA). There is no coordination (regarding reporting formalities) at local level (i.e. not at a national level, for example at province level/harbour level, …)
Reporting formalities	Data/information exchanged through the SW Required data according to the RFD is already in place (with the reservation of

	possible customs' e-Manifest). The only thing left to be implemented is the description of how the information shall be provided.
	Specific/additional national reporting formalities In Sweden some additional reporting formalities are required: Pilotage and fairway dues: The SMA is financed by the fairway dues, which have to be paid by every ship). ATA/ATD and expanded inspection: The STA is the competent authority for Port State Control (PSC) and this information is collected today through the national SSN.
Competent authorities	NSW Authority The SMA is designated as NSW Authority and has been appointed and tasked by government to develop and provide a SW-system in accordance with the RFD. The STA is the competent authority for PSC and ISPS and is also appointed by the Government to be responsible for the regulatory implementation of certain Union legislation regarding e.g. ships notification at arrival and departure including dangerous and polluting goods, waste and residues and security information. The Swedish Coast Guard is the responsible authority for a national point of contact (Swedish Maritime Clearance) for border checks on persons (Schengen) and maritime security, ISPS (by agreement with the STA). The Swedish Customs is the competent authority regarding the Customs Code (entry summary declaration).
	Specific tasks/responsibilities of the NSW Authority regarding the RFD The SMA has also been tasked by the Government, to develop mechanisms for the harmonisation and coordination of reporting formalities within the Union and to coordinate this with the Commission and other Member States.
	LCAs No LCAs have formally been designated in Sweden for the purpose of the RFD yet. However, there are LCAs within the SSN (VTMIS-Directive).
NSW	Concept / system The SMA is creating a (new) Maritime NSW which will be able to connect with (systems of) other authorities (e.g. Customs). The involved administrations will use the existing systems (e.g. Customs, SSN). (Remark: Legally it is too complicated (and nearly impossible) to create a new SW in which all information is collected and exchanged ('domain-crossing'). Therefore it is easier and cheaper to connect existing systems, where the administrations can continue to work within their areas of responsibilities and where they have the expertise. A lot of 'integration' (between the existing systems) will be necessary, which might be complex... but still the best solution.)
	Involved parties

	The involved administrations and other (public or private) parties that will be using (receiving/sending) ship reporting formalities are: - The SMA (who is/will be responsible for managing the SW system) - The Swedish Coast Guard, Swedish Customs, the STA - Other maritime stakeholders (e.g. agents, shipping companies) - Ports (although they have their own systems today, the NSW will most likely be used to exchange information with the ports. Moreover, some ports have expressed that they may not need their own (expensive) systems and that they are willing to use the NSW (once in place) instead (to save a lot of money in the long run).
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data Swedish and English (Lodging/interface) language used in the NSW system/environment English
	Interoperability with SSN All data that is sent to the national SSN system (SafeSeaNet Sweden) is being forwarded to SSN. There is already information exchange within e.g. the port of Gothenburg, where all ship brokers and shipping companies report to the port system, and where the information is forwarded to the national SSN system. The NSW is planned to be fully interoperable with SSN in accordance with the RFD and according to what is being decided at the eMS expert group and at the AnNa project.

9.4.2.23 United Kingdom

UNITED KINGDOM	
Involved stakeholders	The British Department for Transport (DfT) is officially the responsible administration for - and in charge of - (and is coordinating) the implementation of the RFD. The other involved administrations involved in the coordination/harmonisation of ship reporting formalities are Her Majesty's Revenue & Customs, Home Office, UK Border Force, Maritime & Coastguard Agency, and Department of Health. The Association of Port Health Authorities (APHA) is also involved - The APHA is an organisation that represents at a national level the interests of relevant local health authorities. Local health authorities that cover coastal districts of the UK receive the Maritime Declaration of Health so have an interest in one part of the reporting formalities.
Reporting formalities	Data/information exchanged through the NSW All data required under Section A of the Annex to the RFD: - FAL form 1 on all occasions - FAL form 3 if there are Ships Stores on board - FAL forms 4 and 5 on all occasions where crews are on board and have personal

	effects with them - FAL form 6 is only required when there are 12 or fewer passengers on board - FAL form 7 for dangerous goods - Maritime Declaration of Health Remark: Where appropriate, there are agreements with shipping companies to share their own cargo and passenger manifests rather than use FAL forms.
	Specific/additional national RPF (cf. Annex Part C RFD) In the UK no additional (national) reporting formalities are applicable.
Competent authorities	NSW Authorities No NSW Authority for the purpose of the RFD has been designated (not yet). The NSW Authority will be designated when the UK has determined the preferred technical solution. For the moment all relevant departments are collaborating on implementation through a steering group and a technical working group, both chaired by the Department for Transport.
	Specific tasks/responsibilities of the NSW Authority regarding the RFD Not applicable – no NSW Authority has been designated yet.
	LCA's The Port Health Authorities have been designated as LCAs for the purpose of the RFD.
NSW	Concept / system The UK has not yet determined the technical solution for the NSW for the purposes of the RFD. At the moment there are 3 conceptual options: 1. An existing electronic system could be extended to become the NSW (e.g. the Home Office could extend its immigration SW, the 'Collaborative Business Portal)'; 2. A new 'front window' could be created to channel reporting formalities to/from existing electronic systems (the Collaborative Business Portal, Manifests, SafeSeaNet) 3. A new electronic system could be created for all reporting formalities. The most cost effective option (in terms of both the shipping industry that submits information and national/local administrations that use it) will be chosen. BMT Group (British Maritime Technology) has been appointed to gather the information required to determine the preferred option (an analysis of the current and future reporting arrangements and hence what is required to fill the gap between them) and develop a system design document to support procurement of the preferred option. The current development phase is still conceptual: BMT are looking at the 'As Is' and 'To Be' positions for reporting formalities. It is still too early to provide more information on how the SW will look like from a 'technical/IT' point of view (machine to machine interface, web interface…).

	The reporting formalities that will be exchanged through the NSW are mentioned higher ('Reporting Formalities') It is not known yet whether or not all UK seaports will be connected to the future NSW.
	Involved parties The involved administrations and other (private or public entities) who will be using (receiving/sending) ship reporting formalities via the future NSW are: - Data Providers • Ships (usually ships' agents, represented nationally by the Institute of Chartered Shipbrokers) • Possibly 'data aggregators' (intermediate trusted organizations processing information from ships and submitting it through the NSW to reduce the number of bodies with rights to connect to the NSW) depending on agreed solution - Data Receivers • HM Revenue & Customs • Home Office • UK Border Force • Maritime & Coastguard Agency • Local health authorities • Possibly other local public authorities (e.g. police) depending on the agreed solution • Possibly industry bodies (e.g. ports) depending on the agreed solution (Remarks: The Department for Transport is not involved in receiving ship reporting formalities. The UK Border Agency has been absorbed into the Home Office and is no longer a separate organisation; Border Force remains separate.)
	Language used by/in the data providers (e.g. ship masters) and processors (e.g. the NSW) - while providing/receiving data: English (Lodging/interface) language used in the (future) NSW system/environment: English
	Interoperability with SSN It is still too early to say if the future NSW will be interoperable with SSN.

9.4.2.24 EU ports' experiences with regard to the implementation of NSWs

The European Sea Ports Organisation (ESPO) refers to its *Position paper on e-Maritime* (d.d. January 2013), in which the main ESPO comments on the implementation of the RFD are clarified:

- "*SWs are now defined in a way that offers the possibility to MSs to integrate already existing port systems within the national system. Existing PCSs are, de facto, local SWs and it is fundamental that the interfaces between those PCS and the NSW are defined*

and implemented. A PCS shall be understood as a unique community information system that brings together and processes information related both to the logistics of the vessels calling at ports and the logistics of the cargoes.
In that respect, ESPO urges national administrations to integrate existing PCSs as the entry points to the NSWs. Where PCS do not exist, other systems that may be in place are to be considered by the MSs as possible entry points. In any case ESPO believes that port authorities should be actively involved in any system functioning as the entry point to the NSW. ESPO notes that there is often a difference between the information needed for formalities reporting and the actual information that ports need in order to effectively provide services to the ships while at port. Ports need to focus on the operational specificities of their business and therefore need to maintain flexibility and the right to ask for relevant additional information, if needed, in view of better servicing the ships. For example, the FAL form data is not adequate in order to properly organise and manage the vessels' calls. Where existing, PCSs accommodate both operational and formalities data and, in order to avoid duplication of work and repetitive data entries, it is necessary to develop the appropriate interfaces between PCS and NSWs.
As a PSW, the full functionality of a PCS can provide all the various sectors and players within a port community environment with tools specific to them, thus providing a tightly integrated system. It can encompass exports, imports, transhipments, consolidations, hazardous cargo and maritime statistics reporting.[20]

- *Communication formats and protocols to be used for electronic data exchange should be based on open IT solutions that are inexpensive to implement. ESPO considers very important that access to feasible and cost efficient technical means for the digital ship to shore communication is granted in an equal way to all parties involved (e.g. for all vessels and all ports). ESPO believes that personnel and/or financial costs should not limit smaller ports and data providers in fulfilling reporting requirements.*
- *In addition, ESPO asks the EC to further clarify the relation between the NSW development and the e-Customs initiative in order to avoid two co-existing single windows, one for vessels and one for cargo reporting. In most cases, vessel operators are responsible for submitting both vessel and cargo related information, at least for customs clearance in the ports. Furthermore, robust coordination is needed with all other relevant e-initiatives, such as e-Navigation and e-Freight, and with respective EC services and relevant Directives (e.g. 2010/40/EU).*
- *ESPO underlines also the urgent need to define European standardised communication formats for electronic data exchange in view of the pressing timetables while respecting existing International standards. In this regard, the on-going work in the dedicated* expert group on the implementation of the SRF is very important."[21]

With this regard specific attention could also be paid to certain UK ports, using Pdf files for certain formalities – which would make the exchange of information quite difficult (since no changes can be made to the templates). The UK Department of Transport is aware of this issue. The UK is keen to minimise the cost burden on industry imposed by the RFD so intends to minimise the changes from existing practices as far as possible, perhaps looking over the longer term at working with industry bodies to encourage the use of more flexible electronic formats. The British Ports Association (BPA)[22] was contacted as well regarding the experience of

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[20] "Multimodal Innovation Sustainable Maritime & Hinterland Transport. Best Practice Guide on SW, e-Maritime and PCS - Environment for the application of ICT Technologies in European Ports", Port Integration (23 November 2011)

[21] http://www.espo.be/images/stories/policy_papers/policy_papers2013/2013-01-24%20espo%20position%20on%20e-maritime.pdf

[22] http://www.britishports.org.uk/

private UK Ports, who suggested contacting a private UK port in order to know more about the point of view and possible concerns regarding the implementation of a NSW. Since the implementation process of the RFD and the NSW in the UK is – as in many other MSs - still in progress, ports received little communication concerning this matter. UK ports are aware of the coming SW and are worried about the financial consequences of the RFD (cf. budgeting and financing the costs for amendments of existing systems, setting up new systems…), but seem to be, for now, awaiting appropriate and clear communication and instructions from the competent national administration.

9.4.3 Analysis at EU level - Progress made towards harmonisation and coordination of reporting formalities achieved under Art. 3.2 of the Reporting Formalities Directive

"*The Commission shall in cooperation with the MS, develop mechanisms for the harmonisation and cooperation of reporting formalities within the Union*" (cf. Art. 3.2 of the RFD).

With regard to the organisation of the work concerning the implementation of the RFD, DG MOVE refers to its established collaboration platforms and mechanisms with EMSA and the MSs:

The *project management group* (*PMG*) is set for general planning of the implementation, internal coordination between DG MOVE and EMSA, planning of the work of the *Expert Group on Maritime Administrative Simplification and Electronic Information Services* (the *eMS group*) and subgroups, and for budgetary and resource related predictions.

The eMS group was established by the EC in order to support MSs to implement the RFD in a coordinated matter. The members of this Group, one per MS, are coordinating the implementation work within the MS, as required by Art.3.1 of the RFD. The experts and the expertise provided can change in the course of the implementation. Additionally, the group consists of observers from the main stakeholder associations in order to ensure that the facilitation is fully considered.

For several specific topics a sub-group is created. A range of initiatives en activities are organised for/by each sub-group (e.g. discussions about the sub-topic, defining business rules, etc.).

Within the eMS group 8 official sub-groups were established, which are all operational and 1 TEN-T Information meeting was organised:

1. *General Maritime sub-group*: Arrival notification, dangerous goods, FAL form 1 and FAL form 7)
2. *Customs sub-group* - managed by DG MOVE with DG TAXUD (entry summary declaration, FAL form 2, FAL form 3 and FAL form 4)
3. *Waste sub-group* (waste notification)
4. *Security sub-group* (security notification)
5. *Health sub-group* - managed by SANCO and EMSA (marine declaration of health)
6. *Border Control sub-group* - formed by DG MOVE and DG HOME (border checks on persons, FAL form 5 and FAL form 6)
7. *Data mapping and functionalities sub-group*
8. *Single Window and Data Flow Definition sub-group*
9. *eMS TEN-T Information meeting*

Other possible subgroups, such as a *System Security sub-group* or a *Statistics sub-group*, could be created if necessary.

As mentioned before, there is a need to ensure that the reporting formalities are requested in a harmonised and coordinated manner avoiding duplication of the information requested related to the ship arrival or departure. Therefore, the information required in FAL form 1 (*General Declaration*) and FAL form 7 (*Dangerous Goods*) needs to be harmonised with the information resulting from Directive 2002/59/EC described above. These comprise the *general maritime information*.[23] The entry summary declaration, FAL form 2, FAL form 3 and FAL form 4 - specifically dealt with in the eMS Customs sub-group (managed by DG MOVE with DG TAXUD) - need to be harmonised with the information resulting from the Community Customs Code; the security notification - specifically dealt with in the eMS Security sub-group - needs to be harmonised with the information resulting from the Regulation 725/2004 of the EP and of the Council of 31.03.2004 on enhancing ship and port facility security; the border checks on persons, FAL form 5 and FAL form 6 specifically dealt with in the *Border Control sub-group* – (formed by DG MOVE and DG HOME) – need to be harmonised with the information resulting from the Schengen Borders Code; etc.

An eMS sub-group on data mapping and functionalities was established by the eMS group to harmonise the data set of information to be provided to the NSW when fulfilling the reporting formalities covered by the RFD. The sub-group produced an interim report d.d. June 2013 providing its conclusion regarding the data mapping. The report contains a table which identifies the data elements from each of the formalities from parts A and B of the annex of the RFD (some elements may be required at arrival or departure only (respectively marked with "A" and "D").

Some additional involved entities and organisations are:

- The *SSN High Level Steering Group (HLSG)*, which will continue to manage and develop policies related to the SSN. The EC will ensure coordination between the eMS and the SSN HLSG.
- *DG MOVE.D1 - Maritime Transport and Logistics Unit*, responsible for the policy oversight of the RFD. This Unit is responsible for organising eMS group meetings and for the coordination within the EC services and with external actors, such as IMO.
- *EMSA* supports the EC during the eMS group meetings and is actively involved during the functional and technical specification phases.
- In close cooperation with DG TAXUD, informal *Electronic Customs Group (EGC) Informal Meetings* are organised, jointly with the Trade Contact Group (TCG) and representatives of eMS group (DG MOVE), dedicated to discuss the coordination on maritime initiatives with customs impact, notably on eManifest.

Information with regard to the eMS (and sub-group) activities and output is made available on the *CIRCABC* (*Communication and Information Resource Center for Administrations, Businesses and Citizens*) website of the EC - https://circabc.europa.eu/ (see right below 9.4.3.1).

9.4.3.1 Expert Group on Maritime Administrative Simplification and Electronic Information Services (the *eMS group*) – CIRCABC

9.4.3.1.1 CIRCABC - Functioning and organisation of the eMS group

This eMS group was established by the EC in order to support MSs to implement the RFD in a coordinated matter. All eMS activities and initiatives, as well as the results and outputs thereof,

[23] General Maritime Sub-Group: General Maritime Information – Business Rules (Version 1.00 – 23 January 2013)

are uploaded to a separate eMS folder on the CIRCABC webpage in an organised matter. The eMS folder is subdivided in several folders:

1. **Folder 'Information'**

To this subfolder information services on the eMS group can be defined. On this interest group no information service is defined.

2. **Folder 'Library'**

The 'Library' is the space where contents are stored, managed and shared. This folder is subdivided in a few more subfolders with regard to a specific (sub-) topic:

Sub-folder 1 - Case studies

E.g. a PowerPoint presentation regarding Finland's Portnet is uploaded to this sub-folder.

Sub-folder 2 - Drafts

This sub-folder contains some virtual 'collaboration workspaces', which are (still) empty and not seem to be used or (yet).

A subfolder 'eMS' was created as well, to which some documents are uploaded e.g. (i) *Rules of procedure* for the eMS group (d.d. June 2011) describing the details regarding the subject matter and scope, tasks, selection procedure, reimbursement of expenses, convening a meeting convening, agenda, documentation to be sent to group members, opinions of the group, sub-groups, written procedure, secretariat, summary minutes of the meetings, attendance list, correspondence, access to documents, and protection of personal data; (ii) a *(draft) Mandate of the Expert sub-group on waste notification* - established by the EC in view to define the business rules of the notification of waste and residues from ships arriving in or departing from ports of the MSs – in which issues pertaining to the competence of the Expert sub-group on waste notifications, harmonisation with the other messages, participants, deadline, legal basis for the inclusion of the waste message in the NSW, and duration; and (iii) a letter (d.d. September 2011) regarding the inclusion of the waste notification in SSN with a request to the MSs to nominate experts for a waste notification subgroup – for which DG MOVE has the responsibility for the work of the expert group, but for practical reasons EMSA will chair the meetings, hold the secretariat, and prepare the work programme of the group.

Furthermore a subfolder 'General Maritime subgroup' was created to which a PowerPoint presentation regarding *IMO-FAL in Customs Declaration System* (d.d. November 2011, presented during the 1st meeting of this subgroup d.d. 9.11.2013) was uploaded.

Sub-folder 3 – eMS

The *eMS* subfolder contains the same 3 documents as mentioned under *Subfolder 2 – Drafts/subfolder eMS*.

Sub-folder 4 - Expert group meetings

Since 2011 9 eMS group meetings have already taken place: a 1st meeting on 1.04.2011, a 2nd meeting on 16.06.2011, the 3rd meeting on 10.11.2011, the 4th meeting on 21.03.2012, the 5th meeting on 12.07.2012, the 6th meeting on 4.10.2012, the 7th meeting on 12.12.2012, the 8th eMS meeting on 20.03.2013 and the 9th meeting on 18.06.2013.

For each meeting a subfolder was created, to which a series of documents are uploaded, e.g.:

- (Draft and final) agendas for each meeting;
- (Draft and final) reports of all meetings;
- Lists of participants;
- PowerPoint presentations of speeches and information sessions
- Several draft versions of, comments on and input for, and final versions of all the meeting material/documents produced and/or discussed during the meetings, e.g.:
    - *Rules of procedure*
    - *Discussion paper on SW definition*, *Definition of SW*, *SW and data flow definition*, *NSW guidelines*
    - *Roadmap for implementing the RFD* ***, *RFD Road Map Statuses*
    - *Info exchange model (Waste and Security)*
    - *Management of waste exemptions*
    - *Implementation of the reporting formalities for the FAL forms information*
    - *Business rules - General Maritime sub-group*, *Customs Business Rules*
    - *Notification of FAL-forms*
    - *Re-use of data*
    - *E-Customs system*, *Reporting Formalities - Customs subgroup findings*
    - *Schengen Borders Code (Regulation 562/2006)*
    - *Workgroups and sub-groups of eMS: Health sub-group*, *Waste sub-Group* and *Data Mapping and Functionalities sub-group*; *General Maritime Status* and *Health sub-Group Status*
    - *eMAR research project*
    - *Trade procedure in ports*
    - *Transposition Q&A on the RFD*
    - *Clearance and other functionalities*
    - *Waste and security Business Rules*
    - *Waste Message – Business Rules*
    - *MARSEC EWG. Security Message – Business Rules*
    - *Analysis of MSs replies*
    - *Technical specifications*
    - *General Maritime sub-group business rules*
    - *Maritime Declaration of Health/Health sub-group business rules*
    - *Horizontal open issues - Business Rules*
    - *Treatment of Exemptions*
    - *Blue Belt*
    - *Border Control business rules*
    - *EMSA IMP Demonstrator project*
    - *Presentation consultant reporting obligations*
    - *AOB Planning 2013*
    - *RFD Joint Letter WSC ECSA*
    - *Development of SSN Messages*
    - *Identification of ships to which the directive applies*
    - *Harmonisation of Business Rules*

*** EMSA and DG MOVE are take a prominent role to facilitate the implementation of the RFD, which is happening in a number of phases as described in the "*Roadmap for implementing the RFD*" was drafted. By nature, the phases may overlap at some points and therefore finalising a preceding phase is not automatically required for starting the following one:

- Phase 1: Functional specifications (2012 and beginning 2013)

The functional specifications describe what is needed by the stakeholders (authorities and industry) and the processes, as well as requested properties of data submitted and shared. Specifications will help to avoid duplication and inconsistencies, and will allow for more accurate estimates of necessary work and resources. They will provide a precise idea of the problem to be solved so that the system architects can efficiently design the system and estimate the cost of design alternatives. Furthermore, the specifications will provide guidance to testers for verification of each technical requirement.

The functional specifications will contain the following elements: a SW and data flow definition document, business rules for each reporting formality, harmonisation of business rules and data, mapping the data set.

- Phase 2: Technical specifications (2013)

The technical specification will define the interface between the SW and the related network connections - including the system architecture, interfaces and performance requirements. The technical specifications will include: guidelines for the interface between the shipping industry and the SW (reporting (messaging) reference guide), as well as the SW and SSN central system, mandatory functionalities of the SW - including the data quality and the management of the access rights, user authentication, commissioning test plans, ship information repository.

- Phase 3: Technical implementation (2014)

During the technical implementation phase, the central and national systems have to be tendered (where necessary, by the MSs and EMSA) and implemented - following the functional and technical specifications agreed in phase 1 and 2 - in order to 'physically' adopt the systems.

- Phase 4: Testing phase (2014 - 2015)

During this phase functional and non-functional tests will be performed. Functional testing will verify actions or functions specified in the functional specifications. Functional tests tend to answer the question of '*can the user do this?*' or '*does this particular feature work?*' Non-functional testing refers to aspects such as scalability or other performance, behaviour under certain constraints, or security.

- Phase 5: Initial operational phase (1.06.2015)

During this phase the national implementation will be reviewed against legal and technical requirements.

Sub-folder 5 – Sub-groups

For each sub-group a separate sub-folder was created to which the relevant discussion papers, business rules, agendas and reports and minutes are uploaded and can be consulted:

- Border Control sub-group (1st meeting d.d. 23.01.2013, 2nd meeting d.d. 27 February 2013)
- Customs sub-group (1st meeting d.d. 21.10.2011, 2nd meeting d.d. 8.12.2011, 3rd meeting d.d. 6.11.2012, 4th meeting d.d. 14.02.2013, electronic customs group (ECG) d.d. 5.03.2013)
- Data mapping and functionalities sub-group (1st meeting d.d. 28.02.2013, 2nd meeting d.d. 17.04.2013, 3rd meeting d.d. 10.09.2013)
- General Maritime subgroup (1st meeting d.d. 9.11.2011, 2nd meeting d.d. 25.01.2012, 3rd meeting d.d. 3.11.2012)
- Health sub-group
- Security sub-group
- Single Window

- Waste subgroup
- eMS TEN-T Information meeting (on the 2012 TEN-T call supporting the implementation of the RFD - January 2012)

Sub-folder 6 - Transposition

The documents '*Answers on Use of Paper and FAL Convention*' and '*Transposition Questions and Answers on RFD*' (issued by the EC/DG MOVE) can be consulted under this sub-folder.

Sub-folder 7 - X CircaBC manuals

A PowerPoint presentation '*CIRCABC end-user training*' is uploaded to this folder.

3. Folder 'Members'

This service gives an overview of the members of the eMS interest group. This page helps to search the participating members of the eMS Interest Group. A members list can be exported in an Excel file.

All EU MSs are represented (at least by one participant) in the eMS group, as well as DG MOVE (EC), EMSA, EPCSA, IATA and WSC.

4. Folder 'Events'

This service provides an environment for creating, announcing and administering meetings and events (e.g. eMS (sub-)group meetings, information sessions).

5. Folder 'Newsgroups'

This service contains forums wherein the members of the eMS group can exchange their views.

A forum 'general' is created, which is dedicated for a general discussion on the group mandate, administration procedures and tools (e.g. CIRCABC).

6. Folder' Administration'

This folder should be used by the group members to perform system administration functions, e.g. 'my account', 'view membership', 'my calendar', 'my saved searches', 'my notification status'.

9.4.3.1.2 Evaluation of the eMS group/CIRCABC

The CIRCABC website is user-friendly, well-organised, transparent, and informative web page and ditto 'tool' (i.e. virtual work space and information sharing portal for all participants and interested parties. CIRCABC reflects the organisation functioning and work outcome of the eMS group and its subgroups.

Participants can personalise their own user profile, they can also easily login to the webpage, consult all uploaded information and the expert group calendar with past and upcoming events, and share their experiences and good practices.

The members list shows that all MSs and relevant organisations are represented in the eMS group. The amount of uploaded documents (a lot of comment and working documents

included) and the numerous meeting reports reveal that all representatives actively participate in the eMS group activities.

Under the *Expert group meetings* folder some key documents – highlighting the efforts of the EC/DG MOVE to develop mechanisms to implement the RFD in a coordinated matter - can be consulted: the Roadmap for implementing the RFD, the highly appreciated Single Window definition document, sets of business rules, updated information on the Blue Belt initiative, a detailed Q&A on legal implementation issues.

The subgroup structure makes it possible to focus on particular aspects of the RFD with a select and limited group of relevant experts – which is in the best interest of these participating experts, as well as an efficient and all-embracing implementation process of the RFD.

Not all stakeholders who were interviewed during the EU wide stakeholder consultation have a (specific) opinion on DG MOVE's established collaboration platforms and mechanisms for the harmonisation and cooperation of reporting formalities within the Union. Although MSs without sound experience in information/data exchange systems (or already existing SW systems in maritime or other policy fields) and MSs that are still in a rather initial development phase of their National SW, are more eagerly waiting for the results of the eMS (sub)group(s) to (further) implement the RFD and their Maritime SW.

Specific suggestions made by some stakeholders concern (i) the timely issuing and dispatching of the eMS group meeting documents, (ii) the possible transformation of the eMS group into some sort of monitoring body which oversees the first years of functioning of the SWs, (iii) making available examples of progress made in all MSs, (iii) the possibility for MSs to (officially) let attend the eMS group meetings by experts from maritime administrations as well as technical departments, (iv) the intensity and frequency of all eMS (sub)group meetings, (v) the need of a clearer vision about what is meant by Art. 3.2 RFD.

Some more critical thoughts with regard to this issue have been expressed as well, e.g. many questions raised are still pending (such as level of harmonisation, picture of the typical SW approach for the user, connections with other UE initiatives, etc.), (ii) the tight deadline for the implementation of the RFD taken into account the delay in the completion of the eMS group work, which creates difficulties for the MSs in their efforts for a timely and complete implementation, (iii) possible significant additional risks imported through separate initiatives by the EC on multi-modal matters (e.g. e-Freight, e-Manifest) and maritime matters (e.g. CISE) which cut across the objectives of the RFD and create uncertainty, duplication and costs, (iv) a more balanced contribution of all MSs, (v) a bigger but neutral involvement of the shipping industry The efforts to improve coordination, harmonisation and simplification (cf. RFD) are fully supported, but the involvement of EMSA and SSN (maritime safety) seems excessive sometimes, since the RFD concerns more than only safety issues, and (vi) the engagement of DG TAXUD.

9.4.3.2 AnNa

The *AnNa* project (*AnNa* stands for *Advanced networks National administrators*) is an EU Member State driven initiative - in close cooperation with the EC and EMSA - to support the effective implementation of the RFD. The project aims at supporting the effective and sustainable development of NSWs in line with the RFD (e.g. by supporting ICT based system integration in Maritime SW developments).

AnNa is partially (50%) financed with EU funding; participating countries finance themselves the other half of the project costs. The AnNa project proposal was submitted to the EC TEN-T

Motorways of the Sea 2012 Multi Annual Call (closing data 26.03.2013) and is expected to run until 2015. The main reason why AnNa has been established is that in order to build national Maritime SWs, EU MSs, neighbouring countries and businesses need to cooperate on this.

The AnNa project covers the geographical area of the EU, as well as some neighbouring and other countries that have chosen to participate. The involved parties are:

- 13 partner countries (Belgium, Bulgaria, Greece, France, Italy, Latvia, the Netherlands, Portugal, Romania, Slovenia, Spain, Sweden and the UK);
- 9 observer countries (Croatia, Denmark, Germany, Iceland, Ireland, Israel, Finland, Malta and Norway);
- 10 observer organisations (WCO, CLECAT, FIATA, ECASBA, ECSA, EHMC, EPSCA, TIEKE and WSC).

