

# Directive 2002/59/EC “Establishing a Community Vessel Traffic Monitoring and Information System “ & SafeSeaNet

## Block 5 Digitalisation and Simplification Training on EU Maritime Legislation

Marta Lima Galvão / Senior Project Officer

Unit 3.3: Simplification

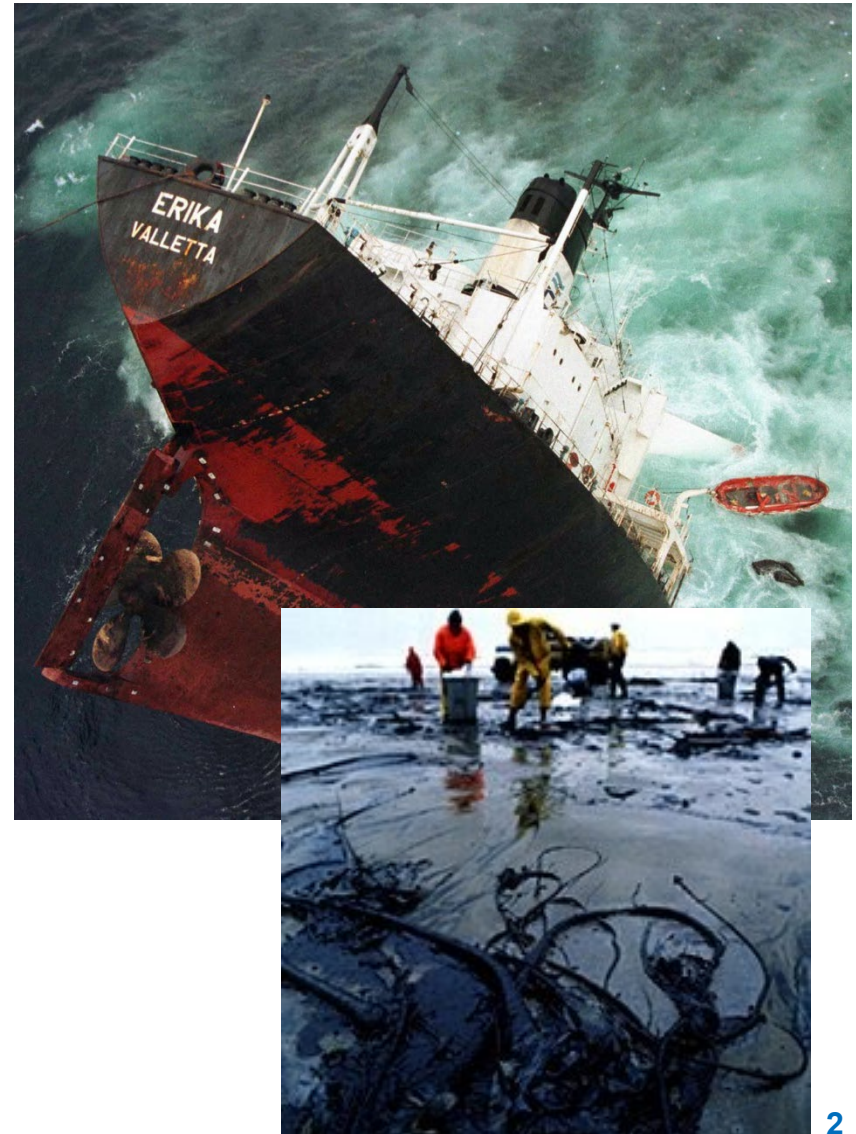
Online, 27 September 2021



Following the loss of the tanker Erika in 1999, the European Union adopted several directives aiming at preventing both accidents at sea and pollution by ships

One is Directive 2002/59/EC that establishes the **SafeSeaNet (SSN)** - the Union maritime information and exchange system

SSN enables the receipt, storage, retrieval and exchange of maritime related information between MS competent authorities





# Content

- **Part I:** Introduction to Directive 2002/59/EC as amended (VTMIS Directive)
- **Part II:** SafeSeaNet



2002L0059 — EN — 16.03.2011 — 002.001 — 1

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► **B** 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 and repealing Council Directive 93/75/EEC

(OJ L 208, 5.8.2002, p. 10)

Amended by:

		Official Journal		
		No	page	date
► <b><u>M1</u></b>	Directive 2009/17/EC of the European Parliament and of the Council of 23 April 2009	L 131	101	28.5.2009
► <b><u>M2</u></b>	Directive 2009/18/EC of the European Parliament and of the Council of 23 April 2009	L 131	114	28.5.2009
► <b><u>M3</u></b>	Commission Directive 2011/15/EU of 23 February 2011	L 49	33	24.2.2011

# Amended in 2009 and 2011



To **establish** in the European Union a vessel traffic monitoring and information system (SafeSeaNet) with a view to enhancing the safety and efficiency of maritime traffic



To **improve** the response of authorities to incidents, accidents or potentially dangerous situations at sea, including search and rescue operations




To **contribute** to better prevention and detection of pollution by ships

- ✓ The Directive implements a number of IMO legal instruments – Conventions, Resolutions, Codes - related to its purpose




## Applies to:



-  Ships of 300 GT and upwards unless stated otherwise

## Does not apply to:



-  Warships, naval auxiliaries, and other ships owned or operated by a Member State and used for non-commercial public service
-  Fishing vessels, traditional ships and recreational crafts with a length of less than 45 (AIS for 15 metres)
-  Bunkers on ships below 1000 GT and ships' stores and equipment for use on board all ships



## **Title I (Art. 4-10)**

Ship  
reporting and  
monitoring

## **Title II (Art. 12-15)**

Notification  
of dangerous  
or polluting  
goods on  
board ships  
(HAZMAT)

## **Title III (Art. 16-21)**

Monitoring of  
hazardous  
ships and  
intervention  
in the event  
of incidents  
and accidents  
at sea

## **Title IV (Art. 22-26)**

Accompanying  
measures

## Annex I

List of  
information  
to be notified

## Annex II

Requirements  
applicable to  
on-board  
equipment

## Annex III

Electronic  
messages and  
the Union  
Maritime  
Information  
and Exchange  
System  
(SafeSeaNet)

## Annex IV

Measures  
available to  
MSs in the  
event of a  
threat to  
maritime  
safety and  
the  
protection of  
the  
environment



## **Title 1**

### **Ship Reporting and monitoring**

4. Notification prior to entry into ports of the member State
5. Monitoring of ships entering the area of mandatory ship reporting systems
6. Use of AIS and LRIT equipment
7. Use of ship's Routing Systems
8. Monitoring of the compliance of ships with VTSs
9. Infrastructure
10. VDR equipment

# Article 4: Notification prior to entry into ports of Member States

**Ships bound for a port of a MS shall notify the information in Annex I(1) to the port authority:**

- 24h in advance or at departure in voyage less than 24h or when destination known
- Ships coming from outside the EU...and carrying DPG, shall comply with the reporting obligations of Article 13

## **Objective:**

Ships to provide important information prior to arriving in ports of MSs

# Article 5: Monitoring of ships entering the area of mandatory ship reporting systems

- MS concerned shall **monitor** and take all necessary...measures to ensure that all **ships entering the area of a MRS...comply with that system in reporting the information...**

- When submitting a new MRS...or amending an existing..., a MS shall include in its proposal at least the information referred to in Annex I(4)

## Objectives:

- MSs to ensure that ships comply with the reporting requirements in the MRS rules adopted by IMO in accordance with SOLAS Chapter V and Resolution A.851(20)

- Harmonise EU MRS reporting requirements

Member States shall:

- provide...**appropriate equipment and shore-based installations** for receiving and utilising the **AIS** information...
- ensure that the coastal stations in charge of monitoring the ... VTSs and SRSs, have:
  - sufficient and properly **qualified staff**;
  - appropriate **means of communication** and **ship monitoring**;
  - **operations** in accordance with the relevant **IMO guidelines**.

### Objectives:

- oblige MSs to set up shore based stations to receive ship AIS information (SOLAS requires AIS for ships).
- adhere to IMO guidelines for ship monitoring by coastal stations (e.g. IMO Resolution A.857(20) Guidelines for Vessel Traffic Services)