AnNa works bottom-up (*'in the action zone'*), assisting national administrations building their Maritime SWs, so that constant interaction between the various administrations and business (also cross-border) is allowed.

AnNa supports (system) integration within and between national Maritime SWs – ship-to-shore and between the various services and administrations – building on the need to:

- Make optimal use of the data and the (international) data models already available;
- Clearly identify what data is required by public authorities (by law) and by logistic chain operators;
- Identify how data can be re-used;
- Incorporate "the longer term"; this means that work and the investments should relate to (i) value for money - also relating to investments in PCSs), and to (ii) execution of the EC transport agenda - including e-Freight / e-Customs goals.
- Develop a framework providing a checklist on feasible measures (including their international perspective).

The AnNa project will carry out 4 major activities:

1. Development of a *Master Plan 2015*, which is a common implementation framework for the RFD to ensure appropriate (European) interconnectivity in accordance with the specifications as developed by the coordinating eMS group describing and elaborating the requirements to implement the RFD, as well as communality issues between the countries. This Master Plan relates to issues concerning the minimum implementation of the RFD whilst facilitating, where practicable, more advanced implementation, and thereby cooperation, by (some) MSs.
2. About 58 pilot projects will be executed, relating to (i) front office-electronic data submission by the reporting parties, (ii) mid office-electronic data exchange between the national (internal) administrations, and (iii) back office-electronic data exchange between participating countries (including existing exchange mechanisms, e.g. SafeSeaNet)
3. Development of a *Master plan Extended Collaboration*, which is an identification of the next steps - post 2015 - requiring further collaboration, e.g. to develop a system that allows ships to report only once when sailing between different EU ports; connecting the Maritime SW to national logistics platforms, elaborating on e-Freight developments and other initiatives.
4. Consultation and cooperation, i.e. twofold (i) creating a platform for all stakeholders - to exchange knowledge, experience and interests and to connect to B2A projects, (ii)

incorporating business approaches and solutions into the frameworks being developed in the AnNa Master Plans on a EU-wide, national and possibly also international level.

Participating countries can decide themselves what to do with the results of the work executed in AnNa. [24]

AnNa has set up a user-friendly and well-ordered and transparent webpage to inform the participants - and whoever is interested - about its initiatives, activities (e.g. past and future events, workshops, meetings, and consultations), its progress, and the outcome and deliverables of its work - http://www.annamsw.eu.

The AnNa initiative and its approach and activities - as mentioned a few times during this project's EU wide broad stakeholder consultation - are widely appreciated by the participating EU MSs.

Within the scope of AnNa there seem to be no overlaps or contradictory activities with the eMS group activities. On the contrary, the AnNa project aims at answering the needs experienced by some MSs implementing the RFD. It is obvious that – taking into account the diversity of available means for, knowledge of, the availability of already existing SW and/or data exchange systems in the MSs – the EC/DG MOVE cannot provide each MS with tailor made assistance. AnNa is also trying to detect - and fill - the gaps in (practical) assistance that could facilitate and help MSs (that want to) to correctly and timely implement the RFD's requirements (e.g. SWs). Moreover, the AnNa participants are also actively participating in (or at least following up) DG MOVE's initiated eMS group. The combination of both the EC/DG MOVE's efforts (cf. eMS (sub)group(s)) and the work parallel done by (and within the framework of) the AnNa project should be considered as an added value for the overall implementation of the RFD.

9.5 Conclusions

On the basis of the gathered information, some conclusions can be made regarding Art. 3.1 of the RFD:

- All MSs seem to have taken initiatives regarding implementation of a national maritime SW. There is a considerable variety (i) of SW concepts, systems, environments, (ii) of approaches to create a SW, and (iii) in the current state of affairs of development of the SWs:
  - MSs thinking about (the concept of) the Maritime SW ('pre-development phase): Belgium, Bulgaria, Denmark, France, Greece, Italy, Latvia, Malta, Poland, Portugal, Romania, Sweden, UK;
  - MSs already developing a Maritime SW: Croatia, Cyprus, Germany, Lithuania, the Netherlands, Spain;
  - MSs with a (more or less) operational (system/environment that will function as a) Maritime SW: Estonia, Finland, Ireland;
  - No information was provided for Slovenia.
- Part of the MSs is waiting for the EU technical specifications regarding the SW, other MSs modernise, (inter)connect and/or or 'rebuild' their existing national reporting formalities (lodge and/or exchange) systems in order to create a proper national maritime SW in accordance with the RFD.

[24] AnNa fact sheet – "Towards a Maritime Single Window" (http://www.annamsw.eu)

- A lot of stakeholders are involved: (i) at EU level and at MS level, (ii) not only the maritime administrations and maritime policy related fields are involved, (iii) → Complex implementation and coordination process

The main difficulties the MSs are struggling with are the following:

- Impact of RFD implementation on the available budget and budgeting process of the (involved stakeholders in) MSs - referred to in 10 interviews.
- Interaction and/or involvement of many different (public and private) stakeholders and authorities in various policy fields is required in - several aspects of - the implementation process of the RFD - referred to in 12 interviews.
- Concerns and/or national legal difficulties regarding exchanging confidential (sensitive) information and guaranteeing data quality - referred to in 7 interviews.
- No or not enough technical specifications at EU level yet - referred to in 13 interviews.
- The implementation timing (1.06.2015) is getting close – referred to in 5 interviews.

Conclusions regarding Art. 3.2 of the RFD: eMS Groups

The opinions on the eMS (sub-)group(s) are somewhat divided. Most participants generally appreciate the efforts of the EC/DG MOVE. On the basis of some specific critical or negative comments regarding the organisation, communication and functioning of the eMS groups some improvements could be made.

AnNA

The AnNa initiative is appreciated by the participating EU MSs and the combination of both the EC/DG MOVE's efforts (cf. eMS (sub)group(s)) and the work parallely done by (and within the framework of) the AnNa project should be considered as an added value for the overall implementation of the RFD.

9.6 Recommendations

It is advisable - in order to guarantee a smoother implementation process of the RFD by the MSs – to (i) let all MSs (e.g. via the EC / eMS groups) use the AnNa initiative outputs - as 'best practices', and (ii) establish a follow-up mechanism after the implementation deadline of the RFD/NSW in order to optimise the use of the NSWs.

10. THE FEASABILITY OF AVOIDING OR SIMPLIFYING FORMALITIES FOR SHIPS THAT HAVE CALLED AT A PORT IN A THIRD COUNTRY OR FREE ZONE (ART. 15(D) RFD)

10.1 Context

Most human activities are regulated and although most regulations are essential, they sometimes come to be regarded not only as unnecessary, but also as a significant burden on the activities they are supposed to control. Few activities have been more subject to over-regulation than international maritime transport, partly because of the international nature of shipping. Countries develop customs, immigration and other standards independently of each other and a ship visiting several countries during the course of a voyage could expect to be presented with numerous forms to fill in, often asking for exactly the same information but in a slightly different way.[25]

In 1965, the Convention on Facilitation of International Maritime Traffic (FAL Convention) was developed to prevent unnecessary delays in maritime traffic, to aid co-operation between Governments, and to secure the highest practicable degree of uniformity in formalities and other procedures. In particular, the Convention reduces the number of declarations which can be required by public authorities.[26]

In its Annex, the Convention contains both 'Standards' and 'Recommended Practices' on formalities, documentary requirements and procedures which should be applied on arrival, stay and departure to the ship itself, and to its crew, passengers, baggage and cargo. Standard 2.1 lists the documents which public authorities can demand of a ship and recommends the maximum information and number of copies which should be required.

The International Maritime Organization (IMO) has developed Standardized Forms for seven of these documents (FAL Forms). They are the: IMO General Declaration, Cargo Declaration, Ship's Stores Declaration, Crew's Effects Declaration, Crew List, Passenger List, Dangerous Goods. Two other documents are required under the Universal Postal Convention and the International Health Regulations. The general declaration, cargo declaration, crew list and passenger list constitute the maximum information necessary (supra). The ship's stores

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[25] IMO, "Convention on Facilitation of International Maritime Traffic (FAL)", available online: <http://www.imo.org/About/Conventions/ListOfConventions/Pages/Convention-on-Facilitation-of-International-Maritime-Traffic-%28FAL%29.aspx>.

[26] Convention on Facilitation of International Maritime Traffic (adopted 9 April 1965, entered into force 5 March 1967), 591 *UNTS* 265, as amended [FAL Convention]. See also: IMO, "Convention on Facilitation of International Maritime Traffic (FAL)", available online: <http://www.imo.org/About/Conventions/ListOfConventions/Pages/Convention-on-Facilitation-of-International-Maritime-Traffic-%28FAL%29.aspx>.

declaration and crew's effects declaration incorporate the agreed essential minimum information requirements.

The 2002 FAL amendments relates inter alia to the Dangerous Goods Manifest (FAL Form 7), which becomes the basic document providing public authorities with the information regarding dangerous goods on board ships.

The 2005 FAL amendments are intended to enhance the facilitation of international maritime traffic, including:

- a Recommended Practice for public authorities to develop the necessary procedures in order to use pre-arrival and pre-departure information to facilitate the processing of information, and thus expedite release and clearance of cargo and persons;
- a Recommended Practice that all information should be submitted to a single point to avoid duplication;
- encouragement of electronic transmission of information; and
- the addition of references to the International Ship and Port Facility Security (ISPS) Code and SOLAS chapter XI-2 in the Standards and Recommended Practices which mention security measures; and amendments to the IMO Standardized FAL Forms (1 to 7).

The purpose of the RFD is to simplify and harmonise the administrative procedures applied to maritime transport by making the electronic transmission of information standard and by rationalising reporting formalities. It replaces Directive 2002/6/EC. Indeed, after the 2005 FAL amendments, certain changes have to be made as legal acts of the European Union must take account of IMO requirements if simplification is to take place.

Therefore, Directive 2010/65/EU refers to the version of the FAL forms that is currently in force (the FAL forms itself are not obligatory to use, it is the information inside these forms that is important). The RFD also aims at stimulating the use of electronic means of transmitting data instead of using paper formats. Moreover, all information should be submitted to one single point. With respect to security measures a new temporary form is introduced in order to harmonise the information required for the prior Declaration of Security provided for by Regulation (EC) No 725/2004. In the Appendix of the RFD, a standard form is being proposed. Until the adoption of a harmonised form at international level, this form shall be used for the transmission of information required under Art. 6 of Regulation (EC) No 725/2004. The form can be transmitted electronically.

10.2 Issue clarification

The current formalities for ships that have called at a port in a third country or a free zone are treated throughout the next chapters.

The examination of the feasibility of exempting or simplifying administrative formalities for ships coming from, calling at, or heading towards a port situated outside the EU or a control type I free zone (within the meaning of customs legislation), should be without prejudice to the applicable legal acts of the Union, and the information that Member States may request in order to protect internal order and security and to enforce customs, fiscal, immigration, environmental or sanitary laws.

In order to examine this issue, following aspects will be described and examined in the next chapters:

- ***First, the provisions in the FAL Convention will be described and analysed and the relationship with other international instruments – such as the SOLAS Convention (especially IMDG Code and ISPS Code) – will be examined:***

  What is the purpose of these instruments? Do they meet their objectives? Is there a sufficient harmonisation between these instruments?

- ***Secondly, the problem of infected vessels will be analysed, both with respect to the cargo as with respect to the crew:***

  Ships going outside the territorial waters or calling at third ports and re-entering the EU, are considered to be 'infected vessels'. A distinction will be made between avoiding/simplifying formalities on the level of the cargo and on the level of the ship and the crew. Indeed, when a ship leaves and re-enters the EU, it is most likely that the cargo has changed (loaded and/or unloaded), but the ships – and the crew – might have remained the same.

The findings on Art. 15(d) can be of use to the development of a future **Blue Belt environment.**

The Blue Belt is a concept according to which ships can operate freely within the EU internal market with a minimum of administrative burden and in which safety, security, environmental protection as well as customs and tax revenues are ensured by the best possible use of existing capabilities to monitor maritime transport.

Indeed, the complexity of administrative procedures was identified as one of key bottlenecks for the development of maritime transport in the context of the public consultations on the European maritime transport space without barriers.

The difficulty under the current customs EU legislation and procedures is that customs are required to take action at the point where the goods cross the external borders of the EU. When Community goods are placed on a vessel that sails outside the territorial limit of 12 nautical miles, the status of the goods automatically changes to non-Community goods and will be treated like this on arrival. This applies even if the vessel is bound for another EU port. From a legal point, the maritime space (seas, oceans) between MSs are regarded as international waters, i.e. not belonging to the maritime space of the Community and so transports within that area are regarded as international transports.

Upon entry of a ship in an EU port, customs require the completion of certain reporting formalities, submission of declarations, proof of Community status where necessary and other cargo information for the goods that are to be unloaded. Upon arrival of the ship in subsequent EU ports, the goods to be unloaded might be subject to the same/similar controls.

However, there are reduced customs formalities for ships and cargo that is transported by a vessel authorised as a regular shipping service (Art. 313 a, Art. 313 b) or approved to use the simplified Level 1 and Level 2 manifest procedures (Art. 447 and Art. 448 of CCIP). RSS operators are only required to bring non-Community status goods under customs control, meaning that Community goods being transported between EU ports do not lose their Community status.

After the launch of the Blue Belt concept by the Belgian Presidency of the Council in 2010, the EC tasked EMSA to carry out a Blue Belt pilot project demonstrating to national authorities, starting with customs authorities, which services SSN can offer to support their mission, with the aim of reducing administrative burden for maritime transport. Indeed, constant and reliable

monitoring of a ship on its route from one EU port to another offers the basis for the assurance as to the movement of cargo carried on it. It should thus allow for the presumption that goods with EU customs status carried on "Blue Vessels" have an EU place of departure and an EU place of destination and can be therefore treated similarly to goods carried by other transport modes within the EU.

The operational phase of the pilot project ran from May 2011 to November 2011. Results were presented to the transport ministers at the June 2012 TTE Council, followed by a debate on possible follow-up measures. Ministers were widely in favour of continued implementation and further development of the Blue Belt concept.

In addition, the establishment of a true Single Market for maritime transport was one of the key actions included in the Single Market Act II Communication, adopted on 3.10.2012. It calls for a Blue Belt package with legislative and non-legislative initiatives, supported by modern ICT technologies, to reduce the administrative burden for intra-EU maritime transport to a level comparable to that of other modes of transport.

10.3 Research questions

The answers to following research questions need to be evaluated:

Regarding the provisions in the FAL Convention:

- What exactly is the scope of the obligations set out in the Convention: Are these binding and to what extent?

Regarding the relationship with other (not EU) international instruments – such as the SOLAS Convention (especially IMDG Code and ISPS Code):

- Is there a sufficient harmonisation between these international instruments?
- What exactly is the problem of infected vessels?
- Should a distinction be made between simplification and avoidance of reporting formalities, with regard to:
    - Administrative formalities on cargo?
    - Administrative formalities on other aspects, such as the crew…?

Regarding the content of reporting formalities:

- What is the content of reporting formalities for ships arriving in and/or departing from ports of the MSs of the Community?
- What is the content of reporting formalities for ships that have called at a third port and re-enter the EU?
- What information is dedicated to what instance (customs, ports…)?

Regarding the legislation with respect to the cargo:

- What are the conditions to be authorised as a regular shipping service (RSS)?
- Is the relaxation of conditions possible?
- Can the legislation be applied to members of the Common Transit Convention i.e. Norway, Iceland, Turkey and Croatia? Can the legislation be applied to members of third countries or free zones? What is e-manifest and which countries can make use of it?
- Are there specific problems concerning dangerous goods, ship's waste and security concerns?
- Do any agreements already exist with Russia, northern African countries…?

- If so, how does this work?
- If so, on which legal base?
- If not, is an agreement possible between the respective customs authorities to reduce the scope for multiple controls on the same goods?
- Is the simplification or avoidance of reporting formalities for ships that have called at a third port and re-enter the EU desirable and proportionate to the cost?
- What is the magnitude of ships that have called at a third port and re-enter the EU (i.e. link with Art. 15(e))?
- Can the information be communicated with national (customs) systems, SSN…?

Regarding the legislation on formalities with respect to the crew:

- Which problems can occur concerning visa?
- Which problems can occur concerning shore leave?
- Are there specific problems in the cruise sector?
- Should problems concerning formalities with respect to the crew be included in Blue Belt discussions?

10.4 Analysis

10.4.1 Relationship between the FAL Convention and other international instruments

In this part, we will first describe the obligations within the FAL Convention. This is important in order to know whether third countries (non-EU MS) could be obliged to fulfil certain requirements within the FAL Convention. When dealing with dangerous goods or security concerns, specific international instruments require extra reporting formalities. Therefore, in a second and a third part, we will take a look at the IMDG Code and the ISPS Code and their effectiveness as well as their impact on facilitation. Lastly, the harmonisation between these international instruments will be dealt with.

10.4.1.1 FAL Convention – Facilitation

The FAL Convention's main objectives are to prevent unnecessary delays in maritime traffic, to aid co-operation between Governments, and to secure the highest practicable degree of uniformity in formalities and other procedures. In particular, it reduces the number of declarations which can be required by public authorities.

Standard 2.1 lists the documents which public authorities can demand of a ship and recommends the maximum information and number of copies which should be required. The IMO has developed Standardised Forms for seven of these documents.

Two other documents are required under the Universal Postal Convention and the International Health Regulations. The general declaration, cargo declaration, crew list and passenger list constitute the maximum information necessary. The ship's stores declaration and crew's effects declaration incorporate the agreed essential minimum information requirements. The 2002 FAL Amendments relates inter alia to the Dangerous Goods Manifest (FAL Form 7), which becomes the basic document providing public authorities with the information regarding dangerous goods on board ships.

The 2005 amendments are intended to enhance the facilitation of international maritime traffic, including a Recommended Practice for public authorities to develop the necessary procedures in

order to use pre-arrival and pre-departure information to facilitate the processing of information, and thus expedite release and clearance of cargo and persons; a Recommended Practice that all information should be submitted to a single point to avoid duplication; encouragement of electronic transmission of information; and the addition of references to the International Ship and Port Facility Security (ISPS) Code and SOLAS chapter XI-2 in the Standards and Recommended Practices which mention security measures; and amendments to the IMO Standardized FAL Forms (1 to 7).

Information required by MSs' legislation which goes beyond the requirements of the FAL Convention should be communicated in a format to be developed on the basis of FAL Convention standards. It has to be noted that, although the RFD mentions the FAL forms, it is the actual information within these forms that is important.

Third countries that did not ratify the FAL Convention, however, cannot be subjected to the provisions within the FAL Convention as it is a *pacta tertiis*. *Pacta tertiis nec nocent nec prosunt* is a basic rule of customary international law. From the viewpoint of a third party, an agreement concluded between two or more parties is a *res inter alios acta*. States can only be bound by that to which they had expressly consented.[27] With respect to treaty law, this rule was codified in the Convention on the Law of Treaties of 1969, which stipulates that treaties do not create either obligations or rights for a third State without its consent. [28] A positive aspect of international law's consensual nature, when compared with municipal law, is its rather high level of compliance.[29]

10.4.1.2 IMDG Code – Dangerous goods

Carriage of dangerous goods is a growing concern, as 10% of the world's cargo comprises dangerous goods and is growing.[30] It is important to identify that this figure of 10% is the declared value. However, undeclared dangerous goods are a big problem.[31] ELLIS argues that *"[d]angerous goods that have not been correctly declared when offered for transport have contributed to some serious accidents at sea. Safe handling, stowage, and segregation of packaged dangerous goods cannot be carried out if there is no knowledge of the presence of dangerous goods inside the cargo transport unit (container and/or trailer), or if the goods have been incorrectly declared."*[32] The current system on dangerous goods is a mixture of regulations. The development of the rules surrounding dangerous goods has created a limited harmonisation of what constitutes dangerous goods, such as the International Maritime Organisation's (IMO) Dangerous Goods Regulations (IMDG). To a certain extent there has been

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[27] PCIJ, S.S. Lotus Case, *France v. Turkey*, 7 September 1927, *PCIJ* Ser. A No. 10 (1927),

[28] Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 *UNTS* 331 [VCLT].

[29] FRANCKX, Eric, "*Pacta Tertiis* and the Agreement for the Implementation of the Straddling and Highly Migratory Fish Stock Provisions of the United Nations Convention on the Law of the Sea", 8 *Tulane Journal of International and Comparative Law* 49 (2000), 54.

[30] GreenPort, "Dangerous Goods" (2011), available online: <http://www.greenport.com/features101/tugs,-towing,-pollution-and-salvage/safety/dangerous-goods>.

[31] ELLIS, Joanne, "Undeclared dangerous goods – Risk Implications for Maritime Transport", 9 *WMU Journal of Maritime Affairs* 5 (2010).

[32] ELLIS, Joanne, "Undeclared dangerous goods – Risk Implications for Maritime Transport", 9 *WMU Journal of Maritime Affairs* 5 (2010).

harmonisation of packaging rules, in respect to certain dangerous goods, under the EU Council Directive 67/548/EEC.[33]

The multi-system approach has resulted in shippers being able to overreach the technical standards under the IMDG Code, because the application of these standards is interpreted differently. The implication of this is an increased opportunity to create loopholes in order to circumvent the spirit and purpose of the IMDG Code. The reason for undeclared dangerous goods may not necessarily be due to the shipper circumventing the legal system. Rather the classification of the good may not be classed as dangerous under the IMDG Code, which leads to confusion of whether it is dangerous or not under the regulations that govern liability over a specific contract.[34]

Dangerous goods that have not been correctly declared when offered for transport have contributed to some serious accidents at sea. Safe handling, stowage, and segregation of packaged dangerous goods cannot be carried out if there is no knowledge of the presence of dangerous goods inside the cargo transport unit (container and/or trailer), or if the goods have been incorrectly declared. Although undeclared dangerous goods are recognized as a safety issue in the shipping industry, there is little information available on the extent of the risk involved.

The EU also has a strong desire to harmonize the shipment of general goods.[35] One can easily identify that if harmonization is necessary in relation to general goods, then it is even more important in the case of dangerous goods, as loss extends past that of the cargo (e.g. damage to ports in case of accidents). Rather, the harm that can be caused in relation to dangerous goods extends to the threat of harm to the crew, the marine environment and other seafarers.

Although the IMDG Code – just like the FAL Convention – tried to facilitate maritime traffic, it has failed to derive a uniform stance.

10.4.1.3 ISPS Code – Security

The International Ship and Port Facility Security (ISPS) Code) is a comprehensive set of measures to enhance the security of ships and port facilities, developed in response to the perceived threats to ships and port facilities in the wake of the 9/11 attacks in the United States. The ISPS Code is implemented through chapter XI-2 Special measures to enhance maritime security in the International Convention for the Safety of Life at Sea (SOLAS), 1974.[36] The Code has two parts, one mandatory and one recommendatory.

In essence, the ISPS Code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case. The purpose is to provide a standardised, consistent framework for evaluating risk, enabling Governments to

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[33] Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances, *O.J.* L 196, 16 August 1967, 1-98.

[34] GUNER-OZBECK, Meltem D., *The Carriage of Dangerous Goods by the Sea* (Berlin: Springer, 2007), 2.

[35] European Parliament, "Rotterdam Rules – European Parliament Resolution on Strategic Goals and Recommendations for the EU´s Maritime Transport Policy until 2018", 2011/C 81 E/03 (2011), para. 11.

[36] International Convention for the Safety of Life at Sea (adopted 1 November 1974, entered into force 25 May 1980) 1184 *UNTS* 278 [SOLAS Convention].

offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures.[37]

However, the ISPS Code has significantly increased the burden on ship managers to maintain ship and crew documents. Some among the 800 Danish seafarers who took part in a survey entitled "From Craft to Control: Danish Seafarers' Perceptions of Administrative Burdens in The Maritime Sector" see some administrative work as counter-productive, with safety, security and the environment potentially at risk as paperwork-laden officers are unable to give them their full attention. Among seafarers one of the administrative burdens that cause most annoyance is complying with the ISPS Code, because it is seen as ineffective and often unnecessary, with the requirement to post a 24-hour security guard even in 'safe' ports cited as a prime example.[38]

10.4.1.4 Further harmonisation between instruments

The IMO already explicitly recognised that there is no sufficient harmonisation between the FAL Convention and other international instruments requiring administrative formalities, such as the IMDG Code and the ISPS Code. As a result, the administrative burden is still too high. Therefore, the 27th IMO Assembly adopted Resolution A.1043(27) in November 2011. This Resolution contains a process of periodic review of administrative requirements in mandatory instruments. It also acknowledged that releasing resources from administrative tasks for administrations and industry alike, contributes to the IMO's goals of efficient regulation of safety and security of shipping (such as the ISPS Code) and the prevention and control of pollution by ships (such as the IMDG Code).[39] An administrative requirement arising from a mandatory IMO instrument is defined as "*an obligation to provide or retain information and data that is, or has become, unnecessary, disproportionate or even obsolete*". An administrative requirement does not necessarily mean that information has to be transferred to the public authority or private persons, but may include a duty to have information available for inspection or supply on request.[40]

In May 2013, the IMO has started a six month consultation period during which it will seek widespread input on the administrative burdens that may result from compliance with IMO instruments. A public consultation until 31 October 2013 has taken place in order to receive input from all stakeholders on which administrative requirements are considered to be burdens.[41] The intention is to gather data from a broad spectrum of stakeholders from which recommendations on how to alleviate administrative burdens can be developed. The IMO recognises that some administrative requirements contained in IMO instruments may have become unnecessary, disproportionate or even obsolete, and is committed to reduce their impact. This would not only be beneficial in its own right, it would also help to release resources that could then be channelled towards the Organisation's overall goals of improving safety and security in shipping and reducing its negative impact on the environment. The consultation

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[37] IMO, "ISPS Code", available online: <http://www.imo.org/ourwork/security/instruments/pages/ispscode.aspx>.

[38] Baltic and International Maritime Council (BIMCO), "Easing the Seafarer's Burden" (1 August 2012), available online: <https://www.bimco.org/en/News/2012/08/01_Feature_Week_31.aspx>.

[39] IMO General Assembly, Periodic Review of Administrative Requirements in Mandatory IMO Instruments, *IMO Doc.* Res. A.1043(27) (20 December 2011).

[40] IMO General Assembly, Periodic Review of Administrative Requirements in Mandatory IMO Instruments, *IMO Doc.* Res. A.1043(27) (20 December 2011).

[41] IMO, "Reducing Administrative Burdens", available online: <http://www.imo.org/OurWork/rab/Pages/default.aspx>. See also: X., "IMO Seeks to Cut Ship Paperwork", Nautilus (August 2013), available online: <http://www.kbz-crmb.be/nautilus/#magazine>.

process is being carried out through a dedicated website, which is accessible from the IMO website (<http://www.imo.org/OurWork/rab>). It offers practical information and guidance to participants in the consultation and includes a questionnaire to be filled in and submitted electronically.

It is deemed necessary to wait for the conclusions resulting from the IMO questionnaire, in order to be able to identify the specific practical problems encountered by all stakeholders. These conclusions can then be included into the discussions on expanding the simplification of formalities for ships calling at third countries.

10.4.2 The problem of infected vessels

Ships going outside the territorial waters or calling at third ports and re-entering the EU, are considered to be 'infected vessels'. First of all, we will take a look at what exactly constitutes a maritime border in international law. Secondly, the borders of the European Customs Union will be discussed. In a third part on simplification of formalities, a distinction will be made between avoiding/simplifying formalities on the level of the cargo and on the level of the ship and the crew. Indeed, when a ship leaves and re-enters the EU, it is most likely that the cargo has changed (loaded and/or unloaded), but the ships – and the crew – might have remained the same.

10.4.2.1 Maritime borders of a State

What exactly is the maritime border? The sovereignty of a coastal State extends – beyond its land territory and internal waters – to the territorial sea.[42] Article 29 Vienna Convention on the Law of Treaties says: "*Unless a different intention appears from the treaty or is otherwise established, a treaty is binding upon each party in respect of its entire territory.*"[43] The International Law Commission already stated in 1956 that the rights of the coastal State over the territorial sea do not differ in nature from the rights of sovereignty that the State exercises over other parts of its territory.[44] According to this view, the maritime frontier will thus be the territorial sea border.[45] However, another opinion is that – while sovereignty certainly follows from a State's possession of territory – the exercise of sovereignty or sovereign rights over a space or object does not make it territory. Consequently, the argument that territorially limited international obligations would necessarily apply in the territorial sea in the same manner as on land is thus

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[42] United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 *UNTS* 3 [LOSC], Art. 2(1). See also Convention on the Territorial Sea and the Contiguous Zone (adopted 29 April 1958, entered into force 10 September 1964), 516 *UNTS* 205, Art. 1(1).

[43] Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980), 1155 *UNTS* 331. [VCLT]

[44] ILC, "Report of the International Law Commission covering the work of its eight session", *UN Doc.* A/3159 (1956), 2 *Yearbook of the International Law Commission* 253 (1956), 265, available online: <http://untreaty.un.org/ilc/documentation/english/a_cn4_104.pdf>.

[45] PALLIS, Mark, "Obligations of States towards Asylum Seekers at Sea: Interactions and Conflicts Between Legal Regimes", 14 *International Journal of Refugee Law* 329 (2002), 343-344; TREVISANUT, Seline, "The Principle of Non-Refoulement at Sea and the Effectiveness of Asylum Protection", in VON BOGDANDY, Armin & WOLFRUM, Rüdiger (Eds.), *Max Planck Yearbook of United Nations Law* (Leiden: Martinus Nijhoff Publishers, 2008), Vol. XXII, 222.

unconvincing.[46] According to this opinion, the maritime frontier is being transferred into the internal waters of a State.

Despite the fact that the link between territory and territorial sea is strong, it is not settled that the territorial sea is to be considered as territory *strictu sensu*.[47] As pointed out by GOODWIN-GILL & MCADAM, the question of whether entering a State's territorial waters constitutes entry – where 'entry' is the judicial fact necessary and sufficient to trigger the application of a particular system of international rules – to State territory remains unresolved.[48] Although entry within territorial waters may be an 'entry' for certain purposes, it is not correct to generalise.[49]

A number of States have claimed that certain international areas or transit zones in ports or airports do not legally form part of their national territory. For example, in the case of *Amuur v. France*, France held before the European Court of Human Rights (ECtHR) that the international zone at Paris-Orly airport was different from French territory.[50] Within this international zone, no interpreters, legal assistance or private assistance was allowed to asylum-seekers. The legal status of the international zone was considered as different from that of French territory. As a result, the 'French Office for the Protection of Refugees and Stateless Persons' (OFPRA) was not legally obliged to examine the request as they would have been if the request had been made by someone already on French territory. Therefore, OFPRA denied the applicants access to the asylum procedure on the grounds that it lacked jurisdiction. The ECtHR, however, confirmed that despite its name, the international zone did not have extraterritorial status and that the European Convention on Human Rights (ECHR) did apply in this case.[51]

We can conclude that – in international law – there are different views on what constitutes the maritime border. Nevertheless, legal fictions – as for example created in French airports – cannot result into States not fulfilling their international obligations.

10.4.2.2 The European Customs Union

The European Customs Union forms a single territory for customs purposes. This means that:

- no customs duties are paid on goods moving between EU countries; all apply a common customs tariff for goods imported from outside the EU; goods that have been legally imported can circulate throughout the EU with no further customs checks.

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[46] GUILFOYLE, Douglas, *Shipping Interdiction and the Law of the Sea* (Cambridge: Cambridge University Press, 2009), 226.

[47] O'CONNELL, Daniel P., "The Juridical Nature of the Territorial Sea", 45 *British Yearbook of International Law* 303 (1971), 381.

[48] GOODWIN-GILL, Guy S. & MCADAM, Jane, *The Refugee in International Law* (Oxford: Oxford University Press, 3rd ed. 2008), 279. See also O'CONNELL, Daniel P. (Ed. by SHEARER, Ivan A.), *The International Law of the Sea* (Oxford: Clarendon Press, 1982/1984), 80-81.

[49] See for example: *The Ship "May" v. R.*, SCR 374 (1931).

[50] ECtHR, *Amuur v. France*, 25 June 1996, Appl. No. 19776/92 (1996). See: BELLO, Judith H. & KOKOTT, Juliane, "Amuur v. France", 91 *American Journal of International Law* 147 (1997), 147-152.

[51] ECtHR, *Amuur v. France*, 25 June 1996, Appl. No. 19776/92 (1996), para. 52.

The European Customs Union comprises the territory of EU MSs, including also their territorial waters, inland maritime waters and airspace.[52] In this regard, it has to be noted that in the contiguous zone, coastal States have certain competences with regard to customs. Therefore, concerning customs, it is possible to consider the contiguous zone as the maritime border. Nevertheless, this element was not taken into account when establishing the European Customs Union. Indeed, the contiguous zone – which may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured – is not considered to be a part of the European Customs Union. This is somewhat contradictory to the provisions in the United Nations Law of the Sea Convention of 1982 (LOSC).[53] Article 33 par.1 LOSC stipulates: "*In a zone contiguous to its territorial sea, described as the contiguous zone, the coastal State may exercise the control necessary to: (a) prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea; (b) punish infringement of the above laws and regulations committed within its territory or territorial sea*."

Thus, ships going outside the territorial waters or calling at third ports and re-entering the EU, are considered to be 'infected vessels'. ECSA stresses that as much as 90% of shortsea shipping in Europe involves at least one port of a third country. Mr. Augustin Fernandez (UECC) gives the following example: "*Our line is covered by five car carrier vessels sailing from Bremerhaven to Turkey and returning from Turkey to Bremerhaven, calling at Zeebrugge, Portbury, Vigo, Livorno, Piraeus and 3 Turkish ports. Due to the "infected"/"contaminated" consideration of the vessel by Customs, all of her cargo – even if it is between EU ports, due to the fact of carrying other non-EU ports cargoes – needs to be fully customs cleared and declared, with big and costly documentary process.*" For the moment, agreements with third countries concerning this issue are non-existent, nor with countries of the European Free Trade Association (EFTA) e.g. Norway, nor with countries with an association agreement / neighbouring policy e.g. Turkey.

10.4.3 Simplification of formalities

Also, even within the EU, formalities should be further simplified. Captain Christian Rorbeck (Maersk) gives the example of a ship calling at six European (and Schengen) ports – Zeebrugge, Gdansk, Aarhus, Gothenburg, Bremerhaven and Rotterdam – and preparing the following documents for authorities[54]:

- 26 crew lists – Arrival and Departure
- 26 Passenger lists – Arrival and Departure
- 14 Crew and Passenger effects declarations
- 6 Stores lists (Bonded, Provision & Vessels)
- 2 Port of Call
- 6 Various "local" forms

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[52] Council Regulation (EEC) of 12 October 1992 establishing the Community Customs Code, *OJ* L 302, 19 October 1992, as amended.

[53] United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 *UNTS* 3.

[54] Captain Christian E. RORBECK (Maersk), "A Captains administrative burdens – Specially related to Port Documents", Presentation in Annex

10.4.3.1 Formalities with respect to the cargo

The current rules concerning customs are definitely disadvantageous for shipping, especially when compared to other modes of transport, such as road transport. Even within the EU, there is a notification duty (being shortened due to Single Market II[55] Act and Blue Belt[56]) to be able to enjoy certain simplifications (Regular Shipping Service – RSS). This is not the case for other modes of transport. The biggest problem is that the same formalities have to be carried out for different governmental services and the same information has to be sent to different governmental services.

10.4.3.1.1 Regular Shipping Service (RSS)

Shortsea shipping means the movement of cargo and passengers by sea between ports situated in geographical Europe or between those ports and ports situated in non-European countries having a coastline on the enclosed seas bordering Europe. Shortsea shipping includes domestic and international maritime transport, including feeder services along the coast, to and from the island rivers and lakes. The concept of shortsea shipping also extends to maritime transport between the MSs of the Union and Norway and Iceland and other States on the Baltic Sea, the Black Sea and the Mediterranean.[57] One of the obstacles to the development of shortsea shipping is the complexity of the administrative procedures.[58] Therefore, the current procedures should be streamlined and simplified.[59]

As stated by ECSA 90% of shortsea shipping in Europe involves at least one port of a third country. However, at this moment RSS is only an option for intra-European maritime transport. Moreover, the RSS status is only attractive to a limited scope of carriers which carry mainly community goods between EU ports. Consequently, and also since the conditions regarding the RSS simplified procedure are quite firm, the majority of the intra-EU shipping is presently outside the scope of the RSS and thus cannot benefit from the presumption of community goods status up on arrival. Only 10%-15% of the ships benefits from RSS, mostly ferry shipping companies.

The reasons for the limited use of this instrument were connected to the application and authorisation process and rigidity of the system.[60] Specific problems concern: the length of the consultation period for MSs to agree to the application, the reporting procedure and the position of the shipper. The consultation period used to be 60 days. In 2010, this was reduced to 45 days and the application can now be electronically. Following the Blue Belt initiative, the consultation period will be further reduced to 15 days. However, shortening the consultation

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55 Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on Single Market Act II, COM (2012) 573 final, 3 October 2012

56 Communication from the Commission on Blue Belt, COM (2013) 510 final, 8 July 2013

57 European Shortsea Network, "Definition on shortsea shipping by the European Union", available online: http://www.shortsea.info/definition.html.

58 Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on Mid-Term Re view of the Programme for the Promotion of Short Sea Shipping, COM (2006) 380 final, 13 July 2006.

59 Council Conclusions during the 2772nd Transport, telecommunications and Energy Council Meeting, Brussels, 11 December 2006, available online: http://www.shortsea.info/medias/documents/Council-conclusions-SSS-92109.pdf.

60 Customs Authorities Belgium, United Kingdom and the Netherlands, WSC, ECSA and EMSA, "Blue Belt Pilot Project Legal Gap Analysis", 3 May 2012, available online: http://www.emsa.europa.eu/news-a-press-centre/external-news/2-news/1463-blue-belt-pilot-project-evaluation-report.html.

period does not have any advantages for shippers. A second improvement in 2010 was that not all ships have to be identified immediately, but only after approval. As of March 2014, the possibility will be added to include future port of calls. Nevertheless, currently, you will still have to ask permission to specific Member States. It would be better if permission could be asked at the EU as a whole instead of MSs.

When the aforementioned problems will be tackled, RSS should be extended to Norway, Russia and Turkey. In a second phase, other countries in Mediterranean waters could be added, such as Lebanon, Syria, Egypt, Libya, Tunisia, Algeria and Morocco.

10.4.3.1.2eManifest

The concept of regular shipping services is only attractive to a limited number of business operations. For example, ships involved in intra-EU trade but calling also at a foreign port are excluded from its scope. The electronic cargo E-Manifest, with information on the status of goods, is considered as a practical solution for this problem. eManifest – an electronic and harmonised cargo manifest – is thus a tool to facilitate voyages of vessels calling in third countries. This represents a considerable facilitation of trade for shippers and shipping companies, as well as a simplification for customs authorities not required to check Union goods, unless identified for random or specific checks. Even deep-sea shipping is being included.

In order to introduce this facilitation, the EC is preparing to present by the end of 2013 an amendment of the current Customs Code Implementing Provisions (CCIP), including provisions to establish the E-manifest. The Commission expects the eManifest to be fully operational as of June 2015.[61] ECSA as well as the WSC welcome this initiative.

10.4.3.1.3Security concerns

Especially with regard to the advance cargo declaration, there are several security concerns. The European Union Advance Cargo Declaration Regime became effective on January 1st 2011. This manifest regulation aims to ensure an equal level of protection against terrorist attacks for all goods shipped into, out of or through the EU through customs controls. It is similar to the advanced manifest regime ("24 hour rule") instituted by the United States' Trade Act of 2002 following the 9/11 terrorist attacks.[62] It affects all freight imported into and exported out of Europe, as well as transhipment cargo. Any failure to comply with the obligations laid down in the European Union Advance Cargo Declaration Regime results in individual EU MSs imposing penalties according to the national legislation and it will apply in addition to existing customs rules laid down in the Community Custom Code. Shipping companies will be obliged to submit cargo information in advance to the customs office solely in case of import or export of goods. Consequently, in case of transit of goods, the rules on advance cargo declaration are not relevant.[63]

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[61] Communication from the Commission on Blue Belt, COM (2013) 510 final, 8 July 2013

[62] Trade Act of 2002, Pub.L. 107–210, H.R. 3009, 116 Stat. 933, enacted August 6, 2002, 19 U.S.C. paras. 3803-3805, available online: http://www.gpo.gov/fdsys/pkg/BILLS-107hr3009enr/pdf/BILLS-107hr3009enr.pdf.

[63] European Community Shipowners' Associations (ECSA), EU Advance Cargo Declaration - ECSA guidance (November 2010), 4, available online: http://www.ukpandi.com/fileadmin/uploads/uk-pi/Documents/ECSA%20guide%20on%20EU%20Advance%20Cargo%20Declaration.pdf.

The Entry Summary Declaration (ENS) consists of all relevant cargo information that must be submitted in advance to the customs office of first entry in case of import of goods to the EU. The ENS will allow this customs office to carry out a risk assessment of the cargo to be imported in the EU. The ENS does not replace the traditional manifest in each port of discharge. However, it is possible that the traditional manifest includes all relevant information for an advance cargo declaration but the manifest must – in addition – also include further specific information as determined in the national transport/customs legislation of each EU MS that the ship is calling at. For export of goods, advance cargo declaration can take the form of either a "customs declaration for export, re-export or outward processing" or, in case such customs declaration does not apply according to the normal customs rules of the Community Customs Code and in case there is no exemption, it can take the form of an Exit Summary Declaration (EXS). This declaration must contain the relevant cargo information and it will allow the customs office of exit to carry out a risk assessment of the cargo to be exported from the EU.

For maritime transport, an ENS and an EXS do not have to be submitted in case of pure intra-EU shipping services, i.e. goods that are carried on board of ships that operate services solely between ports located in EU Member States and that do not call at any port outside the EU.[64] However, when formalities for ships that have called at a port in a third country or free zone would be simplified, these documents will still be required.

10.4.3.2 Formalities with respect to the crew members

Already within the EU, certain problems can arise with respect to visa and shore leave for non-EU nationals. When ships call at third countries, this is *a fortiori* the case for both EU and non-EU nationals. Therefore, it is necessary to take a look at the current problems concerning visa and shore leave as well as positive developments to solve these problems, such as bilateral visa facilitation agreements concluded between the EU and third countries.

10.4.3.2.1 Visa problems

Another element that should be linked to this issue is the problem of visa for crew members when embarking/disembarking. Approximately 90% of the world trade makes use of maritime transport, thereby depending on more than 1.2 million seafarers to operate ships. Many of these seafarers ply waters distant from their home. Also, seafarers and ship owners are often of different nationalities and ships often operate under a flag different from their origin or ownership. Working far from home, seafarers are vulnerable to exploitation and abuse, non-payment of wages, non-compliance with contracts, exposure to poor diet and living conditions and even abandonment in foreign ports. Therefore, only standards observed by all seafaring nations can guarantee adequate protection.[65]

Member States do not apply the visa rules (Schengen, Visa Information System (VIS)) in a harmonised way (different documents, language of the documents, etc.). VIS allows Schengen

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[64] European Community Shipowners' Associations (ECSA), EU Advance Cargo Declaration - ECSA guidance (November 2010), 5-6, available online: http://www.ukpandi.com/fileadmin/uploads/uk-pi/Documents/ECSA%20guide%20on%20EU%20Advance%20Cargo%20Declaration.pdf.

[65] International Labour Organization, "Seafarers", available online: <http://www.ilo.org/global/standards/subjects-covered-by-international-labour-standards/seafarers/lang--en/index.htm>.

States to exchange visa data.[66] It consists of a central IT system and of a communication infrastructure that links this central system to national systems. VIS connects consulates in non-EU countries and all external border crossing points of Schengen States. It processes data and decisions relating to applications for short-stay visas to visit, or to transit through the Schengen Area. The system can perform biometric matching, primarily of fingerprints, for identification and verification purposes. One of the purposes of VIS is facilitating checks and the issuance of visas. It enables border guards to verify that a person presenting a visa is its rightful holder and to identify persons found on the Schengen territory with no or fraudulent documents. Using biometric data to confirm a visa holder's identity allows for faster, more accurate and more secure checks. As a Schengen instrument, VIS applies to all Schengen States (Denmark has decided to implement it).

VIS also provides that bilateral visa facilitation agreements concluded between the EU and third countries may derogate from the provisions of the Code. The EU has concluded an approved destination status (ADS) agreement with China. Next to this, there are visa facilitation agreements with Russia, Ukraine, Serbia, Montenegro, Bosnia, the former Yugoslav Republic of Macedonia, Albania and Moldova.[67] These contain rules on the issuing of visas to certain categories of individuals, including provisions on the required documentary evidence regarding the purpose of the journey, multiple entry visas, applicable fees and length of procedures for processing visa applications. They also provide for visa exemption for holders of diplomatic passports. Certain matters are expressly excluded from the scope of the agreements including recognition of travel documents, visa refusal, proof of sufficient means of subsistence, refusal of entry and expulsion matters. Among the most significant changes that VIS introduces is the obligation for the MSs to notify visa applicants who are refused a visa of the reasons for the decision – thereby using a standard form – and a right of appeal against visa refusal decisions (Art. 32 VIS). These provisions were introduced to enhance the Community approach and the equal treatment of applicants.[68]

For the moment, ECSA and ETF are analysing the current needs and possible solutions. Shipping companies do not experience big problems for EU crew members, but procedures for visa requirements for non-EU crew members is problematic, even within EU-countries as they do not apply the visa rules in a harmonised way.

10.4.3.2.2Shore leave problems

According to the FAL Convention, shore leave means the permission for a crew member to be ashore during the ship's stay in port within such geographical or time limits, if any, as may be decided by the public authorities. Shore leave is essential for the physical and mental health of seafarers. Standard 3.45 FAL Convention states that crew members shall not be required to hold a visa for the purpose of shore leave. FAL Convention Standard 3.10.1 says: "In the seafarer's identity document, public authorities shall not require more than the following information: family name, given names, date and place of birth, nationality, physical

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[66] Regulation (EC) No 767/2008 of the European Parliament and of the Council of 9 July 2008 concerning the Visa Information System (VIS) and the exchange of data between Member States on short-stay visas (VIS Regulation, *OJ* L 218, 13 August 2008, as amended.

[67] See ADS agreements for China (2004) *OJ L* 83/12, Russia (2007) *OJ L* 129 and Ukraine, Serbia, Montenegro, Bosnia, the former Yugoslav Republic of Macedonia, Albania and Moldova (2007) *OJ L* 332 and 334. The Council has also authorised the Commission to open negotiations with Georgia (see Justice and Home Affairs Council, Press Release (November 27-28, 2008), 16325/08, p.40), and Cape Verde (see ILPA, European Update (June 2009)).

[68] For an overview on VIS, see: Annalisa Meloni, "The Community Code on Visas: harmonisation at last?", 34 *European Law Review* 671 (2009).

characteristics, photograph (authenticated), signature, date of expiry (if any), issuing public authority."

The International Labour Organisation (ILO) Convention N° 185 on Seafarers' Identity Documents ILO 185 was adopted as part of a package of maritime security measures following the terrorist attacks of 2001. [69] In order to balance the interests of port States, employers and seafarers, the Convention requires seafarers to carry identity documents, but stipulates that port States must facilitate shore leave and transits to and from ships without visas. Many Parties that may not have ratified ILO Convention 185 nevertheless remain Parties to the ILO Convention N° 108 on Seafarers' Identity Documents of 1958, which similarly prohibits States from requiring seafarers to obtain visas to gain access to shore leave.[70]

The ILO Convention N° 185 establishes an identity regime for seafarers with the aim of developing effective security from terrorism and ensuring that the world's seafarers will be given the freedom of movement necessary for their well-being and for their professional activities and, in general, to facilitate international commerce. It sets out the precise form of the identity document (ID), to be easily adapted subsequently to keep up with technological developments. A major feature of this ID is a biometric template based on a fingerprint. A Resolution accompanying the Convention makes provision for the facilitation of shore leave and transit and transfer of seafarers, including the exemption from holding a visa for seafarers taking shore leave. To avoid the risk of an ID being issued to the wrong person, the Convention also requires ratifying member States to maintain a proper database available for international consultation by authorised officials and to have and observe adequate procedures for the issuance of IDs. These procedures, which cover not only the security aspects but also the necessary safeguards for individual rights, including data protection, have to be subjected to transparent procedures for international oversight.

Nevertheless, the ILO Convention N° 185 is not yet widely accepted by States (only 24 ratifications) and it has not gained general acceptance from all the immigration officials boarding ships in the world ports.

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[69] Seafarers' Identity Documents Convention N° 185, (adopted 19 July2003, entered into force 9 February 2005), available online: <http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_ILO_CODE:C185>. See also: EC, Authorisation of Member States to ratify the Seafarers' Identity Documents Convention of the International Labour Organization (Convention 185), COM (2004) 530.

[70] Seafarers' Identity Documents Convention N° 108 (adopted 13 may 1958, entered into force 19 February 1961), available online: <http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312253:NO>. This Convention has 64 ratifications.

Country	Date	Status
Albania	11 Oct 2007	In Force
Azerbaijan *On 10 April 2006, the Government notified that it provisionally applies the Convention, in accordance with its Article 9.*	17 Jul 2006	In Force
Bahamas	14 Dec 2006	In Force
Bosnia and Herzegovina	18 Jan 2010	In Force
Brazil	21 Jan 2010	In Force
Croatia	06 Sep 2011	In Force
France	27 Apr 2004	In Force
Hungary	30 Mar 2005	In Force
Indonesia	16 Jul 2008	In Force
Jordan	09 Aug 2004	In Force
Kazakhstan	17 May 2010	In Force
Korea, Republic of	04 Apr 2007	In Force
Lithuania	14 Aug 2006	Not in force
Luxembourg	20 Sep 2011	In Force
Madagascar	06 Jun 2007	In Force
Marshall Islands	24 Aug 2011	In Force
Moldova, Republic of	28 Aug 2006	In Force
Nigeria	19 Aug 2004	In Force
Pakistan	21 Dec 2006	In Force
Philippines	19 Jan 2012	In Force
Russian Federation	26 Feb 2010	In Force
Spain	26 May 2011	In Force
Vanuatu	28 Jul 2006	In Force
Yemen	06 Oct 2008	In Force

Table 2: Status of ratifications ILO Convention No. 185[71]

The International Federation of Shipmasters' Associations (IFSMA) pointed out that in many ports, shore leave and crew transits require seafarers to obtain visas in advance.[72] Indeed, the ILO Convention N° 185 does not specifically prohibit port States from demanding visas from visiting seafarers, it merely discourages the practice. If visas have to be made available, it ought to be possible for seafarers to obtain them on arrival at a port. However, sadly, there does not seem to be much sign of any action or of a more conciliatory attitude.

The International Shipping Federation (ISF), which represents maritime employers globally, is therefore calling on port States to facilitate the right of seafarers to shore leave, in line with governments' international treaty obligations, by proposing a new pragmatic approach to visa requirements.[73] ISF has made this proposal in a submission to the IMO Facilitation Committee, which considers reviews of the IMO Convention on the Facilitation of International Maritime

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[71] International Labour Organisation, "Ratifications of C185 - Seafarers' Identity Documents Convention (Revised), 2003 (N° 185)", available online: <http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300_INSTRUMENT_ID:312330:NO>.

[72] Michael GREY, "A Question of Identity", Nautilus (June 2013), available online: <http://www.kbz-crmb.be/nautilus/#magazine>.

[73] International Shipping Federation, "ISF Calls on Governments to Facilitate Shore Leave by Proposing New Pragmatic Approach to Visa Requirements", Press Release (18 February 2013), available online: <http://www.ics-shipping.org/pressreleases.htm>.

Traffic (FAL). The FAL Convention includes a blanket prohibition on port States requiring seafarers to obtain visas in order to enjoy shore leave.[74] However, in a world of heightened concerns about security and immigration issues, the ability of seafarers to exercise this right is increasingly being challenged, with visas now required in United States and Australia. Problems are still being reported of seafarers not being able to leave their ships without visas within the Schengen area of the European Union, in spite of efforts by the EC to resolve these difficulties. Problems also exist in Brazil, Singapore, South Africa and other countries.

Although the EU Schengen Borders Code and Visa Code allow for seafarers to be issued with a visa on arrival at the border – if they have not been in a position to apply for one in advance – shipping companies only have recourse to this arrangement in exceptional circumstances and it does not resolve all the challenges currently faced.[75]

As part of the on-going review of the FAL Convention, several governments have supported proposals to add "visa number, if appropriate" within the information that port states can be permitted to request from ships. Governments have argued that this information will only be used to assist the transmission of information about visas required by those seafarers who might wish to travel beyond the 'geographical limits' of shore leave. Nevertheless, ISF believes that the adoption of such an amendment could serve to legitimise the requirement of visas for shore leave by Parties to FAL, further undermining the fundamental principle that visas should not be required.[76]

ISF is proposing to IMO that governments should agree that in the event that port States do insist upon requiring visas for shore leave, they should make provisions for the seafarers to be able to apply for visas upon arrival in port, or very shortly before. ISF therefore proposed that a new 'Recommended Practice' to this effect should be included in the FAL Convention[77]: Recommended Practice 3.46: "In circumstances where Contracting Governments may not be in a position to fully implement Standard 3.45, adequate provisions should be in place to allow seafarers to apply for a visa upon arrival in port, or shortly before arrival."[78]

If this was accepted, ISF would drop its current opposition to the proposal that visa numbers might be requested from ships. The FAL Committee considered this proposal and agreed to maintain the principle that crew members are not required to hold a visa for the purpose of shore leave, as already set out in Standard 3.45. It decided to refer the subject of visas for other purposes to the Working Group on General Review and Implementation of the Convention, for its consideration and advice on inclusion of the visa number, if appropriate, in the crew and passengers list and in the disembarkation card.[79]

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[74] Convention on Facilitation of International Maritime Traffic (adopted 9 April 1965, entered into force 5 March 1967), 591 *UNTS* 265, as amended [FAL Convention].

[75] IMO Facilitation Committee, Visa Issues – Comments and Proposed Amendment, *IMO Doc.* FAL 38/4/3 (15 February 2013), para. 9.

[76] International Shipping Federation, "ISF Calls on Governments to Facilitate Shore Leave by Proposing New Pragmatic Approach to Visa Requirements", Press Release (18 February 2013), available online: <http://www.ics-shipping.org/pressreleases.htm>.

[77] IMO Facilitation Committee, Visa Issues – Comments and Proposed Amendment, *IMO Doc.* FAL 38/4/3 (15 February 2013).

[78] IMO Facilitation Committee, Visa Issues – Comments and Proposed Amendment, *IMO Doc.* FAL 38/4/3 (15 February 2013), para. 11.

[79] IMO Facilitation Committee, Report of the Facilitation Committee on its Thirty-Eight Session, *IMO Doc.* FAL 38/15 (15 February 2013), paras. 4.18-4.19.

The ILO Convention N° 185 has recognized the importance of shore leave by making it a requirement, but has not ensured that it will be provided. The availability of shore leave is not a problem in every nation, as the vast majority of nations do not require a visa for entry into port. Some do, thereby threatening the ability of ship owners to guarantee shore leave without proper preparation. For example, with its requirement of D-1 visas, the United States has the most notoriously difficult shore leave standards. In the United States a foreign seafarer must obtain a D-1 visa before he is permitted to leave his ship. These visas cost $100 and have to be obtained by the seafarers themselves.[80]

The ILO Convention N° 185, though it mandates shore leave generally, says nothing about informing seafarers of these visas, assisting seafarers in applying for and obtaining these visas, or ensuring that they have these visas before they come on board. Moreover, there is no requirement that port nations using visa systems reduce the waiting period or arrange for these visa requirements to be simplified or waived. It does, however, call for on-shore facilities to be provided within the ports of member nations and for shore leave to be facilitated immediately upon a ship's arrival into port, but this language is certainly not strong enough to mandate that visa requirements be waived or modified.[81]

Australia, for example, implemented a visa requirement for seafarers on shore leave. While this requirement is certainly burdensome for seafarers, the visas will be free of charge and will be valid for a period of three years. If the ILO is serious about the ILO Convention N° 185, it must pressure the United States and Australia to abandon or to rework these visa requirements. At least, the ILO Convention N° 185 should require that ship owners inform all of their crew members about the visa requirements in destination ports and assist these seafarers with the application process. Determining whether the seafarers were given this information and assistance must become a part of the in-port inspection system as well to ensure that these provisions are being obeyed. Otherwise, seafarers entering the popular ports of the United States and Australia will too often be deprived of shore leave, and other nations may begin to establish visa requirements of their own in retaliation. [82] Stricter documentation rules also exist in Brazil, Singapore, South Africa and other countries.

A European example: Slovenia

On 1 July 2004 the Slovenian General Police Directorate instructed the Maritime Police the following: "Holders of Seamen's Books issued in a country not ratifying ILO Convention N° 108 (Seafarers National Identity Documents), who are also holders of a Passport of the country whose citizens need an entrance visa are allowed to go ashore only if they have applied and paid for a visa." The International Transport Workers' Federation (ITF) acted immediately and sent an official letter to the General Police Directorate informing them that Slovenia had ratified the FAL Convention, which states that crew members shall not be required to hold a visa for the purpose of shore leave and also stipulates that foreign crew members shall be allowed ashore by the public authorities whilst their ship is in port. The Police, however, did not know anything about international conventions. The ITF received an official letter from Darko ANZELJ, General

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[80] STEVENSON, Douglas B., "Restrictions on Shore Leave: Any Movement on this Issue?" (2005), available online: <http://www.marinelog.com/DOCS/PRINTMMV/MMVmarstev1.html>.

[81] BAUER, Paul J., "The Maritime Labour Convention: An Adequate Guarantee of Seafarer Rights, Or an Impediment to True Reforms?", 8 *Chicago Journal of International Law* 643 (2008), 654.

[82] BAUER, Paul J., "The Maritime Labour Convention: An Adequate Guarantee of Seafarer Rights, Or an Impediment to True Reforms?", 8 *Chicago Journal of International Law* 643 (2008), 654.

Director of the Slovenian General Police Directorate, in which he stated that there is no international legal basis obliging the Slovenian Police to change their policy.

After several letters of protest from ITF, there was finally a positive response. The Slovenian Transport Minister, Marko PAVLIHA, initiated a meeting between the Ministries of Transport, Internal Affairs and External Affairs. He confirmed that ITF was right and made it very clear that Slovenia must respect the FAL Convention. During the meeting, it was agreed that all seafarers coming to the Slovenian Port of Koper would be allowed to go ashore, even if they do not possess an entry visa. The General Police Directorate changed their instructions to the Maritime Police but not as expected. According to the new instructions, the Maritime police now allows seafarers to go ashore with a valid passport and without visa. But in cases where seafarers are without current, valid passport, they are allowed to go ashore only if they are holders of a Seaman's Book issued in a country ratifying ILO Convention N° 108. There are important countries, however, that did not ratify this convention, for example: the United States, Germany and Japan. The discussion with the Slovenian General Police Directorate is continuing. ITF is argues that if you are a signatory to the FAL Convention, as long as the ID complies with provision 3.10.1 (standard of requirements for an ID), it is valid and ILO Convention N° 108 is irrelevant.[83]

Problems are still being reported of seafarers not being able to leave their ships without visas within the Schengen area of the EU, in spite of efforts by the EC to resolve these difficulties.

10.4.3.2.3 Problems in the cruise sector

The Schengen Borders Code has a special Annex on the various means of transport, thereby including cruise ships. A cruise ship is considered a ship which follows a given itinerary in accordance with a predetermined programme, which includes a programme of tourist activities in the various ports, and which normally neither takes passengers on nor allows passengers to disembark during the voyage.[84] Where the cruise ship comes from a port situated in a third country and calls again at a port situated in the territory of a MS, crew and passengers shall be subjected to entry checks on the basis of the nominal lists of crew and passengers, to the extent that those lists have been modified since the cruise ship called at the previous port situated in the territory of a MS.[85]

The nominal lists of crew and passengers shall include: (a) name and surname; (b) date of birth; (c) nationality; (d) number and type of travel document and, where applicable, visa number. The cruise ship's captain or, failing that, the ship owner's agent shall transmit to the respective border guards the nominal lists at least 24 hours before the arrival at each port in the territory of the MSs or, where the journey to this port lasts less than 24 hours, immediately after the boarding is completed in the previous port. The nominal list shall be stamped at the

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[83] International Transport Workers' Federation, "Shore Leave problems in Slovenia" (30 September 2004), available online: <http://www.itfglobal.org/campaigns/slovenia.cfm>.

[84] Regulation (EC) N° 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code), *OJ* L 105/1 of 13 April 2006, Art. 2(16).

[85] Regulation (EC) No. 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code), *OJ* L 105/1 of 13 April 2006, Annex VI "Specific rules for the various types of border and the various means of transport used for crossing the Member States' external borders", par. 3.2.3.

first port of entry into the territory of the Member States and in all cases thereafter if the list is modified.[86]

In the cruise sector there is a problem as the Seaman's Book (a passport for seafarers) cannot be used by catering and cleaning services.[87] As a solution, tourist visa can be requested. However, this is not an ideal situation.

10.5 Conclusions

There is definitely a need of avoiding or simplifying formalities for ships that have called at a port in a third country or free zone. However, certain conditions need to be fulfilled in order to make this legally and economically feasible.

10.5.1 Further facilitation needed on international level

We can conclude that the FAL Convention enhances the facilitation of maritime traffic, third countries that did not ratify the FAL Convention cannot be subjected to the provisions within the FAL Convention as it is a *pacta tertiis*. This is an element that has to be taken into account when concluding agreements with third countries. Both the IMG Code as well as the ISPS Code do not meet their objectives. The IMDG Code – although trying to facilitate maritime traffic – lacks harmonisation, while the ISPS Code places an enormous administrative burden upon seafarers. Moreover, a lack of harmonisation between these several instruments results into redundant administrative formalities. For the moment, the IMO tries to list the specific problems resulting from this lack of harmonisation.

10.5.2 Further improvements concerning simplifying formalities with respect to the cargo

The current rules concerning customs are disadvantageous for shipping, especially when compared to other modes of transport, such as road transport. Even within the EU, there is a notification duty (being shortened due to Single Market II Act and Blue Belt) to be able to enjoy certain simplifications (RSS). This is not the case for other modes of transport. For the moment, for ships calling at third ports and re-entering the EU, there are no real workable simplified procedures. Ships calling at third ports and re-entering the EU, are considered to be 'infected vessels'. The biggest problem is that the same formalities still have to be carried out for different governmental services and the same information has to be sent to different governmental services. Although Blue Belt meets several needs, further improvements could be introduced.

10.5.2.1 Burden of proof

One of the elements that should be considered is reversing the burden of proof. For the moment, cargo has a non-EU status until the opposite is being proved. This should be reversed

[86] Regulation (EC) No. 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code), *OJ* L 105/1 of 13 April 2006, Annex VI "Specific rules for the various types of border and the various means of transport used for crossing the Member States' external borders", par. 3.2.4.

[87] Nevertheless, in the United States, a District Court in Louisiana found a part-time cleaning lady to be a seaman. In this specific case, the cleaning lady provided her services aboard The Cangirod II, which was a yacht or pleasure boat. In rendering its decision, the Court stated that a part-time cleaning lady contributes to the function or mission of a yacht and is therefore a seaman. See: Lunsford v. Fireman's Fund Ins., Co., 635 F. Supp. 72 (E.D. La. 1986).

in the long term. However, security concerns (dangerous cargo) could be one of the problems. The simplifications should be made possible for all kinds of cargo and for all kinds of traffic. In practice, liner shipping and container shipping will have the most advantages.

10.5.2.2 RSS: Permission of the EU instead of permission of MS

It is a positive evolution that, with regard to recent enhancements to the RSS scheme, the consultation period will be shortened and that shipping companies are now able to include future ports of call. However, a company still has to ask permission to the MS instead of the EU in general.

10.5.2.3 Implementation of eManifest

The implementation of the electronic cargo eManifest, with information on the status of goods, is a crucial step towards the simplification of formalities. This electronic and harmonised cargo manifest will facilitate voyages of vessels calling in third countries. Shippers and shipping companies, as well as for customs authorities will enjoy this facilitation.

10.5.2.4 Agreements with third countries

Agreements concerning the simplification of formalities for ships with third countries are non-existing for the moment. Nevertheless, there are indications that certain shipping companies have made arrangements with third countries as they are already able to enjoy certain simplifications of formalities when calling at these countries. However, this is not formalised and ECSA is not involved[88]. In a first phase, RSS should be extended to Norway, Russia and Turkey. In a second phase, other countries in Mediterranean waters could be added, such as Lebanon, Syria, Egypt, Libya, Tunisia, Algeria and Morocco. Lastly, all shortsea shipping should evolve towards the RSS system.

10.5.2.5 Central database to enhance transparency

Shippers stress that there is a need for transparency and a better balance between simplification of procedures and customs concerns, especially when preparing the documents. Otherwise they will not benefit from the Blue Belt Pilot Project. Indeed, shippers claim not to benefit RSS, as they do not know beforehand onto which ship their cargo will be brought.

At present, a document must be submitted at the place of destination in order to show the status of the goods. This can be done by means of a T2L form. If the shipper - at the place of departure - does not know whether there are alternative forms of demonstrating the possible status, he/she will go for the maximum number of documents. The T2L document will thus be used for the consignment. Therefore, the shipper will not benefit any simplifications.

As a solution, they would like to make use of a central database – connected to Blue Belt – that would allow them to know in advance whether their goods will be transported by a ship that falls within the scope of Blue Belt or not. This central database would be available to all stakeholders. As cargo is placed upon ships by shipping agents, shippers do not always know on which ship their goods will be carried.

[88] The indications referred to in the text above are based on confidential information.

10.5.2.6 Harmonised Single Windows on Community level

Further harmonisation of the Single Window is needed between Member States, but also on Community level. Currently the European Community has three major Single Window initiatives that should be coordinated: (1) the SW Initiative of DG TAXUD, aiming at a SW at community-level for customs purposes; (2) the 'Maritime Single Window' of DG MOVE for maritime requirements; and (3) the SW within DG SANCO, with respect to food.

10.5.3 Further improvements concerning simplifying formalities with respect to the crew

10.5.3.1 Harmonisation of visa rules within the EU

MS are not applying the visa rules (Schengen, Visa Information System) in a harmonised way (different documents, language of the documents, etc.). Currently, ECSA and ETF are analysing the current needs and possible solutions. It would be interesting to take this study into account in order to improve the current legal problems. A positive element, however, is that VIS already provides that bilateral visa facilitation agreements can be concluded between the EU and third countries. These kinds of facilitation agreements are highly recommended.

10.5.3.2 Harmonisation of shore leave rules on international level

The ILO Convention N° 185 has recognised the importance of shore leave by making it a requirement, but has not ensured that it will be provided. Next to this, the ILO Convention N° 185 is not yet widely accepted by States (only 24 ratifications) and it has not gained general acceptance from all the immigration officials boarding ships in the world ports. ISF therefore proposed to IMO that governments should agree that in the event that port States do insist upon requiring visas for shore leave, they should make provisions for the seafarers to be able to apply for visas upon arrival in port, or very shortly before. ISF therefore proposed that a new 'Recommended Practice' to this effect should be included in the FAL Convention. However, this was not accepted.

Also within the Schengen area of the EU, problems are still being reported of seafarers not being able to leave their ships without visas, in spite of efforts by the EC to resolve these difficulties.

10.6 Recommendations

10.6.1 Short term recommendations

In order to make it possible to extend the simplification of formalities for ships calling at a third country port, the simplification within the EU should be optimised first. Concerning RSS, improvements could be made with respect to the burden of proof as well as the notification duty. The role and cooperation of DG TAXUD is therefore crucial.

Also the implementation of the eManifest should be realised in short term.

Next to this, it is essential to take into account the outcome of the IMO questionnaire on redundant administrative formalities.

Moreover, until now, discussions on simplifying formalities have been focusing on the cargo. Nevertheless, it is important to include also formalities with regard to crew members as problems concerning visa and shore leave still exist on international as well at EU level.

10.6.2 Medium/long term recommendations

In order to make it possible to extend the simplification of formalities for ships calling at a third country port, the European Customs Code will need adjustments. The role and cooperation of DG TAXUD is again crucial. Next to this, agreements with third countries – especially Russia, Norway and Turkey – have to be developed. These agreements are non-existent for the moment. In order to enhance transparency for all stakeholders, a central database could be developed. Shipping companies as well as shippers would be able to get the necessary information from this database. This database should be available before third countries are being involved. Indeed, if there is no database, fiscal risks for shippers will be enormous when also third countries will become part of Blue Belt. From their point of view, facilitation of reporting formalities means that everything will go faster, while the fiscal risks for them are enormous. For example, within the EU, shippers may enjoy certain privileges such as zero-rating VAT. A VAT-exemption is dependent on the place of destination of the goods. However, if there is still no satisfactory solution with regard to the distinction between export and transport to another port in the EU, there is a risk that no exemption will be granted. As VAT is slightly above 20% in most countries, this would entail substantial financial risks for shippers.

The PCS could play a crucial role in setting up this database, as this system already is linked with shippers. The IMO defines the term PCS as a computerised system that simplifies information exchanged between non-public authorities in a port. This includes functionalities also found in single windows, for example databases, message exchanges, etc. Also exchange of information with governmental parties could be part of the scope of a PCS.[89] Nevertheless, currently PCS is being used differently in the MSs. PCS should therefore be harmonised, first within Northwest Europe, afterwards within other European countries, and lastly some third countries could be involved.

[89] IMO Facilitation Committee, Guidelines for setting up a single window system in maritime transport, *IMO Doc.* FAL.5/Circ.36 (9 November 2011).

11. THE AVAILABLE DATA CONCERNING SHIP TRAFFIC/MOVEMENT WITHIN THE UNION, AND/OR CALLING AT THIRD COUNTRY PORTS OR IN FREE ZONES (ART. 15(E) RFD)

11.1 Context

Art. 15(e) of Directive 2010/65/EU concerns data and information necessary to examine the availability of data concerning ship traffic/movement within the Union, and/or calling at third country ports or in free zones.

The concerned data are required to define the importance of ship movements in the union involving stops in free zones and/or third country ports.

11.2 Issue clarification

The objective is to obtain insight in the data availability of ship movements/traffic from one EU port to another, or calling intermediately at third country ports or entering free zones: today there is no clear understanding of the importance/extent of this traffic.

The aim is to define which data are available at the moment on ship movements/ traffic, in order to:

- obtain an idea on the importance/extent – this is necessary to evaluate the necessity to introduce simplification for such traffic. For this purpose statistics could be sufficient;
- but also to get a view on the routes taken - in order to define which routes to monitor or not. For this purpose effective route information is required, including routes taken and the frequency.

Data can include concerned cargo volumes, but also the traffic frequency (number of ship movements).

11.3 Research questions

In order to define the importance of ship movements in the Union involving stops in free zones and/or third country ports several data sources are available. Organisations involved in handling these data can be consulted on the availability of the data. Questions to these organisations include:

- Is your organisation, company... involved in such traffic? Can you provide data regarding such traffic?
- Where do you obtain data and what kind of data can you provide on such ship movements/traffic?
- Do you provide such data to third parties or data bases?

- Which parties are specifically involved in the handling of such traffic/ship movements?
- Do you have suggestions on where/how to obtain such data?

11.4 Analysis

The analysis is built up of following parts:

- Investigation and description of existing data sources – a distinction is made between:
  - Cargo data, and
  - Movement data
- Interviews of concerned organisations
- A survey of EPSCA members
- The eManifest

11.4.1 Investigation and description of the existing data sources

There are two kinds of data, being cargo data and movement data. Data on cargo are exchanged between the vessels and the port authorities/terminals for operational reasons and with the customs for tax declaration/clearance purposes. Data on ship movements can be obtained through vessel position tracking systems or reporting formalities.

11.4.1.1 Cargo data

This section discusses the forms containing thee cargo data on the one hand and the availability of analysed cargo data on the other hand.

- Cargo forms

Information relating to cargo which is required by customs and other authorities are collected via a cargo declaration or "cargo manifest" transmitted by the shipping company. Despite the adoption of a standardised cargo declaration (FAL form 2) in the FAL Convention and the existence of an electronic format recommended by the World Customs Organization (CUStoms CARgo message), there is no harmonised structure for the cargo manifest which has been implemented by the MSs and that could be used for electronic administrative clearance systems.[90] The content of the manifest is prescribed by the legislation of each EU MS, not by EU customs legislation.

IMO has developed a standardised form for the Cargo declaration, being FAL form 2. This FAL 2 is used in a limited way because it does not include enough information for risk-analysis and fiscal purposes. Therefore, in general this form is not required. The national requirement is to submit the cargo manifest information, although there is no agreed international standard to submit this information.[91]

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[90] European Commission, Communication from the commission, Blue Belt, a Single Transport Area for shipping, Brussels, 8.7.2013 COM(2013) 510 final, available online: http://ec.europa.eu/transport/modes/maritime/news/doc/com(2013)510_en.pdf

[91] European commission, directorate-general from mobility and transport, draft report, eMS Customs Subgroup 4th Meeting, available online: http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=8382&no=2

The recommended EDI format of the Cargo declaration (FAL form 2) is the UN/EDIFACT Customs Cargo Report Message (CUSCAR). This message permits the transfer of information required by public authorities relating to the cargo of a ship on arrival and departure. CUSCAR is also used for submitting "Ship's Stores Declaration" electronically (= FAL form 3).

Besides the cargo manifests which are required in each port of discharge in the MSs an Entry Summary Declaration (ENS) must be submitted to the customs when goods are imported in the EU and a kind of exit summary when goods leave the EU (Art. 36 a and Art. 182 a Council Regulation (EEC) N° 2913/92).

Art. 15 of the Council Regulation (EEC) N° 2913/92 states that all information which is by nature confidential or which is provided on a confidential basis shall be covered by the duty of professional secrecy. It shall not be disclosed by the competent authorities without the express permission of the person or authority providing it. The communication of information shall, however, be permitted where the competent authorities are obliged to do so pursuant to the provisions in force, particularly in connection with legal proceedings. Any disclosure or communication of information shall fully comply with prevailing data protection provisions, in particular Directive 95/46/EC and Regulation (EC) N° 45/2001.

	EU directives	FAL forms IMO	Corresponding Electronic Data Interchange (EDI) formats
Entry summary declaration (ENS)	Art. 36a Council Regulation (EEC) N° 2913/92 and Art.87 Regulation (EC) N° 725/2004	FAL form 2 (Cargo Declaration)	CUSCAR - CUStoms CARgo message

Table 3: EU directives and corresponding FAL forms and EDI's containing cargo data

More specifications on the elements/content required for directive Art. 36a Council Regulation (EEC) N° 2913/92, FAL from 2 and CUSCAR message are given in Annex 2.

- Cargo statistics

In this section the maritime statistics are discussed which are available on the websites of Eurostat, the international maritime statistics forum (IMSF) and the European Sea Ports Organisation (ESPO).

- Eurostat

Eurostat is the statistical office of the EU situated in Luxembourg. Its task is to provide the EU with statistics at European level that enable comparisons between countries and regions.

Within Eurostat there are **aggregated statistics available on maritime transport.** The data are collected and/or compiled by the competent national statistical authorities, which can be for instance the National Statistical Office, the Ministry of Transport, the National Maritime Administration. Different countries organise data collection in different ways, according to the specific national statistical organisation, in order to minimise burden on respondents. Generally speaking, original data sources can be the Port Authorities. However custom documents as well as other administrative sources (such as vessel registers) are used. The data collection is based on the terms of Directive 2009/42/EC of the EP and of the Council on statistical returns in respect of carriage of goods and passengers by sea. Data are transmitted to Eurostat via eDAMIS (electronic Dataflow Administration and Management Information System), following the transmission format foreseen in Directive 2009/42/EC.

The maritime transport data have been calculated using data collected at port level of the EU ports and the ports in Turkey and Norway. The data are displayed at port level, regional level, Maritime Coastal Area (MCA) level and country level. The data are presented in six collections, displaying Main Annual results, Short Sea Shipping, Passengers, Goods, Vessels traffic and Regional information.

Data for maritime transport on port-to-port level is considered to be confidential by the Working Group on Maritime Transport Statistics.

Eurostat provides information on Short Sea shipping (SSS)[92]. Results on SSS are broken down by sea regions (Atlantic Ocean, Baltic Sea, etc.) and by type of cargo.

Based on the statistics of Eurostat it can be stated that the share of Short Sea Shipping is about 60% of the maritime transport volume of goods of EU-27 in 2011. Also the share per cargo type in this 60% are given, notably 46% for Liquid Bulk, 20% Dry Bulk, 13% Containers, 13% of Ro-Ro units and 7% of other cargo. Furthermore the transport volumes are given of SSS between the EU-27 ports and the Atlantic Ocean (13%), the North Sea (26.5%), the Black Sea (6.6%), the Baltic Sea (21,2%) and the Black Sea (6.6%).

With this data it is possible to get insight in the cargo volumes transport within Europe from all EU-28 countries, Norway and Turkey to the sea regions (not available on port level). For most countries, the highest share of their short sea shipping of goods was with partner ports located in the same sea region as their own coastline. One exception was Latvia, where about half of the short sea shipping of goods came from or was destined for ports located in the North Sea. Romania was another exception, with the Mediterranean region taking the largest share. These results are all expressed in cargo volumes and not in shipping frequencies.

Conclusions:

- There are no statistics available on ship traffic frequencies on the busiest shipping routes within Europe and to third country ports, as such data is not collected within the scope of Directive 2009/42/EC.
- There are no statistics disseminated on cargo volumes shipped from one port to another port within Europe, as data for maritime transport on port-to-port level is considered confidential. Instead, statistics on cargo volumes are disseminated on the aggregated port-to-MCA level. Pre-qualified researchers may access the confidential micro data for scientific purposes, provided that Eurostat's guidelines for such access are fulfilled[93].
- There is information available on the number of vessels calling at EU-28 ports and ports in Norway, Croatia and Turkey. But it is not possible to see where these ships are coming from or destined for.

[92] This deals with the transport of goods between ports in the EU-28 on one hand, and ports situated in geographical Europe, on the Mediterranean and the Black Sea on the other, i.e. ports in EU-28 countries (Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Spain, Sweden and the United Kingdom), candidate countries (Montenegro, Iceland, the former Yugoslav Republic of Macedonia, Serbia and Turkey), EEA countries (Iceland and Norway), Baltic (Russia), Mediterranean (Albania, Algeria, Bosnia–Herzegovina, Egypt, Israel, Lebanon, Libya, Morocco, Occupied Palestinian territory, Syria, and Tunisia) and Black Sea (Georgia, Moldova, Russia and Ukraine).

[93] As described on http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/introduction

- There are statistics available on the SSS of goods by reporting country and by type of cargo. But it is not possible to deduct which type of cargo transported which share of SSS volume to the sea regions from the disseminated statistics. If requested, Eurostat can produce and disseminate such statistics based on the available micro data (although not on port-to-port level, because of the confidentiality issues).
- All statistics are available in Excel, CSV, HTML, PC AIS, SPSS, TSV and PDF format.
- Based on cargo volume flows for SSS of goods from countries to the sea regions, following conclusions can be drawn, based on Eurostat Statistics of 2011. Countries with the highest share of SSS of goods with:
    - The Mediterranean Sea: Italy (33%) Spain (17%) and Greece (11%).
    - The Black Sea: Italy (33%)
    - The Atlantic Ocean: UK (40%), France (17%)
    - The Baltic Sea: Germany (21%), Sweden (20%)
    - The North Sea: UK (32%), Norway (19%), Netherlands (14%), Germany (10%)
- ***International Maritime Statistics Forum (IMSF)***

The *International Maritime Statistics Forum (IMSF*) is responsible for developing a number of recognised standards which have been, or are in the process of being, adopted by governments and international bodies including the EuC and United Nations. Current projects include the development of a variable, to be incorporated into leading vessel databases, indicating the country obtaining primary economic benefit from the operation of individual ships. For statistics IMSF refers to the website of Eurostat.

- ***European Sea Ports Organisation (ESPO)***

ESPO represents the port authorities, port associations and port administrations of the seaports of the MSs of the EU and Norway. ESPO states that all the statistics they provide are available on ESPO's website and are related to port throughput (i.e. traffics in millions of tonnes in a port[94]). ESPO launched a Rapid Exchange System (RES). The idea was to arrange a voluntary exchange of statistics on a confidential basis between participating ports, and to have the results available as quickly as possible. The ESPO Rapid data Exchange System includes quarterly data/statistics on the following traffics:

- Total liquid bulk (tons)
- Total dry bulk (tons)
- Total general cargo (tons)
- Containers (tons, TEU)
- Passengers
- Total tonnage (tons) (tonnage of goods carried, including packaging and including the tare weight of containers or ro-ro units)

Around 50 ports participate in ESPO RES. All the data/statistic are per port; there is no information on origin or destination of the transported goods. Data/statistics are expressed in

[94] European Sea Ports Organisation – Traffic Data of Year 2013 - http://www.espo.be/images/stories/statistics/espo%20-%20q1-2013.pdf

tons. Annual data/statistics on total number of vessels are given for the 50 participating ports. There is no data/statistics available on specific transport.

Furthermore ESPO website refers to Eurostat for statistics.

11.4.1.2 Movement data

Three different types of maritime monitoring data:

- **Reporting regimes where data must be actively reported by a person or vessel**
- Port security notification requirements - Article 6 of Regulation (EC) 725/2004

The Port Security Regulation (EC) 725/2004 establishes Community measures to enhance the security of ships used in international trade, domestic shipping and associated port facilities in the face of threats of intentional unlawful acts. It also seeks to give effect at Community level to measures agreed at the Diplomatic Conference of IMO in 1992 through the addition of a new Chapter XI-2 to SOLAS as well as the adoption of the International Ship and Port Facility Code (ISPS Code).

The ship pre-arrival security information form needs to be submitted prior to entry into the port of an EU member state to the competent authority for maritime security of the port of arrival. The form consists of following elements: IMO number, Type of ship, Gross Tonnage, Port of Arrival, ETA, the location of the ship at the time the report is made and a list of the last ten calls, in chronological order with the most recent call first, at port facilities at which the ship conducted ship/port interface together with the security level at which the ship operated (SOLAS regulation XI-2/9.2.1.3).

The ISPS Code applies to ships on international voyages (including passenger ships, cargo ships of 500 GT and upwards, and mobile offshore drilling units) and the port facilities serving such ships.

- Notification of dangerous/polluting goods aboard ships (Hazmat) - Article 13 of Directive 2002/59/EC and Notification for ships arriving in/departing from ports - Article 4 of Directive 2002/59/EC

The information to be notified to the designated MS competent authority includes 'General Information' (ship identification, port of destination, estimated departure/arrival times and total number of persons on board).

- AIS

AIS is a ship-born mechanism that automatically promotes the exchange of data between ships as well as coastal stations. This data includes: (a) fixed data such as the unique maritime mobile service identity (MMSI), call sign and name, IMO number and details of the ship; (b) automatically generated dynamic navigational data including details of the ship's position, course and speed over ground and navigational status; and (c) manually entered voyage data. The rate of data exchange increases as a ship gains speed.

The fitting of AIS is mandatory for all vessels of 300 gross tonnage and above on international voyages, cargo ships of 500 gross tonnage and above and passenger ships irrespective of size. Warships and government owned vessels are exempt. The basic obligation to fit and use AIS is imposed by Regulation 19 of Chapter 19 of the International Convention for the Safety of Life at Sea (SOLAS). Furthermore the Vessel Traffic Monitoring Directive 2002/59/EC (the 'VTM Directive') requires any ship calling at the port of a MS to be fitted with AIS. The purposes of

AIS include promoting the safety of navigation, collision avoidance, enabling coastal States to obtain information about ships and their cargoes and a VTS tool (see below).

Implicit in the structure of AIS is that other vessels within transmission range are entitled to AIS data as are the monitoring stations of coastal States. Furthermore the VTM Directive provides for the exchange of AIS data between MSs. In addition, because AIS is transmitted un-encrypted over open frequencies, there is nothing to prevent anyone with suitable equipment from receiving it.

- LRIT

LRIT is a new long-range vessel monitoring system which also requires the periodic transmission of the name and course of vessels. However the data is transmitted only at six hourly intervals and the transmissions take place by satellite meaning that LRIT is a closed system.

The legal basis for LRIT is contained in Regulation 19-1 of Chapter V of SOLAS which provides that the following, providing they are parties to SOLAS, are entitled to LRIT data: (a) the flag State at all times; (b) a port State where a ship has indicated its intention to enter a port in that State; and (c) a coastal State in respect of a ship within 1,000 nm of its coast (unless the ship is in the waters of its flag State).

The EU LRIT CDC (managed by EMSA) collects and distributes data to Contacting Governments according to the Data Distribution Plan, which defines rules and rights for access (which users can receive which LRIT information). The EU LRIT CDC also interacts with the LRIT International Data Exchange. Certain aspects of the performance of the LRIT system are reviewed or audited by the LRIT Coordinator acting on behalf of the IMO and its Contracting Governments.

- **Surveillance systems where data are gathered in respect of a person or vessel without the active participation of the latter;**
- Vessel traffic services (VTS)

VTS are shore based-systems which range from the provision of information messages to the extensive management of maritime traffic. There are two basic types of VTS: (a) port VTS which are concerned primarily with traffic management in/around a port; and (b) coastal VTS which deal with traffic passing through a specific area. Usually, on entering a VTS area the master of a ship must first report to the authority responsible for the VTS. He must then monitor a specific radio frequency for navigational or other warnings. The activities of a ship within a VTS area are, however, usually monitored by the VTS authority using radar, AIS and in some cases radio direction finders (RDF) and remote video cameras.

In terms of international law the legal regime for VTS is contained in Regulation 12 of SOLAS supplemented by guidelines adopted pursuant to IMO Resolution A.857(20) of 27 November 1997. At EC level, VTS is addressed in Articles 8 and 9(3) of the VTM Directive. The guidelines state that the purpose of VTS is to improve the safety and efficiency of navigation, safety at sea and the protection of the marine environment, offshore installations etc. from possible adverse effects of maritime traffic.

- **Data sharing mechanisms for the exchange of maritime monitoring and surveillance data.**
- National data sharing mechanisms

The French SPATIONAV information system is designed to collect and compile data generated by a range of sensors to assist maritime operational centers in the performance of their duties.

The principal partners are the Navy, the Directorate of Maritime Affairs and the Customs Department. SPATIONAV, which makes use of data provided by coastal observation stations and AIS, operates alongside another mechanism, TRAFIC 2000, which was developed to implement the VTM Directive. The primary role of TRAFIC 2000 is to provide the authorities responsible for maritime security the data necessary to assess risks to security, safety and the environment from vessels, including those carrying dangerous or polluting goods. The system is intended to be integrated with SafeSeaNet.

Finland has a well-developed maritime data exchange mechanism in which the principal actors are the Navy, the Frontier Guard and the Maritime Administration. Pursuant to a 1993 inter-agency memorandum, AIS and VTS data, including data from the GOFREP reporting system are sent by the Maritime Administration to the Navy as are data gathered by the Frontier Guard from its patrol vessels and aircraft and sensors. This data is then compiled with the Navy's own classified data to create a real-time maritime picture. Data is then distributed to the two agencies in accordance with their needs. It is also supplied to a range of 'secondary' agencies including the environment ministry, customs, police and rescue service.

The Norwegian Coastal Administration (NCA) has access to AIS data from national AIS networks in Norwegian continental shelf for the exchange of data from AIS receivers on offshore installations. Access to AIS data from offshore installations provides coverage for up to 100-150 nautical miles from the coast in the relevant areas. Furthermore the Norwegian Coastal Administration receives AIS data from a Norwegian manufactured AIS satellite that was launched from India in 2010 which receives AIS information from ships every 90 minutes. The Norwegian Coastal Administration's current policy is to only grant access to data from the AIS network to other public agencies, including ports. Other actors, such as ship owners' associations, may be granted access to data under certain circumstances based on legitimate needs. Furthermore SSN Norway was developed, a national ship reporting system for vessels arriving to and departing from ports. It is in line with the RFD, which instructs EU/EEA MSs to implement an electronic reporting system by June 1, 2015.

Bulgaria has a national AIS server. The National AIS server was developed by Astra Paging Ltd. under contract with the Bulgarian Maritime Administration. The server provides the necessary features for integration of the Bulgarian Vessel Traffic Management and Information System (VTMIS) and the European SSN ship traffic monitoring system. In mid-2007, the National AIS server was also integrated into the Mediterranean AIS network, which is based in Italy. Collecting, checking and merging AIS National Marine Electronics Association (NMEA) data (i) received from: Bulgarian VTMIS base stations, External AIS receivers / base stations, EU SRIT system, Mediterranean AIS server, Other National AIS servers, and (ii) dispatching AIS data to the following external systems: at EU level to EU SRIT system, Mediterranean AIS server, other National AIS servers – at national level to the Border police, the Bulgarian Navy, customs and the Port Community.

- Regional AIS data sharing agreements

The HELCOM AIS Network enables the real time sharing of AIS data among the Parties to the 1992 Helsinki Convention (Denmark, Estonia, EC, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden) and Norway. The North Sea Data Exchange, developed with the assistance of INTERREG III undertakes a similar function for North Sea countries Norway, Sweden, Denmark, the Netherlands, Belgium and the UK. The Mediterranean AIS Regional Exchange System (MARES) enables the real time sharing of AIS data between Bulgaria, Cyprus, France, Greece, Italy Malta, Portugal, Romania, Slovenia and Spain. The Black Sea Regional AIS Data Exchange Network is currently operating with open freely available AIS data from

www.marinetraffic.org. Furthermore there is also the exchange system of the Norwegian Coastal Administration (NCA) - see above.

- SSN

SSN is a system established by Directive 2002/59/EC as amended, hosted and technically developed by EMSA which puts a reporting and notification obligation on Masters, operators or agents of ships enabling MSs to provide and receive information on ships and their hazardous cargoes. Main sources of information include Automatic Identification System (AIS) based position reports, and notification messages sent by designated authorities in participating countries. The main notification reports submitted to SafeSeaNet are: Ship Notification, Port Notification, Hazmat Notification and the Incident Report.

SSN is a data exchange system, based on an index server, developed by EMSA to support the implementation of elements of the VTM Directive (relating to port, HAZMAT, ship and alert notifications). SSN is also used to distribute LRIT data.

SSN is an operational system and is not used for statistics regarding ship movements.

SSN has implemented a Central Index System that stores *only references to the data locations and not the actual data itself*. It functions as a central hub for all communication between data requesters and data providers. The Central Index needs to know what information each data provided holds. Data providers connected within the SSN network send information by means of a notification mechanism. The data provider, upon receiving queries from the data requester routed through the Central Index, retrieves the data from their local database. In this way the Central Index acts as the sole point of contact.

- Commercial AIS data sharing mechanisms

Because AIS data is unencrypted and broadcasted over publicly available wavelengths, a number of commercial companies have successfully established web-based AIS data sharing mechanisms. The first such service, and one of the largest, is AIS Live which is owned by IHS Fairplay. Access to this service is by subscription.

- Commercial S-AIS data sharing mechanisms

The commercial ability to decode AIS messages using a constellation of satellites has been continuously demonstrated by a number of commercial and government operators, including ORBCOMM, exactEarth and Spacequest since 2008, this is called S-AIS. Through this research and development, AIS signals can now be detected by a satellite in a low earth orbit and provide a global capability for monitoring all AIS-equipped vessels. Data gathered by satellite contains info about the MMSI, ship location, ship course and ship speed (it does not contain info about the vessels destination and ETA).

- Maritime Analysis and Operations Center – Narcotics (MAOC-N)

MAOC-N, which is based in Lisbon, is a law enforcement center that coordinates the maritime interdiction of illegal drugs trafficked on the high seas. It was established in 2007 on the basis of an agreement between Ireland, the Netherlands, Spain, Italy, Portugal, France and the UK. Data is gathered from a range of sources including AIS and classified intelligence.

- Virtual Maritime Traffic Center (V-RMTC)

The V-RMTC is a virtual network connecting the operational centers of a number of navies that enables the sharing via internet of unclassified information on merchant shipping. Coordinated by the Italian Navy, it was established in 2006 pursuant to an Operational Agreement between some 15 countries with naval interests in the Mediterranean.

- NATO – Marine Situational Awareness (MSA) Concept

NATO's Maritime Safety and Security Information System (MSSIS) is based around AIS data, provided by NATO-member States and a number of non-NATO States, where the location and movement of some 10,000 ships is tracked each day. This data is then analysed using a range of software analysis tools, some of which make use of commercial and open source databases, to identify potential anomalies. The analysed data is then fed into NATO's Maritime Command and Control Information System which also includes intelligence data, classified data and the real-time location of NATO vessels.

- Commercial historical AIS/S-AIS Data[95]

Lloyd's List Intelligence	Lloyd's List Intelligence (formerly Lloyd's MIU) is a specialist business information service dedicated to the global maritime community. It is a member of the publicly quoted group Informa plc and forms part of the Lloyd's List Group along with sister company Lloyd's List. Lloyd's List Intelligence provides a wide range of services via industry-specific channels. Lloyd's List Intelligence channels include: Tankers, GAS and Dry bulk. Data is drawn from a network of sources products including: Lloyd's List, Seasearcher, Lloyd's Casualty Reporting Service, Lloyd's Confidential Index, APEX, Hull Risk, Global LNG Tracker. Data is available only online on subscription. Data is provided in the form of a regular table layout. Key data suppliers include: - 1,400 locations covered by land based AIS receivers - Satellite AIS reports from ORBCOMM - In addition, tracking is enhanced with satellite AIS reports as a result of an agreement with ORBCOMM Inc. Satellite AIS positions are recorded from 1Nm to more than 1,500Nm from shore, providing greater reporting where land based AIS is reduced. - 700 Lloyd's Agents and Sub-Agents - Classification Societies (IACS and non-IACS members) - Flag Registries - P&I Clubs - Ship Owners - Port Authorities - Ship Brokers - Insurers
IHS Maritime	provides services as: Seaweb/AIS Live/AIS Movements – discussed in the interview (§11.4.2.1)
AXSMarine	sell raw AIS databases (combination of own AIS data and Satellite AIS from ExactEarth)
ORBCOMM	sell raw Satellite AIS databases
ExactEarth	sell raw AIS and Satellite AIS databases, but do also provide the real-time

[95] This is not a complete list, the purpose is more to give an idea on what kind of commercial data are available

	monitoring service exactAIS

- Non-profit open source AIS sharing centers

Marine Traffic services (Figure 14-2 to Figure 14-5)	The web site MarineTraffic.com is part of an open, community-based project. It provides free real-time information to the public, about ship movements and ports, mainly across the coast-lines of many countries around the world. The initial data collection is based on the Automatic Identification System (AIS). The base stations are equipped with an AIS receiver, a PC and an Internet connection. The AIS unit receives data, which are processed by simple software on the PC and then sent to a central database by means of a 'web service'. On the website of Marine Traffic.com it is possible to track ships based on Vessel's Name, MMSI or IMO Number and by Vessel Type or by location (area, port). When selecting a vessel the last port of call, the destination, ETA and vessel type is given. Also shipping details can be asked, which delivers the last ports of calls, arrival and departure dates, depending on the received records in the last 10 days. Not all ports/areas are covered. A list is given of all AIS stations contributing to the network and the area that they cover and their availability. Furthermore, if details are available, the shipping route can be mapped from the last port of call. Data is archived for some years and it is possible to ask for snapshots of tracking data for a vessel, a port or an area, but this data is only for personal use. Thus this data cannot be used for studies. Several methods of data exporting are supported, such as raw NMEA over TCP/IP and XML, CSV, JSON over HTTP.
Vessel Finder (Figure 14-6 to Figure 14-7)	This is a similar site to the one of maritime traffic. Online details on shipping movements are limited to the five last ports of call. Further the vessel type, the destination and ETA are given. The main goal of AISHub.net is to become a raw NMEA AIS data sharing center**.** Everybody who wants to receive data from all available sources in real time has to share his own feed with the other AISHub members. Every member will receive the combined feed of all data sources. There are no restrictions how the members will use the data. Everybody is allowed to publish the data for free. Furthermore there is an application AIS Dispatcher, it is a free utility for receiving, processing and forwarding of AIS data. AIS Coverage is limited as it depends on the feeders.
Sailwx (Figure 14-8)	Sailwx is an integrated maritime information service that aggregates worldwide ship locations into a single map. Weather conditions including ocean currents, wave height and tides are also available and can be integrated into ship location maps. Locations of ships in territorial waters and on the high seas are provided on a zoomable world map, making the service the maritime equivalent to 'Google Maps' for shipping. Not all ships worldwide are mapped. Ship track maps are based on data reported via the World Meteorological Organization's Voluntary Observing Ship (VOS) service or the YOTREPS network of cruising yachts. This information service acts as a free aggregator of maritime Automatic Identification System (AIS) information to provide real-time cartographic ship-location. Many ships do not report their weather observations to WMO, or report only sporadically; these ships will not have records in Sailwx database. Additional data from the YOTREPS network of cruising yachts; YOTREPS positions are updated only once per year. The route of the ship can be plotted on a map.

11.4.1.3 Analysed Movement data

Global level	
The International Tanker Owners Pollution Federation (ITOPF) (Figure 14-9)	The International Tanker Owners Pollution Federation (ITOPF) is a not-for-profit organisation, involved in all aspects of preparing for and responding to ship-source spills of oil, chemicals and other substances in the marine environment. On their website you can find a link to the WebGIS page which gives an overview of the oil tanker movements in the world. Shipping routes can be selected and amount of oil tankers on these routes can be identified. These figures are based on datasets depicting tanker traffic flow from laden oil tanker (of handy size (15,000 to 50,000 tons) and above) shipments for the years 2001, 2005 and 2011. The raw information was purchased from Lloyd's MIU then analysed in house to produce a map showing the total tonnage and number of vessels for each shipping route.
ESA	The European Space Agency (ESA) created a map using seven years of radar data from ESA's Envisat satellite. Earth observation satellites have been providing ship-detecting services for several years, but this is the first time this amount of data collected over an extended period has been processed to produce an overview of ship traffic patterns. Dr Vincent Kerbaol and Guillaume Hajduch of France's CLS (a subsidiary of the French space agency, CNES) created the map based on a new ship detection algorithm they developed. Using this algorithm, they processed near-real time products from Envisat's Advanced Synthetic Aperture Radar (ASAR) from 2002 to 2009. Hajduch calibrated the products they retrieved from the ESA archive and then, because ships appear as bright points in radar images, identified the bright pixels located in marine areas. The ship routing map gives an idea of the busiest maritime areas in Europe. Traffic in the North Sea (based on this map) is denser then traffic in the Baltic sea for example. Based on this map it is not possible to give traffic frequencies, nor the transported goods on certain routes.
Baltic Sea region	
Helcom (Figure 14-10 to Figure 14-12)	The analysed data that is available through the HELCOM map and data service has been compiled through various different sources. A large amount of work carried out by different HELCOM groups, experts, projects as well as HELCOM Secretariat staff has contributed to the broad selection of data now available. Also data produced by other organisations and projects are displayed via the map service. - Information available online: - AIS density maps (monthly average 2011 and 2008) - AIS passage line crossings by ship draught and by ship type for 2007 till 2012
DaMSA[96]	The Danish Maritime Authority is responsible for the shore-based AIS data in Denmark. It is possible for interested parties in the maritime world with an operationally founded need to be granted access to these data. In order to get access, an application must be submitted motivating the operational need for

[96] http://www.dma.dk/ais/

	shore-based AIS data. All others must pay for their access and can be granted only restricted access. For example, it is possible for ports to buy access to AIS data from ships bound for the port in question as well as data from the port area and from a radius of about 50 nautical miles. Ship owners can buy access to AIS data from their own ships. Information which is available online: Ship crossings over passage lines (= a line between two points marking the limit between the two sections of water) for the years of 2005 to 2010, sub-divided based on their direction. • The Danish Maritime Authority has developed a number of Web Map Services (WMS), making it possible for you to import some of the Danish Maritime Authority's data into digital charts (geographical information systems) or into Google Earth. • Navigational pattern of all ships fitted with AIS in Danish and surrounding waters in 2010. • Navigational pattern of all tankers fitted with AIS in Danish and surrounding waters in 2010 • Navigational pattern of all tankers with a draught below 7 m fitted with AIS in Danish and surrounding waters in 2010. • Navigational pattern for all tankers with a draught of at least 7 m, but below 11 m fitted with AIS in Danish and surrounding waters in 2010. • Navigational pattern for all tankers with a draught of at least 11 m fitted with AIS in Danish and surrounding waters in 2010. A transit route is a route that ships pass without a stay in port. The statistics account for the number of ships of each category passing Denmark and the countries from which some of them come. • The number of ships that have passed the Sound, the Great Belt and the Kiel Canal per year in 2006-2010 from Bornholm to the Skaw and the other way around.
North Sea	
Norwegian Coastal Administration (NCA) (Figure 14-13)	In the webGIS application (http://kart.kystverket.no/) density plots can be shown of number of passages within a grid resolution of 500 by 500 m. The density plots are based on land-based AIS data of the period 1-1-2011 until 31-12-2011 and satellite- based AIS data of 1-5-2011 till 31-12-2011 for waters beyond the reach of land based AIS. The legend is restricted to high traffic and low traffic in a colour scale, exact figures of frequencies not given.
Mediterranean Sea	
Euromed (Figure 14-14 to Figure 14-15)	*Study: Euro Mediterranean Transport Project, Mediterranean Transport infrastructure Network. Technical Note 22 - MEDA shipping Movements – European Commission* This study is based on data obtained from Lloyds List and is part of a record of world ship movement on daily basis. For the eight ports selected this has given rise to over 24,000 movements in a single year. Almost half of these movements are vessels smaller than 5,000 GT. This effect is particularly notable in the general cargo classification where more than 85% of the movements are undertaken by vessels less than 5000 GT. Data is taken over a period of 12 months.

	The database does not include the types of volumes of cargos carried by ships listed. To acquire this information it would be necessary to obtain it directly from investigations at individual ports from either or both of port authorities and customs. The ports taken into account are Alexandria, Algiers, Ashdod, Beirut, Casablanca, Istanbul, Latakia and Tunis in the Mediterranean Sea. The shipping movements between these ports were analysed for container ships, Ro-ro ships, cargo ships and dry bulk ships. The principal aim of this study is to identify the routes taken by vessels arriving and departing from selected ports in the MEDA countries. This study gives an idea on shipping movements to and from above mentioned ports in the Mediterranean Sea, for the period from the 1st October 2003 to the 30th September 2004. This investigation gives an idea on traffic frequencies from the investigated ports in the Mediterranean sea towards third country ports by ship type. For these ports is given where the vessel are originally coming from and destined for. The traffic frequencies between ports of the European Union in the Mediterranean sea is not investigated in this research. This study is based on AIS data.
	Safemed II Webgis application (http://www.safemedgis.org/) In this Webgis application following aspects can be displayed: • The main oil tanker ports (main ports where crude oil tankers have been calling in year 2005) • The main oil tanker routes (main routes for crude oil tankers for year 2005) • The main ports (main ports activity for year 2005) • The main routes (main traffic routes for year 2005) The raw data of the vessel movements is based upon data provided primarily by the Lloyds' Marine Intelligence Unit and REMPEC but also from a variety of sources over a period of time. The commercial use of the results of this data is strictly prohibited. The full version of the GIS application is only available to the designated National Authorities of the Mediterranean partners and the SAFEMED beneficiaries. This information can only be used for purposes in connection with the objectives proclaimed by the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean Sea (**Barcelona Convention**) and/or defined by the SAFEMED Project.
	Study on Maritime Traffic Flows in the Mediterranean Sea. July 2008. A report prepared for the Regional Marine Pollution Emergency Response Center for the Mediterranean Sea (REMPEC) by Lloyd's Marine Intelligence Unit under Task 2.3 O of Activity 2 of the European Union financed MEDA regional project "Euromed co-operation on Maritime Safety and Prevention of Pollution from Ships-SAFEMED". REMPEC commissioned Lloyd's Marine Intelligence Unit to undertake a full study of maritime traffic flows for the Mediterranean. The analysis is part of the SAFEMED project and aims to identify: • Major areas of traffic activity broken down by vessel type and size • Major areas of concentration for vessels which normally carry hazardous cargoes (Crude, Product, Chemical, LPG and LNG Tankers)

	• Changes in historical vessel activity profiles within the Mediterranean and projection of future trends taking into account possible changes in the distribution of oil out of the Black Sea, and the impact of any major port development plans within the Mediterranean. • Identification of major Crude Oil, LNG and LPG routes and ports together with quantification of cargo volumes The data contained in this report is sourced from Lloyd's MIU's Shipping Information Database and covers ship traffic flows within and through the Mediterranean Sea in respect of merchant vessels over 100 GT. The data includes all recorded ship calls, including those for bunkering purposes (e.g. at Gibraltar). In chapter 4 the port to port links are discussed. The major Tank routes are shown, as the major non-Tanker routes (see Figure 4.1 and 4.2). Table 4.1 gives an overview of the top 20 projected routes in the Mediterranean based on voyages in 2006. Furthermore the top 10 Laden Crude Oil Routes, Laden LPG routes in the Mediterranean are given for 2006, with the number of voyages. A detailed breakdown for the major non-Tanker routes is shown in appendix 3 (which is not accessible).

11.4.2 Interviews

Interviews have been conducted with the main parties, who have insight in availability of data concerning ship traffic/movements.

On the one hand parties who are involved in European maritime shipping industry at European level were interviewed, such as the European Community Ship owners Association (ECSA), the European Port Community Systems Association (EPSCA) and the European Maritime Safety Agency (EMSA).

On the other hand commercial research centers/companies were interviewed who are familiar with analysing/producing data on ship traffic/ movements, such as the Institute of shipping Economics and Logistics (ISL), IHS Fairplay and H. Clarkson.

	Organisation	Contact person
Conducted interviews	EMSA	Marta LIMA GALVAO/ Abela Charles
	ECSA	Christophe Tytgat
	IHS Maritime	Alex Gray/ Anne Smith
	Institute of shipping Economics and Logistics	Sönke Maatsch
	EPCSA	Richard Morton
	H. Clarkson	Colin Cridland
E-mail correspondence	ICS[97]	Peter Hinchliffe (Interview with :John Murry)
	ITMMA[98]	Prof. Theo Notteboom

Table 4: Consulted persons

The conducted interviews are discussed in the next paragraphs.

11.4.2.1 IHS Maritime – Alex Gray /Anne Smith

IHS Maritime offers on-line ship and movement look up services, notably, Sea-Web, and AISLive, and bespoke data services. The AIS orientated services are restricted to shipping movements and do not involve cargo-data. IHS Maritime does not currently combine cargo-data and AIS data.

The **Sea-web site** provides online access to ships, company, shipbuilder, casualty, ports, fixtures, current and historic movement details, resulting in 600 data fields being available. The website contains info on about 180,000 ships, principally of 100 GT and above. Distinct data on IMO Ship Number, Trading Areas, port of call, arrival data, sailing date, hours in port and ships 'currently at' are available in the product. AISLive covers the current AIS-position. The information of the movements database is obtained from the terrestrial AIS data and is supplemented by satellite derived data. Due to the nature of AIS coverage the movements are currently available for over 90,000 ships on a day to day basis.

[97] Email correspondence from John Murray 25/6/2013: "An interview with ICS would not provide much useful information. Other associations such as ECSA or World shipping Council are far more involved in this aspect of the industry than ICS."

[98] Email correspondence from Prof. Theo Notteboom 26/62013: "The subject of this study is not directly related to his study field. Figures about shipping movements and traffic within Europe and to third country ports are not available."

AIS Live takes a 'snapshot' of the positions of all vessels within the IHS network. The positions are stored and crosschecked with the Register of Ships vessel database to check the accuracy of the reported data. Thousands of automatic zones have been created all over the world which dynamically report when a vessel has been in the locality and the time the vessel spent in that zone. AIS live supplies Satellite data, Live data, Clean data, iFrame data in the IHS Maritime Data offering.

IHS Maritime maintains the largest and most diverse maritime databases available, covering ship characteristics, movements, owners and managers, maritime companies, ports and terminals and fixtures data. IHS Maritime is currently the only provider of combined satellite and terrestrial AIS ship position, and movement and port calling information.

AIS Movements information enables clients to receive customized data based on real-time and historic ship positions across five continents, in over 2,000 sites and in 100 countries. Movement information can be enhanced with ship characteristics and ownership details. Over 90,000 ships are covered daily, 200 million ship movements and nearly 5 million port callings recorded annually. Databases can be provided in different formats such as XML, CSV, XLS, and NMEA format. AIS data is captured every six seconds.

The AIS databases are sold to product suppliers, port service providers, research and consultancy entities, traders, and governments in standard on-line services and as raw data.

The data that IHS Maritime provides to Eurostat contains info about the aggregated profile of the fleet, not about the ship movements.

According to IHS it would not be impossible to make an estimation of the shipped cargo based on AIS data, ship types and TEU at European level. But that means that an extensive amount of data needs to be analysed. Information about frequencies on shipping routes can be provided by IHS. IHS states that although movement data is available at European level, they do not have the resources to undertake this kind of analysis at the moment, due to the vast amounts of data that would need to be processed.

11.4.2.2 European community ship owners associations (ECSA) - Christophe Tytgat

ECSA, formed in 1965 under the name of the Comité des Associations d'Armateurs des Communautés Européennes (CAACE) and taking its present name in 1990, comprises the national ship owner associations of the EU and Norway. Its aim is to promote the interests of European shipping so that the industry can best serve European and international trade and commerce in a competitive free enterprise environment to the benefit of shippers and consumers.

Within ECSA there is no data available on shipping movements/traffic, as it consists of associations and not of companies. The statistics produced by ECSA (annual report 2011-2012) are made by external firms such as Fairplay Solutions (IHS), Lloyd's Register, Drewery shipping consultants, Clarkson ... and do not involve specific transport.

Furthermore ECSA suggested to contact ESPO, IHS Fairplay, Institute of shipping Economics and Logistics, the Short sea Promotion Center Flanders and the WSC.

11.4.2.3 Institute of shipping Economics and Logistics (ISL) - Sönke Maatsch

The Institute of Shipping Economics and Logistics is one of Europe's leading institutes in the area of maritime research, consulting and knowledge transfer. For research involving information on ship traffic, two kinds of data are used. On the one hand data on ship movements is bought from commercial AIS Databases (e.g. IHS Fairplay). This data consists of ship movements for a certain area, e.g. during the last 3 or 6 months and only contains the arrival and departure time. On the other hand, data on cargo handled by each ship in an analysed port is obtained from a port or terminal. This information is confidential and access is subjected to strict conditions. The elaborated studies wherein AIS-data and cargo data are matched are on scale of port/terminal level. The two kinds of data match very well on port/terminal level. There are no studies elaborated on European scale within ISL. Furthermore it seems rather impossible to match AIS-data and Cargo-data on such a large scale. The amount of data in the AIS-databases are large and it is very difficult to get cargo-data by ship from ports due to confidentiality. ISL regularly gathers cargo data from major European and non-European ports. For European ports, it also uses Eurostat data.

Only a small share of the world fleet calls in European ports. In general it can be said that intra-European traffic uses smaller ships than external trade so that the share of intra-European traffic uses smaller ships than external trade so that the share of intra-European traffic is higher for ship traffic than for cargo traffic. ISL states it will be very hard to get figures at European level linking ship movements with port/cargo traffic. These figures are not available within ISL.

Depending on the transport, different shipping routes are taken, e.g. liquid carriers/oil tankers between Middle-East and Europe, coal is transported on the shipping routes between South-Africa and Europe and iron is transported on the routes of South-Africa and South-America to Europe. For more info about commodities, ISL refers to its Port Data Base or Eurostat.

Furthermore ISL says to only have own data (ISL Port Data Base) on cargo transported to/from the ports in Black Sea, Mediterranean Sea, the Baltic Sea and the North Sea. There is no data available within ISL on ship traffic frequencies in these zones. These are provided by companies selling AIS data. Data regarding cargo shipped on the busiest shipping routes can be estimated from Eurostat port data (by using O/D relations), but this is a very tedious task.

On the website of ISL there is a link to the ISL Info center, ISL Library, ISL Publications & Databases. To make use of the services provided by the ISL Info center a certain price needs to be paid depending on the time and range of information made available. The ISL Library is open to the public and the use is free of charge. A reading room, online working spaces and a copier are available. The ISL library has a total stock of about 129,000 books, of which are 30,000 monographs and 29,000 annual publications. Furthermore 750 professional journals and series are kept regularly. The studies made by ISL (including the statistical yearbook) can be purchased from their website (https://shop.isl.org).

11.4.2.4 Interview EMSA – Marta Lima Galvao/Abela Charles

EMSA is involved in maritime safety in Europe, fulfilling operational tasks in the field of oil pollution response, vessel monitoring and in long range identification and tracking of vessels. The Agency has been tasked with assisting the EC in monitoring the implementation of EU legislation. Furthermore, the Agency operates, maintains and develops maritime information capabilities at EU level. Significant examples are the SSN vessel tracking system, to enable the EU-wide tracking of vessels and their hazardous cargoes; and the EU LRIT Cooperative Data Center, to ensure the identification and tracking of EU flagged ships worldwide.

Only limited data exchanged through SSN are saved, the detailed information on port calls and hazardous cargoes is held by the member states. All the data are provided and owned by the MSs and can only be used for the purposes defined in Directive 2002/59/EC. Sometimes pilot projects are performed. But then the member states need to give permission to collect/ save certain data. The reports of the pilot projects are not accessible for the public and are only distributed to the MSs participating in the investigation. The pilot projects/investigations are not related to shipping traffic (examples of investigations: sharing data with third countries (e.g. Morocco), investigations on ship emissions...).

As for the Blue Belt project, 253 ships were monitored. The main conclusions can be found on the EMSA website. This project was in operation between the 5th of May and 2nd of November 2011. Upon arrival (2 hours in advance) a blue belt notification report was sent to the relevant custom authorities reporting their voyage.

AIS data is provided every 6 minutes. These data are saved by SSN but are not used to generate statistics on ship traffic movement. A huge amount of information needs to be analysed before it is possible to make conclusions on shipping traffic. Also this has never been investigated at European level before. AIS data are achieved through land based stations. AIS data originating from satellite are only used for projects (not on a regularly basis).

There is no data available on RSS within EMSA.

There is no data available on shipped cargo within EMSA. The EC is due to issue a legislative proposal to facilitate the movement of cargo between EU ports as required by the Single Market Act II. At this stage it is unclear whether SSN will be used to exchange cargo details.

All ports in Europe are obliged to send notification messages. If these data would be used for investigations, the MSs would need to give their permission. In the past this only happened during specific pilot projects.

Information obtained through AIS data is saved by SSN, however, it is not used to generate statistics about ship movements. Moreover, very limited data are received from Members states as regards to port calls. SSN, for example, does not have information on the last port of call for all ships and therefore is not in a position to accurately determine from which third country ports the ships are arriving from.

EMSA suggested to contact/look at:

1. Eurostat;
2. Motorways of the SEA -Trans European Network Transport: Interesting studies for specific areas, such as in the Mediterranean;
3. European Sea Port Organisation (ESPO)
4. DG TAXUD

11.4.2.5 H. Clarkson – Colin Cridland

H. Clarkson is one of the world's leading providers of integrated shipping services. They can provide data on 100,000 vessels either in service or on order, 10,000 companies and 600 shipyards as well as extensive trade and commercial data.

H. Clarkson has his own proprietary system called SeaNet, which contains vessel positions going back over approximately 5 years based on AIS data received primarily from ORBCOMM, a US-based satellite AIS provider and Astra paging, a Bulgarian land based AIS provider. When they

want to sell AIS databases, ORBCOMM and Astra paging need to give their permission. Providing such services to other parties is not something that Clarkson have so far been involved with. The vessel AIS data are matched with vessel characteristic data supplied by their sister company Clarksons Research Services Ltd.

H. Clarkson collects references and analyses vessel AIS data for their commercial ship brokerage business and to advise their own ship owning, energy and commodity clients as to trends, employment patterns, availability of vessels etc.

H. Clarkson has the software and analytical resources to be able to supply analysis on ship movements/traffic within the European Union and to third country ports.

Other possible suppliers of AIS/vessel data that Clarkson mentions are IHS Fairplay, Lloyds List Intelligence, AXSMarine/ExactEarth, ORBCOMM and Maritime Insight. Maritime insight is a Swedish based consultant and used to be owned by IHS Fairplay, but is now independent.

a. Clarkson already completed analyses for the combined European ECAs and all existing ECAs on following aspects: Number of unique vessels by Vessel Type
b. Capacity of unique vessels by Vessel Type
c. Average time spent within ECA by Vessel Type
d. The percentage a) and b) represent of world fleet
e. Average capacity of vessels within ECA by Vessel Type
f. Average capacity of world fleet by Vessel Type
g. Total days (vessels x days) spent in ECA by Vessel Type
h. Average days (of g) by Vessel Type
i. Total world fleet days (vessels x days) by Vessel Type
j. The percentage g. is of h. by Vessel Type
k. Time distribution within ECAs by Vessel Type (see Figure 18)

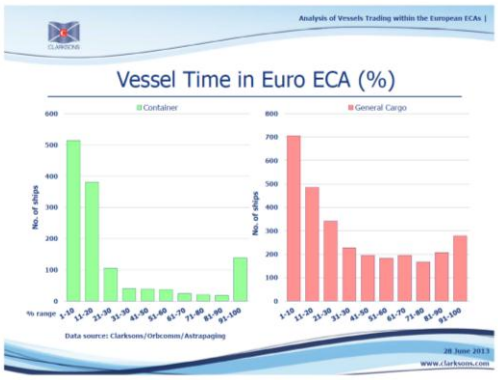

Figure 18: Time distribution within ECAs by Vessel Type

l. Average age of vessels in ECA by Vessel Type
m. Average age of world fleet by Vessel Type
n. Age distribution of vessels within ECA

The analysis could be extended over time (now a period of one year was considered) to cover service vessels, calculate minimum values and maximum values.

11.4.2.6 EPCSA - Richard Morton

The European Port Community Systems Association (EPCSA) was formed to "influence public policy at EU level in order to achieve e-logistics throughout all European ports, operating as a key element of the EU maritime, shipping and logistics industry."

A PCS is a neutral and open electronic platform enabling intelligent and secure exchange of information between public and private stakeholders in order to improve the competitive position of the sea and air ports' communities. It optimises, manages and automates port and logistics efficient processes through a single submission of data and connecting transport and logistics chains.

Information that is exchanged through the port community systems is confidential and should not be copied.

PCSs in general provide a huge range of services and key features which can be summarised as follows:

- Easy, fast and efficient exchange, re-use and centralisation of EDI information, available 24/365;
- Customs declarations;
- Electronic handling of all information regarding import and export of containerised, general and bulk cargo;
- Status information and control, tracking and tracing through the whole logistics chain;
- Interface to all relevant (and EDI ready) Authorities in the Harbour;
- Processing of dangerous goods;
- Processing of maritime and other statistics; and
- Support with the implementation of new standards and processes, more efficiently and quickly, but can also provide for different requirements at individual ports or national government level.

The members of the EPCSA are the Port Community System Operators (PCSO), who are trusted third parties. Some are 100% publicly owned, some are private-public partnerships, others are privately owned. Every PCS has some form of steering committee made up of representatives from different internal and external groups, such as the board of directors or local user groups.

The range of PCS key stakeholders consists of private companies on the one hand (shipping agents, terminal operators, forwarders, Customs brokers, etc.) and of public or government agencies – Customs or Port Authorities, for example – on the other hand.

In terms of the client structure, shipping lines, terminals and freight forwarders play the most important roles, followed by importers and exporters in general, on-carriage operators, port authorities, transport authorities, Customs, Police, Harbour Master, Pilots and shipping agents, as well as container depots. The number of clients differs and ranges from about 280 to 2,500, with most of them being importers or exporters, forwarders, terminals, on-carriage operators, ship agencies or brokers. The number of end users ranges from about 500 to more than 12,500 but this does not seem to be related to the size of the PCS or to how many PCSs are being operated.

When the ship arrives, a manifest needs to be sent through (CUSCAR) to the customs, for tax declaration purposes. On the other hand it is sent to the port itself for operational reasons. Most of the ships get custom cleared automatically. CUSCAR is already commonly used, but is

not obliged. MSs don't always trust the electronic manifest and ask for paperwork. CUSCAR exists now about 10 to 15 years.

In the UK, Intra EU cargo is managed by using the Customs Status Declaration element of the CUSCAR in which to place a "C" which indicates EU Cargo. This is recognised by UK customs authorities as a recognised declaration and thus in 99% of the cases the cargo is cleared automatically.

According to EPSCA, studies on ship movements/traffic at European level have not been done before.

11.4.3 Survey EPCSA members

A survey has been made and sent to different members of EPCSA in and outside of EU. Sixteen port authorities participated in the survey, whereof 14 within the EU, one in Israel and one which is unknown (see Annex 1).

It can be concluded that 70% of the EPSCA members can provide data on traffic frequency, last ports of call, shipped cargo and ship type. But only the Bilbao port Authority gave (estimated) figures concerning the percentage of cargo ships that are exclusively calling at EU ports and free zones.

This confirms that cargo data is available within most of the port authorities, but that there is a lack of exact figures concerning ship movements to third country ports and to ports within the EU.

11.4.4 eManifest

Today, free movement of goods is a basic freedom under EU law; however it is not yet a reality for the maritime sector. Once ships leave the MSs' territorial waters (beyond 12 miles from shore) they are considered to pass the EU's external borders. So ships travelling between ports in two different MSs are deemed to have left the EU Customs Territory and customs formalities are required when the vessel leaves the port of departure and again when the vessel arrives at the port of destination, even if both are EU ports.

The EC is proposing to significantly improve customs procedures by putting in place a system which can make a distinction between the Union goods on board (which should be swiftly discharged) and the non-Union goods on board, which must go through the appropriate customs procedures.

For this purpose, a harmonised electronic cargo declaration will be developed. This new "eManifest" allows the shipping company to provide information on the status of goods to customs officials.

Goods indicated as Union goods in the eManifest will, if this status is confirmed, no longer be subject to customs controls, apart from random checks. Moreover – and importantly – the Union status will not be lost anymore when the vessel calls at third country ports, provided that the Union goods remain on board of the ship when calling at third country ports.

11.5 Conclusion

The aim of Art. 15(e) of the RFD is to get insight in the data availability of ship traffic/movements within the Union, and/or calling at third country ports or in free zones.

Insight in ship traffic/movements can be obtained by linking and analysing cargo data and ship movement data.

This research aims to answer following questions:

- Which cargo/movement data is used, where is it collected, with whom is it shared and who is entitled to the data;
- Which studies, statistics are available on ship traffic/movements.

Main Findings on cargo data

1. All information on cargo can be found in the cargo manifest. Cargo data is exchanged on a confidential basis and can only be used with the express permission of the person or authority providing it. Cargo data is submitted to the customs for tax declaration purposes and to the ports/terminals for operational reasons. The MSs are obliged to provide cargo data to the EC (Eurostat) but these data can only be used for the purposes defined in Directive 2009/42/EC. Data about maritime transport on port-to-port level is considered to be confidential by the Working Group on Maritime Transport Statistics (Eurostat). Only aggregated statistics are available.
2. Statistics available at the website of the international Statistics Forum and the European Sea Ports Organisation do not involve specific transport. Furthermore references are made to the website of Eurostat.
3. There is no data available on shipped cargo within EMSA.[99]
4. The survey of the port authorities (EPSCA Members) confirms that cargo data is available within most of the port authorities, but that there is a lack of exact figures concerning ship movements/traffic to third country ports and to ports within the EU.
5. According to ISL, it is possible to get insight in which cargo is shipped on specific shipping routes by further analysing port data of Eurostat, using origin and destination relationships. But this is a very tedious task. By doing so, only the volumes of cargo flows would be known between the different EU ports and not the number of vessels transporting these volumes.

Findings on movement data

1. Data on movement is incorporated in reporting formalities:
   - Port Security notification requirements
   - Notification of dangerous/polluting goods aboard ships
   - Notification for ships arriving in/departing from ports

   Or can be obtained through tracking systems such as AIS, LRIT, VTS
2. AIS is mandatory for all vessels of 300 gross tonnage and above on international ships calling at MS ports. AIS messages contain static (e.g. MMSI number) and dynamic information (e.g. position course, last port of call and destination).
3. AIS can be received by anyone with suitable equipment.
4. Different data sharing mechanisms exist to exchange movement data:

[99] Interview with EMSA

- Real-time AIS open source (e.g. vessel finder).
- National data sharing mechanisms (e.g. SPATIONAV)
- Regional data sharing mechanisms (e.g. HELCOM)
- European data sharing mechanism (SSN)
- Commercial real-time AIS (e.g. AIS live (IHS Fairplay)
- Commercial S-AIS (e.g. ORBCOMM)

5. To get insight in the shipping routes and frequencies, historical movement data bases should be analysed. Movement data bases can be purchased from commercial organisations as from Lloyd's Intelligence List, IHS Fairplay and AXSMarine. Based on the ship type and the TEU, it is possible to make an estimation of the transported goods at European level. IHS, Clarkson and ISL state that therefore a massive amount of data needs to be analysed.
6. AIS data is saved by EMSA but is not used to generate statistics about ship movements (except for pilot projects and with permission of the MSs). Moreover, very limited data is received from MSs as regards to port calls. SSN, for example, does not have information on the last port of call for all ships and therefore is not in position to accurately determine from which third country ports the ships are arriving from.
7. Eurostat also provides information about number of vessels calling at the ports in the EU, by vessel type and size. But it does not provide the information about the origin or destination of the ships. Data on shipping frequencies between ports in the EU cannot be deducted from the data of Eurostat.
8. Analysing AIS databases at European level has been done by Clarkson. This was done for a study commissioned by the European Emission Commission. This study is not publicly available.
9. Solely few studies are available on analysed movement data for a certain region, certain ship types and a certain period (§ 11.4.1.3). These studies are not sufficient to get insight in the % of ship movements within the EU and to third country ports or free zones.

Findings on linking cargo data and movement data

1. There is no analysed information available at European level, or at the sea region level where ship movement data and cargo data are linked.
2. ISL, IHS Fairplay and ECSA state that it will be very hard to get figures at European level linking ship movements with port/cargo traffic. ISL states that it seems rather impossible to match AIS-data and cargo data on such a large scale. The amount of data in the AIS-databases is large and it is very difficult to get cargo-data by ship from ports due to confidentiality reasons. Studies linking ship movements and port/cargo traffic have been done at port/terminal level by ISL and can be purchased from their website. The two types of data matched very well at port level.

Overall conclusion

There is a lack of maritime statistics regarding specific ship movements/ traffic within the EU and/or calling at third country ports or in free zones.

11.6 Recommendations

It can be concluded that there is no ship movement and cargo data 'immediately' available at EU level. In order to do a proper impact assessment of the RFD, immediately available 'data' are required/crucial for DG MOVE.

Two recommendations are proposed in this section. The first recommendation requires an adaptation of the current Directive 2009/42/EC of Eurostat. The second proposal is related to further investigation of AIS data. In the future another opportunity will arise with the implementation of the eManifest.

- Recommendation 1

Eurostat collects data for maritime transport on a port to port level for countries of the EU-28, Norway and Turkey. This information is considered to be confidential by the Working Group on Maritime Transport Statistics. Eurostat only produces aggregated statistics and is only entitled to use the data for the purposes defined in Directive 2009/42/EC. There is no public access to the micro data.

A first recommendation is to refine the existing directive 2009/42/EC of Eurostat. In order to be able to use the cargo data on a port to port basis and if possible also derive the movement data from the existing data bases. If necessary the directive 2009/42/EC can be redefined to also gather/use information on ship movements, based on shipping reporting formalities. A more general dissemination of confidential port-to-port data is probably not realistic as it would go against the principles of data confidentiality as defined in the European Statistics Code of Practice, as well as the legal framework of Eurostat and the national statistical authorities. But there is already an opening for use of the port-to-port micro data collected within the framework of Directive 2009/42 by researchers for scientific purposes. At the moment, Eurostat and EMSA are also discussing the possibility of launching a study on how port call data from the central SSN can be used to support the statistical activities of Eurostat.

- Recommendation 2

Another recommendation is to order specific analysis of AIS data, possibly linked with cargo data to get insight in the shipping movements and cargo traffic within the EU and/or calling at third country ports or in free zones.

At the moment studies on ship movements (AIS data), linked with cargo data, has been carried out, but only on port and terminal level.

The disadvantage is that AIS data needs to be purchased and that an extensive amount of data needs to be analysed. Furthermore cargo data would need to be made available by getting permission of all Member States.

- eManifest

In the future, MSs shall accept the fulfilment of reporting formalities in electronic format and their transmission via a SW. This SW, linking SSN, e-Customs and other electronic systems, shall be the place where, in accordance with the RFD, all information will be reported once and made available to various competent authorities and the MSs. Then it will be possible to link the information on cargo and movement data.

To be able to use the linked data, the first phase of the implementation of the eManifest[100] needs to be realised as foreseen in the Blue Belt Communication. The deadline for this implementation is scheduled in June 2015. Furthermore the permission of the MSs will be needed to use the linked data for maritime statistics regarding Art. 15(e) of the RFD.

[100] European Commission, Working Document: eManifest V1.0, Considerations for the Implementation of the eManifest, 13/09/2013, Brussels.

12. GENERAL CONCLUSIONS

Regarding Art. 15(a) of the RFD it is possible to extend the simplification introduced by the RFD to cover inland waterway transport, although it has to be taken into account that the maritime and inland waterway transport sectors are still two different and separate sectors.

The maritime transport sector is already strictly regulated by EU and international rules and mandatory administrative procedures (and information sets and reporting obligations). The inland waterway transport sector on the other hand is less regulated by some administrative procedures, and reporting formalities are only defined at MS level on the basis of a smaller information set.

But the group of stakeholders/actors which are actively involved in both the maritime and the inland waterway transport sector is growing due to the requests of logistic partners for alignment and improvement of multimodal transport between seagoing vessels and inland barges.

Regarding Art. 15(b) of the RFD ("the compatibility of RIS with the electronic data transmission process referred to in the RFD") it is **possible to harmonise the information sets used in the maritime and inland transport sector.**

The maritime transport sector has been using harmonisation, regulations and rules for a long time, and has already established organisations like the European Maritime Safety Agency (EMSA) with a data exchange network like SafeSeaNet (the European Platform for Maritime Data Exchange – cf. Directive 2002/59/EU). Similar ideas or initiatives with regard to inland waterways are still being discussed and are only under construction.

There is no EU directive for RIS on how electronic data transmission should be organised and implemented. This is a major obstacle for making a unified method of electronic data transmission between the RIS partners, and certainly for data exchange with other transport modes e.g. the maritime transport sector.

The realisation for a SW in the maritime sector is more obvious due the existence of the different EU directives which resulted in NSWs, NSW Authorities, NCAs, LCAs, SSN, etc. and supporting organisations like EMSA. This is less obvious in RIS due to the lack of similar EU directives.

There is a need for information exchange/harmonisation between the maritime and inland transport sector and vice versa. Currently EU directives to streamlining information exchange in RIS - and especially with other transport modes - which is the goal of Art. 15 (b) - are non-existing.

The philosophy/principals/methodology used in SSN, could also be used for data exchange in RIS but there a number of important differences that have to be taken into account.

The ERI Expert Group is the most important RIS Expert Group to consult and/or to involve with regard to the objectives/questions of Art. 15 (a) and (b) of the RFD.

Regarding Art. 15(c) of the RFD, i.e. "the progress towards harmonisation and coordination of reporting formalities that has been achieved under Article 3 of the Reporting Formalities Directive (Art. 15(c) RFD)", **a lot of progress has been made**. All MSs seem to have taken initiatives regarding implementation of a national maritime SW, although there is a considerable

variety (i) of SW concepts, systems, environments, (ii) of approaches to create a SW, and (iii) in the current state of affairs of development of the SWs.

Furthermore, part of the MSs is waiting for the EU technical specifications regarding the SW, other MSs modernise, (inter)connect and/or or 'rebuild' their existing national reporting formalities (lodge and/or exchange) systems in order to create a proper national maritime SW in accordance with the RFD.

Another issue is the number of stakeholders involved at EU level and at MS level (not only the maritime administrations and maritime policy related fields are involved) which results in a complex implementation and coordination process.

The AnNa initiative is appreciated by the participating EU MSs and the combination of both the EC/DG MOVE's efforts (cf. eMS (sub)group(s)) and the work parallel done by (and within the framework of) the AnNa project should be considered as an added value for the overall implementation of the RFD.

Most participants generally appreciate the efforts of the EC/DG MOVE. The amount of eMS group documents (a lot of comment and working documents included) produced and the numerous meeting reports reveal that all representatives actively participate in the eMS group activities. The eMS subgroup structure makes it possible to focus on particular aspects of the RFD with a select and limited group of relevant experts – which is in the best interest of these participating experts, as well as an efficient and all-embracing implementation process of the RFD. On the basis of some specific critical or negative comments of the participants regarding the organisation, communication and functioning of the eMS groups some improvements could be made.

In order to guarantee a smoother implementation process of the RFD by the MSs it could be recommended that (i) all MSs (e.g. via the EC / eMS groups) should be able to use the AnNa initiative outputs - as 'best practices', and that (ii) the EC could establishes a follow-up mechanism after the implementation deadline of the RFD/NSW in order to optimise the use of the NSWs.

Regarding Art. 15(d) of the RFD, **there definitely is a need of avoiding or simplifying formalities for ships that have called at a port in a third country or free zone.**

However, certain conditions need to be fulfilled in order to make this legally and economically feasible. Today there is a lack of facilitation on international level to enhance harmonisation and avoid redundant administrative formalities. One of the elements that should be considered is reversing the burden of proof. For the moment, cargo has a non-EU status until the opposite is being proved. This should be reversed in the long term. Agreements with third countries concerning the simplification of formalities have to be concluded. Further improvements are needed concerning simplifying formalities with respect to the crew, etc.).

The implementation of the electronic cargo eManifest, with information on the status of goods, is a crucial step towards the simplification of formalities. This electronic and harmonised cargo manifest will facilitate voyages of vessels calling in third countries. Shippers and shipping companies, as well as for customs authorities will enjoy this facilitation.

Regarding Art. 15(e) of the RFD, a lack of maritime statistics regarding specific ship movements/ traffic within the EU and/or calling at third country ports or in free zones has been detected.

Regarding cargo data, all information on cargo can be found in the cargo manifest. The Member states are obliged to provide cargo data to the Commission (Eurostat) but these data can only be used for the purposes defined in Directive 2009/42/EC. Only aggregated statistics are available.

The survey of the port authorities (EPSCA Members) confirms that cargo data is available within most of the port authorities, but that there is a lack of exact figures concerning ship movements/traffic to third country ports and to ports within the EU.

According to ISL, it is possible to get insight in which cargo is shipped on specific shipping routes by further analysing port data of Eurostat, using origin and destination relationships. But this is a very tedious task. By doing so, only the volumes of cargo flows would be known between the different EU ports and not the number of vessels transporting these volumes.

Regarding movement data, data on movements are incorporated in reporting formalities or can be obtained through tracking systems such as AIS, LRIT, VTS. Different data sharing mechanisms exist to exchange movement data. To get insight in the shipping routes and frequencies, historical movement data bases should be analysed. Movement data bases can be purchased from commercial organisations.

Eurostat also provides information about number of vessels calling at the ports in the EU, by vessel type and size. But it does not provide the information about the origin or destination of the ships. Data on shipping frequencies between ports in the EU cannot be deducted from the data of Eurostat.

Solely few studies are available on analysed movement data for a certain region, certain ship types and a certain period. These studies are not sufficient to get insight in the % of ship movements within the EU and to third country ports or free zones.

There is no information available on neither European nor sea region level about links between cargo and ship movement data. Studies linking ship movements and port/cargo traffic have been done at port/terminal level by ISL and can be purchased from their website.

In general it can be concluded that data still can/need to be harmonised at maritime and inland waterway level, in order to facilitate the ship movements through the European Union. A huge effort and progress has already been achieved by the different MS towards harmonisation and coordination of reporting formalities under Article 3 of the Reporting Formalities Directive. It also seems feasible to avoid or simplify formalities for ships that have called at a port in a third country or free zone, under certain conditions. The collection of data could still be improved, in order to provide statistics about cargo and movement data through the European Union and to/from third countries.

13. GENERAL RECOMMENDATIONS

Specific recommendations are made regarding each issue referred to in Art. 15 of the RFD:

Regarding Art. 15(a) of the RFD ("the possibility of extending the simplification introduced by this Directive to cover inland waterway transport"), which was approached from a functional point of view, it is advisable to foresee a stepwise and well-structured action plan in order to be able to consider an extension of the simplification introduced by the RFD to inland waterway transport. Apart from the technical component of the solution, the challenge will be to convince all concerned stakeholders to take part in - and become part of - the proposed action plan.

The existing demand/need for (more) harmonisation between the information/data sets used in the maritime transport sector and the ones used for inland waterway reporting formalities should be analysed together with - and faced with – the feasibility of actually harmonising both data/information sets (and the costs related thereto).

Harmonisation should be realised at different levels (i.e. data, rules, signification of data (e.g. the term dangerous (goods) does not have the same meaning in the inland waterway transport sector as in the maritime waterway transport sector).

Privacy should be treated with care because the information sets are composed of data sets which are coming from different organisations with different (commercial - responsibility) interests.

The ERI Expert Group is the most important RIS Expert Group to consult and/or to involve with regard to the objectives/questions of Art. 15(a) of the RFD.

Regarding Art. 15(b) of the RFD, which was investigated from a technical point of view, it is considered possible to harmonise the information set used in the maritime and inland transport sector:

- If there are more strict rules for reporting formalities in the inland waterway transport sector, and
- After defining ***how*** the ***electronic data transmission*** will be organised; This requires a new Directive that defines/regulates data exchange in the inland waterways transport sector.

The WCO (World Customs Organisation) data model should be used as a reference framework for the harmonisation of information sets and data exchange between the maritime and inland transport sector.

Regarding Art. 15(c) of the RFD ("the progress towards harmonisation and coordination of reporting formalities that has been achieved under Art. 3 of the RFD (Art. 15(c) RFD)"), it is advisable - in order to guarantee a smoother implementation process of the RFD by the MSs – to (i) let all MSs (e.g. via the EC / eMS groups) use the AnNa initiative outputs - as 'best practices', and (ii) establish a follow-up mechanism after the implementation deadline of the RFD/NSW in order to optimise the use of the NSWs.

Regarding Art. 15(d) of the RFD (the feasibility of avoiding or simplifying formalities for ships that have called at a port in a third country or free zone), recommendations have been formulated for the short and medium/long term:

In order to extend the simplification of formalities for ships calling at a third country port, the simplification within the EU should be optimised first. Concerning RSS, improvements could be made with respect to the burden of proof as well as the notification duty. The role and cooperation of DG TAXUD is therefore crucial.

Also the implementation of the eManifest should be realised in short term.

Next to this, it is essential to take into account the outcome of the IMO questionnaire on redundant administrative formalities.

Moreover, until now, discussions on simplifying formalities have been focusing on the cargo. Nevertheless, it is also important to include also formalities with regard to crew members as problems concerning visa and shore leave still exist on international as well as EU level.

On a longer term, the European Customs Code will need adjustments. The role and cooperation of DG TAXUD is again crucial. Next to this, agreements with third countries – especially Russia, Norway and Turkey – have to be developed.

In order to enhance transparency for all stakeholders, a central database could be developed. Shipping companies as well as shippers would be able to get the necessary information from this database. This database should be available before third countries are being involved. Indeed, if there is no database, fiscal risks for shippers will be enormous when also third countries will become part of Blue Belt.

The Port Community System (PCS) could play a crucial role in setting up this database, as this system already is linked with shippers. The IMO defines the term PCS as a computerised system that simplifies information exchanged between non-public authorities in a port. Also exchange of information with governmental parties could be part of the scope of a PCS. Nevertheless, currently PCS is being used differently in the Member States. PCS should therefore be harmonised, first within Northwest Europe, afterwards within other European countries, and lastly some third countries could be involved.

Regarding Art. 15(e) of the RFD (the available data concerning ship traffic/movement within the Union, and/or calling at third country ports or in free zones), it has been concluded that there is no ship movement and cargo data 'immediately' available at EU level. In order to do a proper impact assessment of the RFD, immediately available 'data' are required/crucial for DG MOVE.

Two recommendations are proposed: The first recommendation requires an adaptation of the current Directive 2009/42/EC of Eurostat. A second recommendation is related to further investigation of AIS data. In the future another opportunity will arise with the implementation of the Electronic manifest.

Based on these specific recommendations, the RFD does not need to be amended in order to enhance the harmonisation of reporting formalities for the maritime transport sector as well as for the inland waterway transport sector. Other relevant directives or regulations could be amended to facilitate a smoother harmonisation. The RFD aims at achieving coordinated and harmonised reporting formalities before a certain date. Each MS can in principle choose how it will achieve the Directive's goal. The (SW) implementation deadline referred to in the directive could maybe be postponed, due to the reported calendar and output of the eMS workgroups.

Also other involved instances need to be implied in the further implementation and harmonisation process (e.g. DG TAXUD), or new organisations could be created (e.g. for RIS).

14. ANNEXES

14.1 Annex 1: Questionnaire - Stakeholder consultation

n°		QUESTIONS	ANSWERS	
			ANSWER TO CLOSED-ENDED QUESTIONS (e.g. yes / no - NA - number)	ANSWER TO OPEN-ENDED QUESTIONS
1.		Did your country establish some kind of **coordination (mechanism/forum) between the different administrations** who use/receive/send out the ship reporting formalities (data) covered by the Reporting Formalities Directive?		
	a.	If YES, which administration is **in charge of this coordination (mechanism/forum)**?		
	b.	If YES, which **administrations are participating** to this coordination (mechanism) ?		
	c.	Is there (also) any **coordination (regarding reporting formalities) at local level** (i.e. NOT at a national lever, for example at province level/harbour level, ...)**?**		
2		Do **initiatives/activities (for example 'working groups'/meetings)** took/take place **between the involved national administrations and private stakeholders** with regard to **implementation of the Reporting Formalities Directive?**		
3.		Are there **implementation difficulties or problems** concerning the Reporting Formalities Directive?		
	a.	**If YES, what is the nature of these difficulties / problems (If so, please explain** the problem/difficulty a bit more):		
		Technical?		
		Legal?		
		Political?		
		Other?		
	b.	**If YES,** do these difficulties/problems possibly have an **impact on the** implementation **timing of the Reporting Formalities Directive**(1/06/2015)?		
4.		Can (or will) **ship reporting formalities resulting from specific national legislations** - if any - be **lodged in the National Single Window?**		
	a.	If YES, **which specific (national) formalities are they (cf. Annex part C RFD)?**		
5.		**Was there already some national (= within your MS) harmonisation and / or coordination of the ship reporting formalities,** before the Reporting Formalities Directive was adopted **(i.e. before 2010)?**		
	a.	If YES, how?		
	b.	if YES, on which level?		
	c.	If YES, to what extent?		
	d.	if YES, which reporting formalities are requested in / by your MS? (Cf. Annexes of the Reporting Formalities Directive) **Please, list all reporting formalities applicable in your Member State!**		
6.		Has a **National Competent Authority ('NCA') with the purpose of the Reporting Formalities Directive** been designated in your Member State?		
	a.	If YES, what is the **name** of the **entity (or (cluster of) entities)**?		
	b.	If YES, what are the **contact references** of the responsible person(s)?		
	c.	If YES, what are the **tasks and responsibilities** of the NCA? Does the **NCA (also) take on a coordination role (regarding reporting formalities)**? And does the NCA **have 'powers' to actually take coordinating measures**? If YES, does the NCA e.g. Issue regulations (e.g. Protocols) to effectively coordinate the harmonisation of requested reporting formalities within your MS?		
	d.	Is (will) the **NCA in your MS (be) responsible for the set-up and/or functioning of the NSW? Or** is (will) **another** authority/entity (be) responsible for that? Which one?		
7		**How does (or will) the National Single Window look like / work? Is the NSW already in place, or not? What is the current state of 'development'?** Can you **briefly describe the 'system' or 'environment'** of the NSW - **also some technical specifications, such as the 'IT' part ("machine to machine" interface? web interface?)** And is an existing system/environment (e.g. SSN, a system used by Customs or a port, etc.) that will be 'transformed' or 'expanded' to become the 'NSW'? Or will a completely new system/environment be built?		

8.	More specifically, regarding the **National Single Window**:			
	a.	**Which parties / actors** are involved in the functioning of the NSW: **Who provides** data and **who receives** data through the NSW - e.g. Customs, Ports (Port Community Systems), administrations etc.? **Please, list all involved actors?**		
	b.	Who is **responsible** for / **managing** the (system behind the) NSW?		
	c.	Is the **NSW interoperable with SSN**? If YES, how?		
	d.	Are **all national seaports in** your Member State **connected to the NSW?** **If YES, how** (for example via Port Community Systems, directly to the NSW)?		
	e.	**Which information / data** are (or will) being (be) exchanged through the NSW? **Please, list all reporting formalities applicable in your Member State.**		
		Which information does the NCA/NSW **receive from which** authorities / actors?		
		Which information does the NCA/NSW **send (out) to which** authorities / actors?		
	f.	**Which languages are used in/by the NSW?** - Language u**sed by the data providers (e.g. ship masters) and processors** (e.g. the NCA) - while providing/receiving data? - **(Lodging/interface) language** used in the NSW system/environment		
9.	**a.**	Are **Local Competent Authorities (LCAs)** designated in your MS (for example ports)? If YES - who/which entities/organisations/administrations are they?		
	b.	**How do the LCAs - if any - collaborate (with each other)** - some communication mechanisms or regular meetings for example?		
10.	How is the **ship reporting formalities "data"/information" being exchanged between** the NCA and LCAs and between the LCAs (if any):			
	a.	Through **SSN, or a NSW, or another other channel(s)?**		
	b.	Do certain methods, procedures, agreements, protocols for "**information exchange**" exist?		
11.	**a.**	What is the **"importance"** of **ship movements from - and to - the harbours** in your Member State, **involving stops in free zones and / or third country ports?** With "importance" we mean (big or small) numbers of vessels / (high or low) percentages of ship movements? → This is relevant to investigate the "feasibility of avoiding or simplifying formalities for ships that have called at a port in a third country or free zone"!		
	b.	With regard to question 11.a: Can **(national or international) data - i.e. statistics (numbers of vessels / percentage of ship movements / …)** regarding these cargos / routes / ship movements, ... **be provided by an administration in your country (to demonstrate / prove these movements/this 'importance')?**		
12.	**What do you think about the efforts, initiatives and activities of the EC/DG MOVE (and EMSA) to develop mechanisms for the harmonisation and coordination of reporting formalities within the Union**? (Cf. art. 3.2 of the Reporting Formalities Directive) → With reference to the **eMS group:** **Are you satisfied about the functioning of the eMS group?** Could some things be better organised, communicated,? Do you have any suggestions to improve the functioning of the group?			

14.2 Annex 2: List of consulted persons and documents – Art. 15(a) and (b) RFD

Name	Function	Organisation
Ing. Barthold Van Acker	**RIS Project manager**	**nv De Scheepvaart**
Jan Gilissen	**RIS Coordinator**	**nv De Scheepvaart**
Piet Creemers	**RIS Project Manager**	**Waterwegen en Zeekanaal NV**
Yves Mackelberghs	**Responsible SafeSeaNet and NCA**	**MDK – Department Scheepvaartbegeleiding**
Lieven Dejonckheere	**Director**	**MDK – Department Scheepvaartbegeleiding**
Johan Deman	**Functional Manager** **Responsible NCA**	**Scheldt Radar Network Beheer- en Exploitatieteam Schelderadar (BET)**
Rob Scipio	**Chief Administrator**	**Scheldt Radar Network Beheer- en Exploitatieteam Schelderadar (BET)**
Johan Raes	**Chief Administrator**	**Scheldt Radar Network Beheer- en Exploitatieteam Schelderadar (BET)**
Jos van Splunder	**Chairman RIS ERI expert group** **Responsible SafeSeaNet en NCA**	**Rijkswaterstaat**
Peter Oudenes	**Senior Advisor**	**Rijkswaterstaat**
Ivo ten Broeke	**RIS Project manager**	**Rijkswaterstaat**
Sandra van Putten	**Project Manager**	**Panteia-ENA**
Hans Visser	**Project Manager**	**Panteia-ENA**

The most important standards, directives, documents…. consulted for the purpose of the analysis of Art. 15(a) and (b) of the RFD are:

- The EU RIS Directive of the European Union (2005/44/EC - OJ L 255,30.09.2005)
- The (PIANC) RIS guidelines (2004) were adopted as Commission Regulation (EC) No 414/2007 concerning the technical guidelines for the planning, implementation and

operational use of River Information Services (RIS) referred to in Article 5 of Directive 2005/44/EC

- Tracking and Tracing standard. Formalised as Commission Regulation (EC) No 415/2007 22 March 2007 concerning the technical specifications for vessel tracking and tracing systems
- Notice to Skippers standard. Formalised as Commission Regulation (EC) No 416/2007 of 22 March 2007 concerning the technical specifications for Notices to Skippers
- Electronic reporting standard. Formalised as Commission Regulation (EC) No 164/2010 of 25 January 2010 concerning the technical specifications for electronic reporting
- Standard for Electronic Chart display and Information system for Inland Navigation, Inland ECDIS, Edition 2.0, dd. 23-11-2006 as formalized by the CCNR as Protocol 2006-II-22. The transition from Edition 2.0 to Edition 2.1 of the Standard is in force and dated 22-10-2008
- The PIANC Report n°125 – Part I – The Implementation Status of River Information Status 2010 – March 2011
- The PIANC Report n°125 - Part II - RIS Related Definitions – March 2011.
- The PIANC Report WG125 - Part III – Guidelines and Recommendations for River Information Services – Version 3.0 – March 2011– which is an update of the PIANC RIS Guidelines 2004
- Guidelines and Criteria for Vessel Traffic Services on Inland Waterways, dd. 31-5-2006. Enclosure to CCNR protocol 2006-I-20) and IALA recommendation V-120, June 2001, 2001
- Regional Arrangement Concerning the Radiotelephone Service on Inland waterways (Europe), 2000
- European Commission, Directive 2006/87/EC Technical requirements for inland waterway vessels, 2006
- Harmonised Commodity Description and Coding System of the WCO (worldwide)
- UN Code for Trade and Transport Locations UN/LOCODE (worldwide)
- EDIFACT Standard of the UN (worldwide)
- Standardised UNECE Vocabulary for Radio Connections in Inland Navigation (Europe), 1997 revision 2009
- RIS-Index Encoding Guide, Version 1.0
- The RIS-architecture defined within the COMPRIS-project:
    - WP 2: Function Architecture – 21/12/2004
    - WP 2: Information Architecture – 21/12/2005
    - (sub)WP 2.1: Reference Model and the Objective and Scope of RIS - dd. 21/12/2005
    - (sub)WP 2.3: Data Architecture – dd. 08/04/2005
    - (sub)WP 2.3: Physical and Communication Architecture – dd. 08/04/2004
    - (sub) WP 2.4: Organization Architecture – dd. 08/08/2003.

A number of additional documents which are specific for Issue 2 are:

- IRIS Europe I – RIS Data Exchange Process Description – April 2009
- IRIS Europe I - RIS Data Exchange XML Messaging Reference Guide – April 2009
- SafeSeaNet: Safe Sea Network. http://ec.europa.eu/idabc/en/document/2282/5637
- European Maritime Safety Agency (2006). SafeSeaNet, XML Messaging Reference Guide
- Service-Oriented Architecture: Concepts, Technology, and Design - Thomas Erl - Prentice Hall Service-Oriented Computing Series
- Service-Oriented Architecture: A Field Guide to Integrating XML and Web Services – Thomas Erl - Prentice Hall Service-Oriented Computing Series

- Enterprise SOA: Service-Oriented Architecture Best Practices: Service Oriented Architecture Best Practices (Coad) - Dirk Krafzig
- Web Services Platform Architecture: SOAP, WSDL, WS-Policy, WS-Addressing, WS-BPEL, WS-Reliable Messaging and More - Sanjiva Weerawarana
- An Introduction To Enterprise Architecture: Second Edition - Scott, A. Bernard
- Understanding SOA with Web Services - Eric Newcomer
- Enterprise Integration Patterns – Gregor Hohpe and Bobby Woolf
- Service-Oriented Architecture (SOA) in the Real World – ARC

Reports of RIS related research and implementation projects (COMPRIS, ALOS Danube, IRIS Europe I & II, Wireless Waterway, IRIS Master Plan, PLATINA, RISING) are also consulted: e.g. within the PLATINA project several Work packages are related to the objectives of the current mission: creation and operation of European IWT information services, monitoring administrative barriers, benchmarks and best practices, administrative and technical support for RIS[101]. See also www.ris.eu.

14.3 Annex 3: List of consulted persons and documents – Art. 15(c) RFD

During the study, the consultant analysed a number of background documents:

- *The E-Freight 'Next Generation Single Window' for Trade and Transport'* - Paper for the e-Freight 11 Conference, T. Cane (BMT) & T. Katsoulakos (INLECOM), 18th April 2010
- *Case studies on Implementing a Single Window, to enhance the efficient exchange of information between trade and government* – UN/CEFACT
- *Het jaar van de doorbraak in heel wat douanedossiers VEA Douane* - December 2012 (www. Transportecho.be)
- *SafeSeaNet. MDK haven informatie dagen* (Agentschap MD&K Scheepvaartbegeleiding) – 4 November 2010
- National SW 2012-2015 (PPT Antti Karima (FI)) - 13 June 2012
- SafeSeasIreland (PPT Greg Houlihan, Maritime Safety Directorate, Dept. of Transport (IE)) – 10 June 2008
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Communication and action plan with a view to establishing a European maritime transport space without barriers (*COM(2009)11*);
- The Blue Belt initiative: one of the actions mentioned in the Single Market Act II adopted on the 3rd of October 2012;
- The scope of - and actions within- the "e-Maritime forum": The e-Maritime forum (focused on the industry) will take place in the course of 2013. This event is an interesting opportunity to consult some of the stakeholders;
- Thematic report. Vessel Traffic Monitoring Information Systems, MARSUNO pilot project 2011;
- Position Paper ESPO on e-Maritime (January 2013)
- Multimodal Innovation for Sustainable Maritime an Hinterland Transport (Port Integration) – November 2011
- Meeting document: Single Window and data flow definition – Submitted by MOVE D.1 and EMSA (5th eMS group meeting, 12th July 2012);

Following stakeholders were interviewed by phone:

- Antonis Michail - Policy Advisor European Sea Ports Organisation (ESPO)
- David Whitehead - Director British Ports Association (BPA)
- Pat McNamara – Harbor Master at Eastport (UK)
- List of contacts EU wide stakeholder consultation, see below:

Country	NCA	Admin	Port	Organisation/Ministry	Name person	Issue 1 & 2	Issue 3
							x
Belgium BE (1952)		x		Federal Public Service Mobility & Transport	Bodiaux Pierre		x
		x		Agency for maritime & coastal services	Yves Maekelberg	X	x
			x	PORT OF ANTWERP	APCS-team		x
Bulgaria BG (2007)			x	Bulgarian Ports Infrastructure Company	Symeon Belyovski	X	x
		x		Bulgarian Maritime Administration	Anna Natova	X	x
Cyprus CY (2004)		x		Cyprus Ports Authority	Kokkinos Yiannakis	X	x
Denmark DK (1973)	x			Admiral Danish Fleet HQ	Martin Ahl		x
		x		Danish maritime authority	Moller Nielsen Steen	X	x
			x	PORT OF COPENHAGEN	Brian Kristensen		x
Estonia EE (2004)		x		Estonian Maritime administration	Siht Alar	X	x
Finland FI (1995)		x		Finish Transport agency	Eronen MattiAntti Arkima		x
		x		Ministry of Transport and Communication	Nyman Sirkka-Heleena	X	x
France FR (1952)		x		Ministère de l'écologie, du développement durable et de l'énergie	Doba Serge Cheruy Nicolas		x
				Voies Navigables de France	Olivier Dissaux	X	
			x	PORT OF MARSEILLES (Med.Sea)			x
Germany DE (1952)		x		German Federal Waterway and Shipping Administration	Werner Brunet	X	x
	x	x		Bundesministerium	Hans Heinrich Callsen-Bracker		x
			x	PORT OF HAMBURG			x
Greece GR (1981)	x	x		Ministry of Shipping, Maritime Affairs and the Aegean	Ilias Sofikitis	X	x
				Ministry of finance (??)	Nikos Tsagkaris Konstantinos Katagis		
			x	PORT OF PIRAEUS (Med. Sea)			x
Ireland IE (1973)	x	x		Marine Survey Office	Greg Houlihan		x
Italy IT (1952)		x		Italian Coast Guard	Marco Gionfriddo Di Guardi Daniele Marco Gonnelli	X	x
			x	PORT OF GIOIA TAURO (Med. Sea)			x
Latvia LV (2004)	x	x		Latvian Coast Guard Service	Deniss Bickovs		x
		x		Ministry of transport	Laima Rituma		x
Lithuania LT (2004)		x	x	Klapeida State Seaport Authority	Kaupas Aleksandras	x	x
			x	PORT OF KLAPEIDIA			x
Malta MT (2004)				Transport Malta	Antoine Zahra Charles Abela Paul Spiteri		x
Netherlands NL (1952)		x		Ministry of Infrastructure and the Environment	Trijntje Verzijden		x
		x		NCA Saefseanet	Jos Van Splunder		x
		x		Ministry of infarstructure and environment	Roeland Van Bockel		x
		x		Ministry of Finance/Customs	Pieter Verbakel		x
Poland PO (2004)		x		Ministry of transport, construction and maritime economy	Agnieszka Michalak		x
				Polish Inland Navigation Office in Szczecin	Piotr DURAJCZYK	X	
	x			Maritime office in Gdynia	Bogdan Rojek		
Portugal PT (1986)		x		IPTM Ministry of Economy	Joao Carvalho Ricardo Santos		x
				IPTM DSAS-DAP	Heloisa Cid	X	
Romania RO (2007)		x		Romanian Naval Authority (Ministry of Transport)	Ion Zeicu		x
			x	PORT OF CONSTANTA (Black Sea)			x
				RNA – Romania Naval Authority	Mihai GHIBA	X	
Slovenia SI (2004)		x		Slovenian Maritime administration	Miran Bordon		x
Spain ES (1986)				PORTEL - puertos del estado	Fraile Javier Luezas Jaime Garcia Pedro	X	x
			x	PORT OF VALENCIA (Med. Sea)			x
Sweden SE (1995)		x		Swedish Maritime Administration	Anna Staaf → Jörgen Sjoholm instead of Anna! Katarina Händel Mikael Renz Ulf Andersson	X	x
				Swedish Transport Agency	Monica Sundklev		x
United Kingdom UK (1973)	x	x		Navigation safety - department for transport	Michael Read-Leah	X	x
			x	PORT OF SOUTHAMPTON			x

14.4 Annex 4: List of consulted persons and documents – Art. 15(d) RFD

National, European and international organizations were interviewed and asked their opinion on this issue. Next to this, both large shipping companies and smaller shipping companies were involved and questioned.

Organization	**Contact person**	**Contact details**
European Sea Ports Organization (ESPO)	Patrick Verhoeven	patrick.verhoeven@espo.be
European Community Shipowners' Associations (ECSA)	Christophe Tytgat	Tytgat@ecsa.eu
European association for forwarding, transport, logistics and customs services (Clecat)	Marc Van de Perre	vandeperre@clecat.org
European Transport Workers' Federation (ETF)	Philippe Alfonso	p.alfonso@etf-europe.org
European Commission – DG Taxud	Frank Janssens	frank.janssens@ec.europa.eu
European Shippers' Council (ESC)	Godfried Smit	g.smit@evo.nl
International Chamber of Shipping (ICS)	Peter Hinchliffe	peter.hinchliffe@ics-shipping.org
World Shipping Council (WSC)	Damian Viccars	damian.viccars@worldshipping.org
Belgian Maritime Law Association (BVZ)	Karel Stes	Karel.Stes@exmar.be
Royal Belgian Shipowners' Association (KBRV)	Leo Werkers	Leo.Werkers@brv.be
Antwerpse Scheepvaartvereniging (ASV)	Jan Van Wesemael	Jan.VanWesemael@alfaportantwerpen.be
Short Sea Shipping Belgium	Willy De Decker	willy.de.decker@shortsea.be
Aegean Bunkers at Sea NV	Reginald Robyn	r.robyn@ampni.com
Fast Lines Belgium	Yvan Vlaminck	Yvan.Vlaminckx@fastlines.be
Cobelfret	Michel Cigrang	Michel.CIGRANG@cobelfret.com

Delphis - Team Lines	Vincent Roels	vroels@teamlines.be
Maersk	Pernille Dahlgaard	Pernille.Dahlgaard@seagoline.com
DFDS Seaways	Poul Woodall	poul.woodall@dfds.com
Unifeeder	Ebbe Bisgaard	ebb@unifeeder.com
CMA CGM	Muriel Mazzei	ho.mmazzei@cma-cgm.com
Maersk Tankers	Eric De Geyer	Eric.De.Geyer@maersk.com
LDA Lines	Antoine Person	Antoine.Person@lda.fr
SNCM	Nicolas Isoard	nisoard@sncm.fr
La compagnie Méridionale	Hervé Pellecuer	herve.pellecuer@cmn.fr
KESS / K-line	Hand Ackermann	Hans.Ackermann@de.kline.com
Hapag Lloyd	Anemone Pelikan	Anemone.Pelikan@hlag.com
Neptune Lines	Nicolas Travlos	email@neptunelines.com
Grimaldi	Paul Kyprianou	kyprianou.paul@grimaldi.napoli.it
Stena Lines	Marcel Van der Vlugt	marcel.vandervlugt@stenaline.com
Transfennica	Dirk Witteveen	Dirk.Witteveen@transfennica.com
UECC	Augustin Fernandez	agustin.fernandez@uecc.com
Sea-cargo	Ander Rossevold	Anders.Rossevold@sea-cargo.no
Color Line	John Nielsen	John.j.Nielsen@ColorLine.dk
Seatruck ferries	Alistair Eagles	aje@seatruckgroup.co.uk
Mac Andrews	Guy Adams	lon.gadams@macandrews.com
K-line UK	John Kitchener	John.Kitchener@uk.kline.com

During the study, the consultant analysed a number of background documents:

Treaties and international agreements

Convention on the Territorial Sea and the Contiguous Zone (adopted 29 April 1958, entered into force 10 September 1964), 516 UNTS 205.

Seafarers' Identity Documents Convention No. 108 (adopted 13 May 1958, entered into force 19 February 1961), available online: <http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312253:NO>.

Convention on Facilitation of International Maritime Traffic (adopted 9 April 1965, entered into force 5 March 1967), 591 UNTS 265, as amended [FAL Convention].

Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331 [VCLT].

International Convention for the Safety of Life at Sea (adopted 1 November 1974, entered into force 25 May 1980) 1184 UNTS 278 [SOLAS Convention].

United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3 [LOSC].

Seafarers' Identity Documents Convention No. 185, (adopted 19 July 2003, entered into force 9 February 2005), available online: <http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_ILO_CODE:C185>.

ADS agreements for China (2004) OJ L 83/12, Russia (2007) OJ L 129 and Ukraine, Serbia, Montenegro, Bosnia, the former Yugoslav Republic of Macedonia, Albania and Moldova (2007) OJ L 332 and 334.

EU documents

Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances, O.J. L 196, 16 August 1967.

European Commission, Authorisation of Member States to ratify the Seafarers' Identity Documents Convention of the International Labour Organization (Convention 185), COM (2004) 530.

Regulation (EC) No. 562/2006 of the European Parliament and of the Council of 15 March 2006 establishing a Community Code on the rules governing the movement of persons across borders (Schengen Borders Code), OJ L 105/1 of 13 April 2006.

Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on Mid-Term Re view of the Programme for the Promotion of Short Sea Shipping, COM (2006) 380 final, 13 July 2006.

Council Conclusions during the 2772nd Transport, telecommunications and Energy Council Meeting, Brussels, 11 December 2006, available online: http://www.shortsea.info/medias/documents/Council-conclusions-SSS-92109.pdf.

Regulation (EC) No 767/2008 of the European Parliament and of the Council of 9 July 2008 concerning the Visa Information System (VIS) and the exchange of data between Member States on short-stay visas (VIS Regulation, OJ L 218, 13 August 2008, as amended.

European Parliament, "Rotterdam Rules – European Parliament Resolution on Strategic Goals and Recommendations for the EU´s Maritime Transport Policy until 2018", 2011/C 81 E/03 (2011).

Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on Single Market Act II, COM (2012) 573 final, 3 October 2012.

Communication from the Commission on Blue Belt, COM (2013) 510 final, 8 July 2013.

IMO documents

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14.5 Annex 5: List of consulted persons and documents – Art. 15(e) RFD

Persons consulted concerning Art. 15(e):

Organization	Contact person
EMSA	Marta LIMA GALVAO/ Abela Charles
ECSA	Christophe Tytgat
IHS Maritime	Alex Gray/ Anne Smith
Institute of shipping Economics and Logistics	Sönke Maatsch
EPCSA	Richard Morton + Members EPCSA
H. Clarkson	Colin Cridland

Websites consulted of:

- IMO
- EMSA –SafeSeaNet
- Eurostat
- International Maritime Statistics Forum (IMSF)
- European Sea Ports Organisation (ESPO)
- ISPS
- Customs ICS (Import Control System)
- Lloyd's List Intelligence
- IHS Maritime
- AXSMarine
- ORBCOMM
- ExactEarth
- The International Tanker Owners Pollution Federation (ITOPF)
- The Helsinki commission (HELCOM)
- Sailwx
- Marine Traffic services
- Vessel Finder
- ESA

Studies consulted:

- Euro Mediterranean Transport Project, Mediterranean Transport infrastructure Network. Technical Note 22 - MEDA shipping Movements – European Commission
- Regional marine pollution emergency response center for the Mediterranean sea (REMPEC), Euro-Mediterranean Partnership, Euromed Cooperation on maritime safety and prevention of pollution form ships (SAFEMED), Study of Maritime Traffic Flows in the Mediterranean Sea

14.6 Annexes re Art. 15(e) RFD

Annex 1. Survey EPSCA Members

A survey has been made and sent to different members of EPCSA in and outside of EU. Sixteen port authorities participated in the survey, whereof 14 within the EU, one in Israel and one which is unknown.

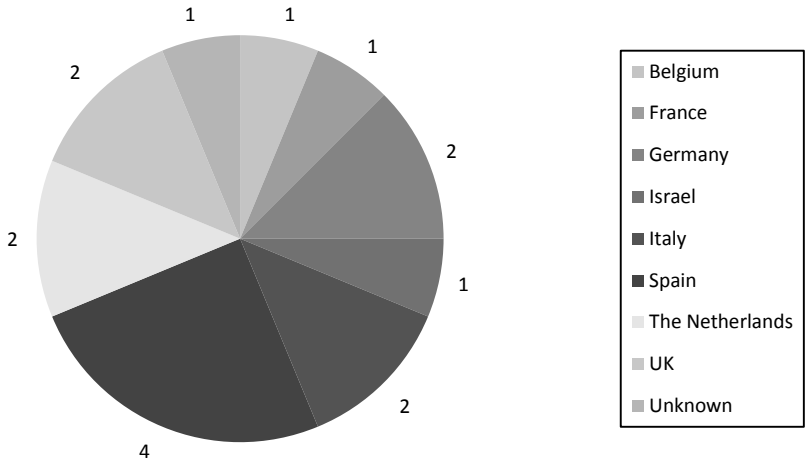

Figure 14-1: Respondents survey per country

Which (estimated) percentage of movements to your harbour comes directly from a port outside the EU and free zones?

No answer	NA	Answer
6	**6**	**4**

The six port authorities answering that there is no data available refer to other institutes to get this information, such as ZMGS, SafeSeaNet, the coast guards, ...

Organisations	**Answers**
Portbase – Rotterdam/Amsterdam PCS	100% via the carriers or their agents
Port of Amsterdam	Approximately 74.6%
Unknown	<10% from ports total turnover
Port of Barcelona A.S.	Tons (containers and breakbulk): 63.5% TEUS (full and empty containers): 82.6% Containers (full and empty): 80.9%

Only three (the unknown PCSO not taken into account) of the sixteen PCSO could give a percentage of ships which come directly from third country ports or outside the EU (see table above).

Can data (re cargos, routes / ship movements,...) be provided to demonstrate / prove these ship movements (e.g. statistics - numbers, percentages)?

No answer	No	Yes
2	**8**	**6**

DBH Logistics IT AG refers to the Vessel and Dangerous Cargo declaration (ZMGS and SafeSeaNet) to get this information.

The Venice Port Authority refers to the Coast Guard, which is the maritime rescue coordination center in Italy in order to obtain this info.

Six of the sixteen participants are able to provide data concerning ship movements/traffic.

Can you obtain data regarding ship movements or traffic from following sources:

	No answer	Yes	No
Vessel Tracking & Tracing	1	8	7
Shipping companies	1	8	7
National competent authorities	2	4	10
Ports	2	8	6
Other	3	6	7

50% of the participants state to be able to obtain data from sources as Vessel Tracking and tracing, shipping companies and the ports. 25% of the Port authorities can obtain data regarding ship movements through the national competent authority.

What kind of data can you provide on such ship movements/traffic?

	No answer	Yes	No
Company level	2	11	3
Traffic frequency	2	11	3
Routes taken (last ports of call)	2	13	1
Shipped cargo	2	11	3
Ship type	3	10	3
Other	4	7	5

Approximately 70% of the EPSCA members that answered the questionnaire can provide data on ship movements, specifically: company level, traffic frequency, routes taken, shipped cargo and ship type.

Seven of the interviewed ports could provide extra data, differing among the ports, such as; next port of call, crew and passengers info, board provisions, services to be rendered (pilotage, tugs, boatmen,..), capacity of the terminal, ...

What is the percentage of cargo ships that are exclusively calling at EU ports and free zones?

	No answer	NA	Other
Overall percentage	6	6	4
Container ships	6	6	4
Bulk dry carries	6	6	4
Tankers	6	6	4

One of the sixteen participants can give figures on the percentages of cargo ships that are exclusively calling at EU ports and free zones.

Dbh Logistics IT AG and the Venice Port Authority confirm to have info on the percentages, but do not give any figures.

The Port of Barcelona S.A. only has data concerning the container ships, notably 20% of the containerships are exclusively calling at EU ports and free zones.

The port of Bilbao Authority confirms that 90% of the ships are exclusively calling at EU ports, whereof 70% container ships, 15% bulk dry carriers and 5% tankers.

Which percentage of cargo ships are making use of the status of authorised regular shipping service (RSS)?

Only the Port of Bilbao Authority has figures concerning RSS shipping, notably the overall percentage of ships making use of RSS is 25%. This status is mainly used by containerships (20%). Bulk dry carriers and tankers represent respectively 3 and 2%.

Annex 2. Content cargo reporting forms

- **Information to be notified according to directive Art. 36a Council Regulation (EEC) N° 2913/92:**

    - Number of items
    - Unique consignment reference number
    - Transport document number
    - Consignor
    - Person lodging the summary declaration
    - Consignee
    - Carrier
    - Notify party
    - Identity and nationality of active means of transport
    - crossing the border
    - Conveyance reference number
    - First place of arrival code
    - Date and time of arrival at first place of arrival in Customs territory
    - Country(ies) of routing codes
    - Mode of transport at the border
    - Customs office of exit
    - Location of goods
    - Place of loading
    - Place of unloading code
    - Goods description
    - Type of packages (code)
    - Number of packages
    - Shipping marks
    - Equipment identification number, if containerized
    - Goods item number
    - Commodity code
    - Gross mass (kg)
    - UN Dangerous Goods code
    - Seal number
    - Transport charges method of payment code
    - Declaration date
    - Signature/Authentication
    - Other specific circumstance indicator

- **Information to be notified according to FAL form 2: Cargo Declaration**

    - Name of ship
    - IMO number
    - Call Sign
    - Voyage number
    - Ports where report is made
    - Flag Stat of Ship
    - Name of master
    - Port of loading
    - Details of the consignment(s): in respect of goods discharged at the port in question data items should be repeated following Bill of Lading (B/L) No.:
    - Transport document numbers for cargo to be discharged at the port in question (B/L No.)
    - Container identification, where appropriate; marks and numbers; number and kind of packages; quantity and description of the goods or, if available, the HS code

- Gross weight
- Measurement
- Ports at which cargo remaining on board will be discharged
- Original ports of shipments in respect of goods shipped under multimodal transport documents or through bills of lading

- **Content of the CUSCAR message ("CUStoms CARgo message")**

  - Name and type of the ship
  - IMO number
  - Call sign
  - Voyage number
  - Name master
  - Flag state of the ship
  - Name of master
  - Port of loading
  - Port of discharge
  - B/L No.
  - Cargo details
  - Containers
  - Container seal
  - Number & kind of packages
  - Container identification
  - Description of the goods
  - HS code
  - Gross Weight
  - Measurement
  - Data and signature by master, authorized agent or officer

Annex 3. Figures

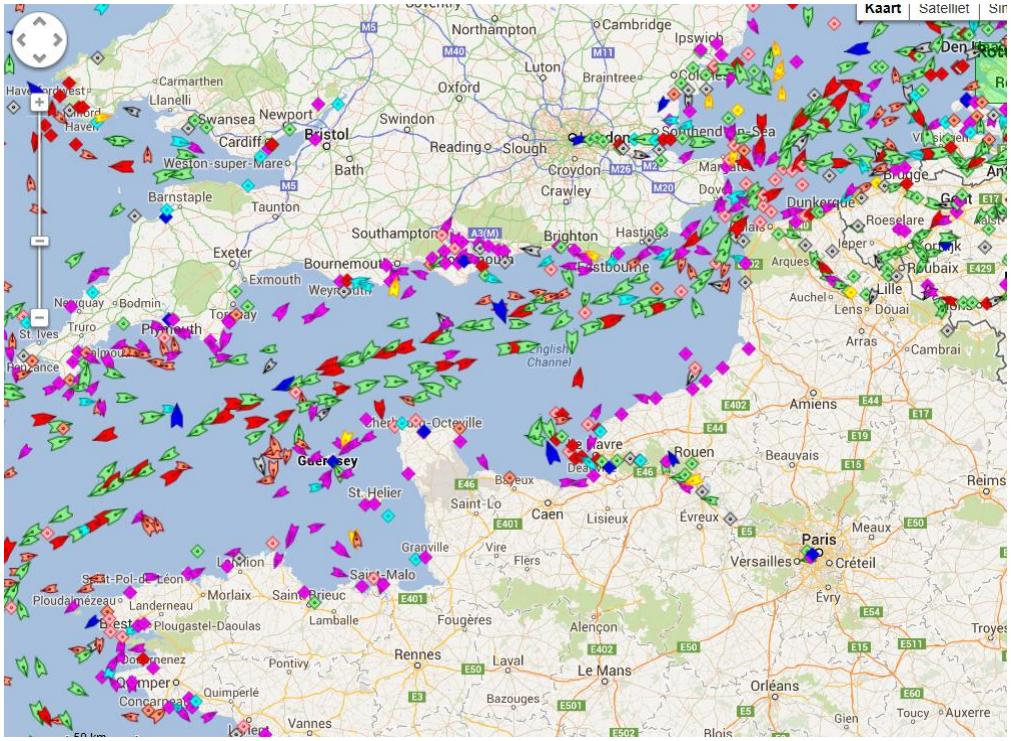

Figure 14-2: Screenshot website Marine traffic services (source: http://www.marinetraffic.com/ais)

Departures & Arrivals in Port: **20 Records Found**

Port	Vessel's Name	Arrival Time (LT)	Departure Time (LT)
ROSTOCK	VITALI KOZHIN		2013-06-26 19:21
ROSTOCK	VITALI KOZHIN	2013-06-24 16:43	
ALTWITTENBEK	VITALI KOZHIN	2013-06-24 06:46	2013-06-24 06:53
RENDSBURG	VITALI KOZHIN	2013-06-24 04:39	2013-06-24 05:13
FISCHERHUTTE	VITALI KOZHIN	2013-06-24 02:54	2013-06-24 03:03
HOCHDONN	VITALI KOZHIN	2013-06-24 01:57	2013-06-24 02:05
OSTERMOOR	VITALI KOZHIN		2013-06-24 00:24
BRUNSBUETTEL	VITALI KOZHIN	2013-06-23 23:25	
VLISSINGEN STAD	VITALI KOZHIN	2013-06-22 13:17	2013-06-22 13:19
VLISSINGEN	VITALI KOZHIN		2013-06-22 12:54
VLISSINGEN	VITALI KOZHIN	2013-06-22 00:09	
BRUNSBUETTEL	VITALI KOZHIN		2013-06-20 09:54
OSTERMOOR	VITALI KOZHIN	2013-06-20 09:02	
HOCHDONN	VITALI KOZHIN	2013-06-20 08:06	2013-06-20 08:17
FISCHERHUTTE	VITALI KOZHIN		2013-06-20 07:12
FISCHERHUTTE	VITALI KOZHIN	2013-06-20 06:05	2013-06-20 07:12
RENDSBURG	VITALI KOZHIN	2013-06-20 03:36	2013-06-20 04:33
ALTWITTENBEK	VITALI KOZHIN	2013-06-20 01:42	2013-06-20 01:49
ROSTOCK	VITALI KOZHIN		2013-06-19 15:45
ROSTOCK	VITALI KOZHIN	2013-06-17 14:22	

Figure 14-3: Marine traffic service: Departures and Arrivals in a port (source: http://www.marinetraffic.com/ais)

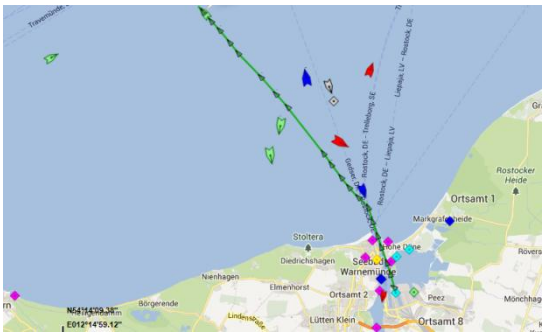

Figure 14-4: Marine traffic service: plotted route from the last port of call (source: http://www.marinetraffic.com/ais)

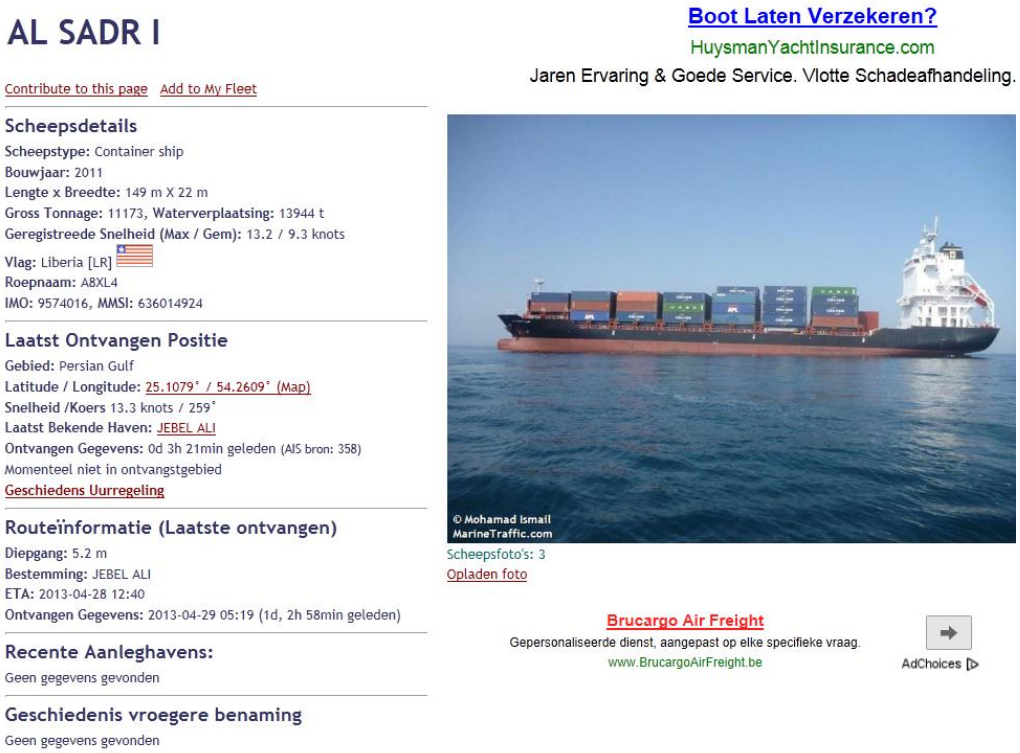

Figure 14-5: Marine traffic service: Available information (source: http://www.marinetraffic.com/ais)

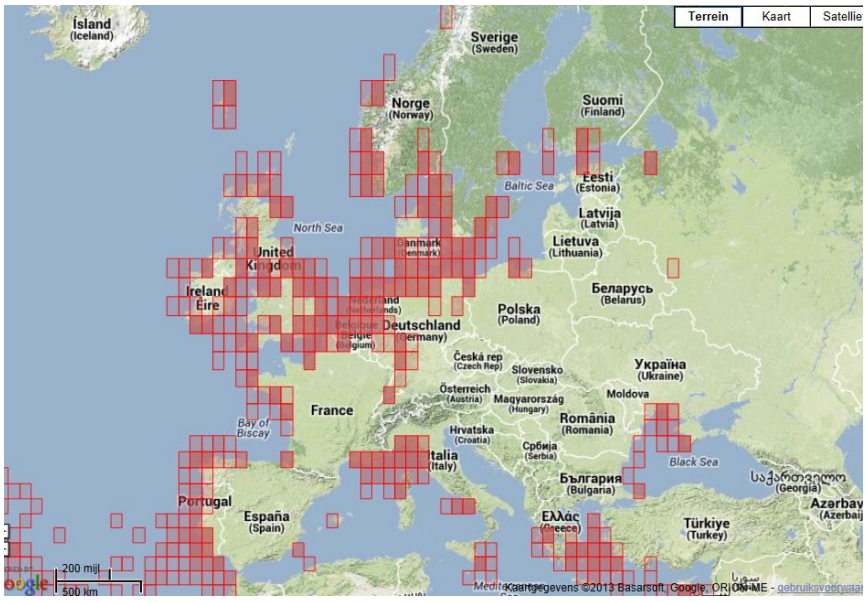

Figure 14-6: Vessel Finder coverage (source: http://www.vesselfinder.com)

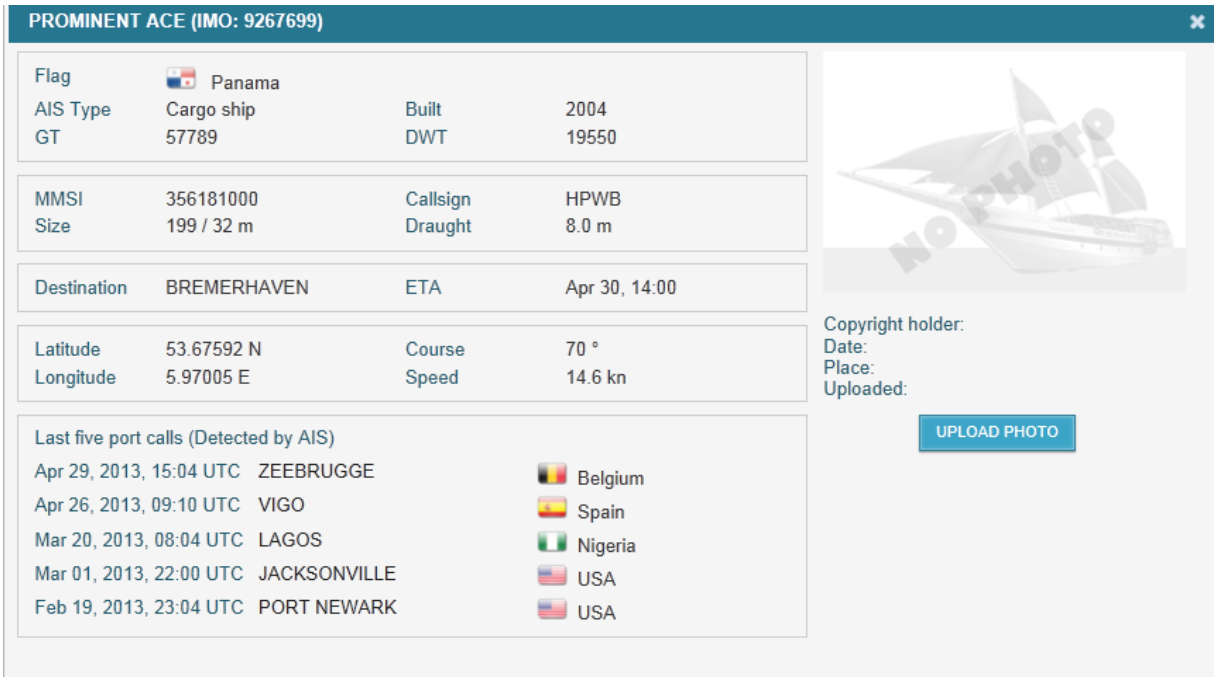

Figure 14-7: Vessel finder - vessel information (source: http://www.vesselfinder.com)

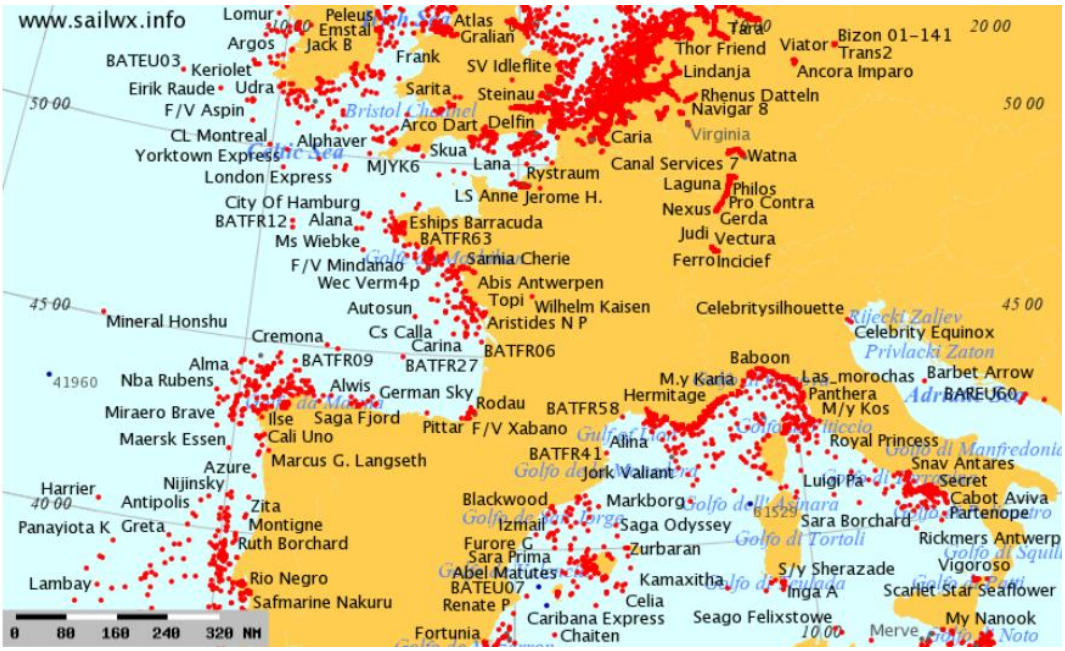

Figure 14-8: Screenshot Sailwx (source: http://www.sailwx.info)

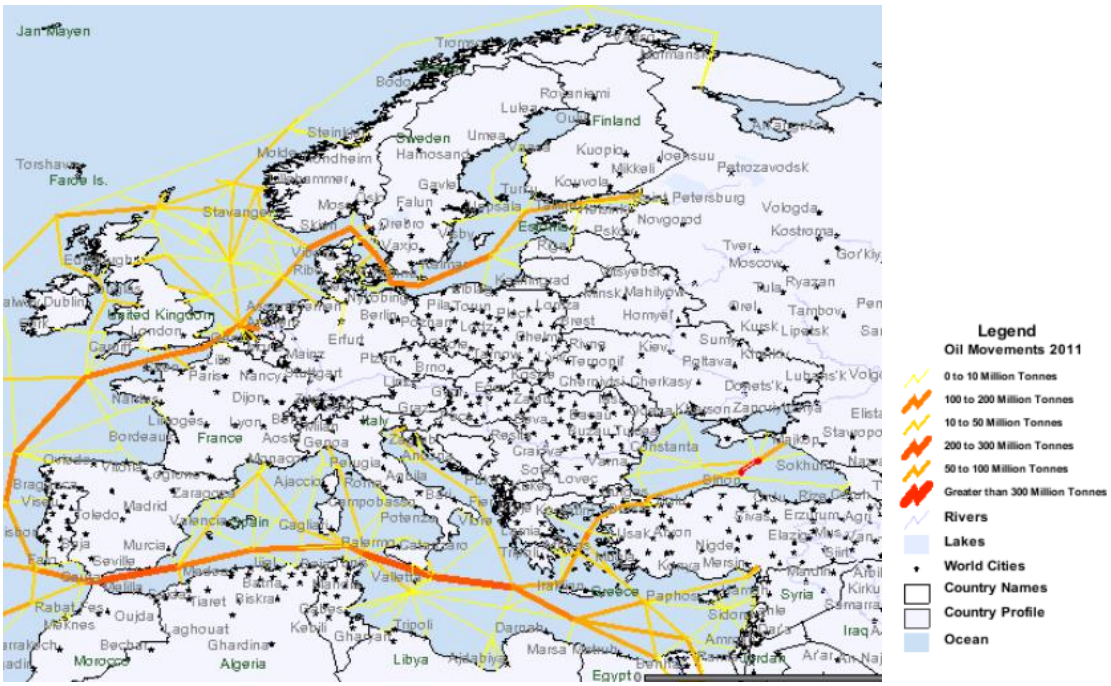

Figure 14-9: Oil movements 2011 (source: ITOPF 2013)

Figure 14-10: Helcom Map and Data Service: Traffic in 2015 (source: Helcom)

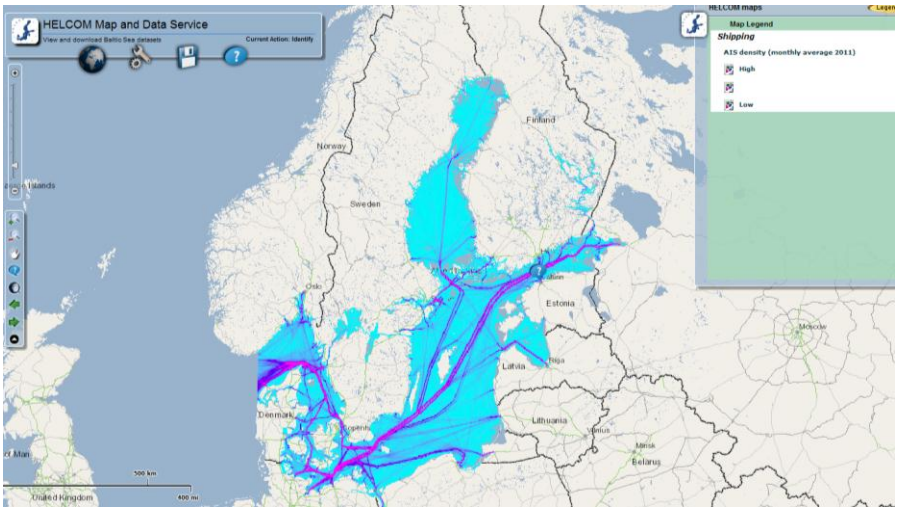

Figure 14-11: Helcom Map and Data service: AIS density (monthly averages 2011) (source: Helcom)

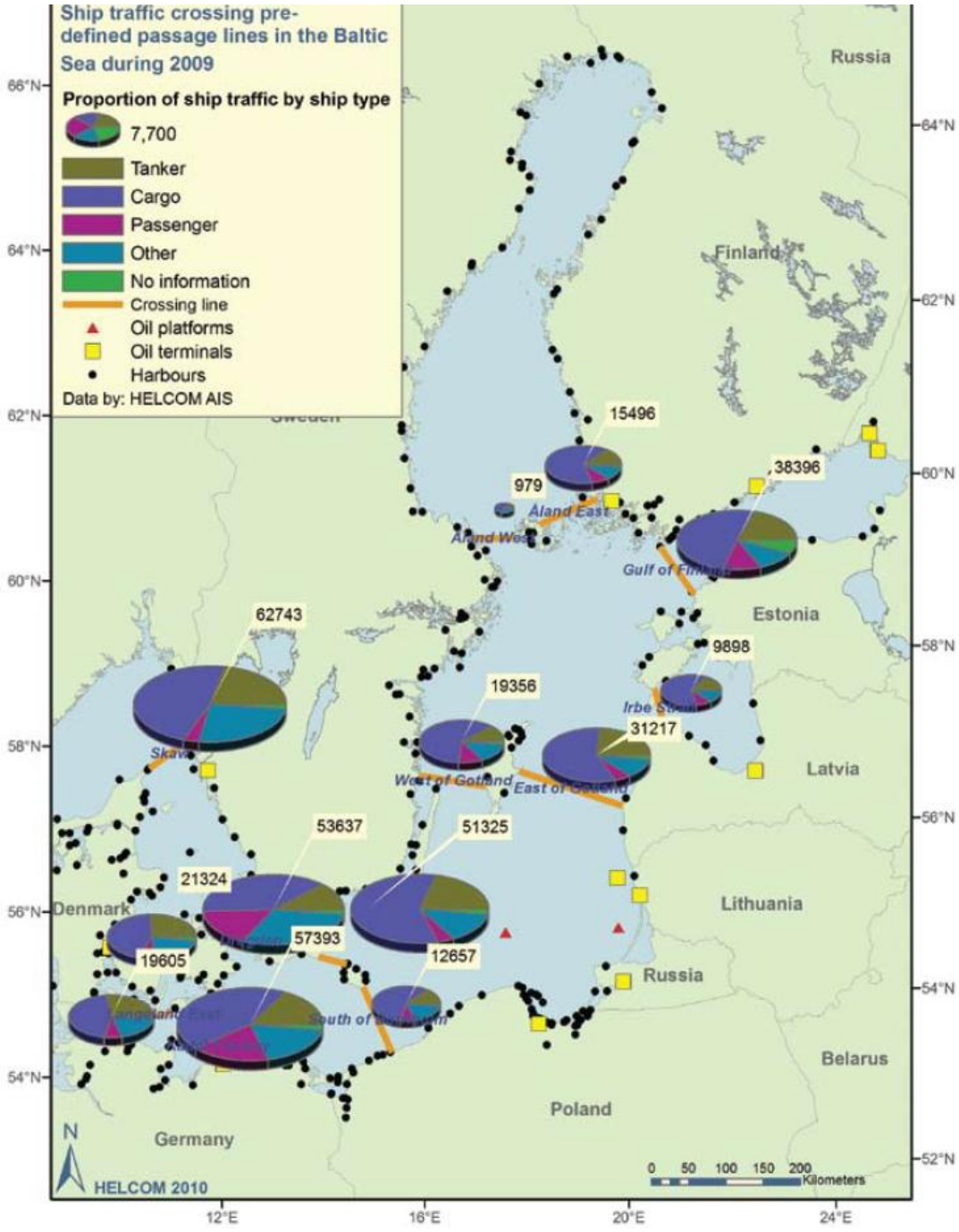

Figure 14-12: Ship traffic crossing predefined passage lines in the Baltic Sea during 2009 (source: Helcom AIS)

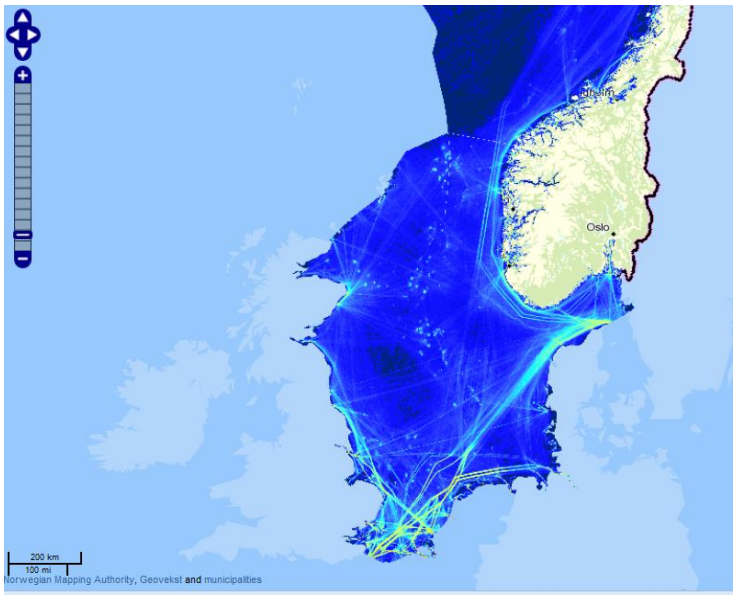

Figure 14-13: The Norwegian Coastal Administrations (NCA) – density maps bases on Lloyd's MIU (source: NCA)

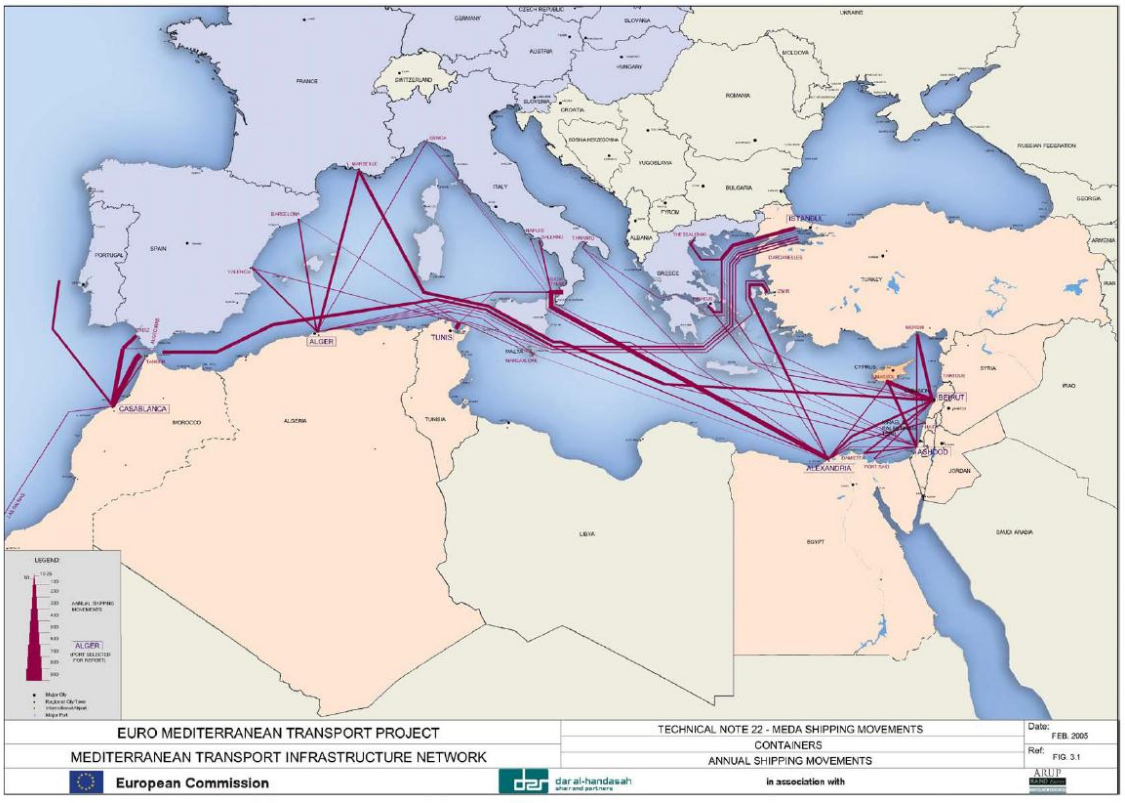

Figure 14-14: Euro Mediterranean Transport Project - Containers: annual shipping movements

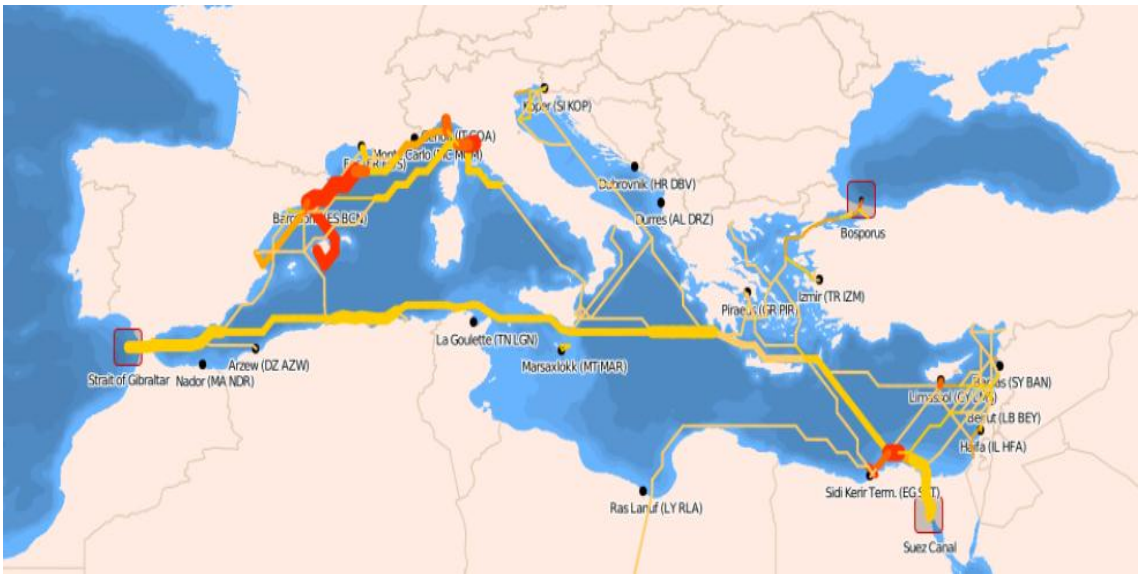

Figure 14-15: Safemed II - Webgis application displaying the main routes and oil tanker routes in 2005 in the Mediterranean sea based on Lloyd's MIU