## Title II

### Notification of Dangerous and Polluting Goods on board ships (HAZMAT)

12.Obligation for shippers

13.Notification of dangerous  
or polluting goods carried on  
board

14.Computerised exchange of  
data between Member States

15.Exemptions



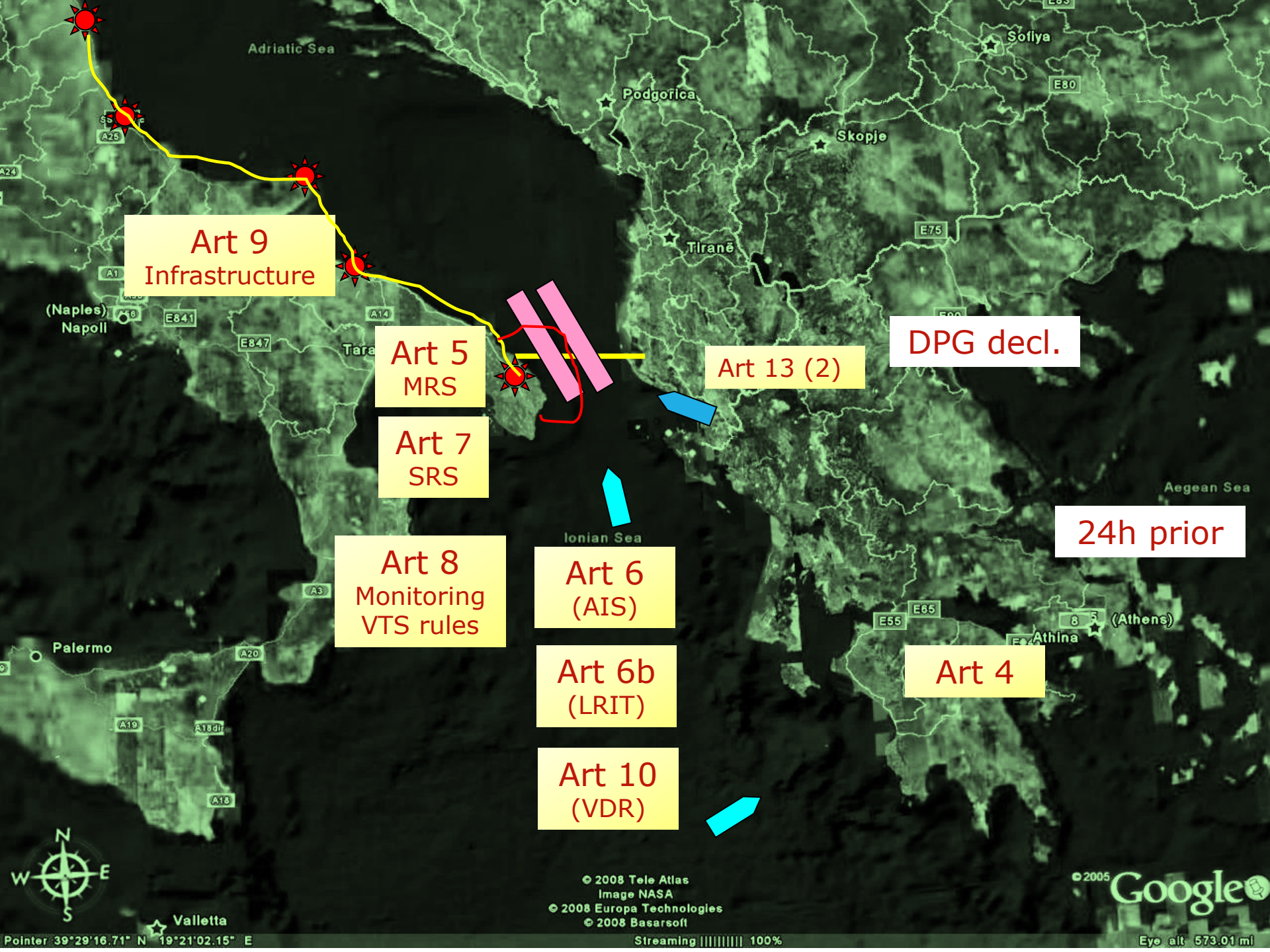
# Article 13: Notification of dangerous or polluting goods carried on board

- Ship...carrying **DPG** ... shall... **notify the information indicated in Annex I(3) to the competent authority** designated by that Member State.

- ...authority...retain the information ... long enough for it to be usable in the event of an incident or accident at sea... [and] **provide this information electronically and without delay** ..., 24 hours a day upon request

## Objective:

Obliges ships to report DPG as defined in IMO Conventions (MARPOL and SOLAS) and Codes (IMDG, IMSBC, IGC and IBC)



Art 9  
Infrastructure

Art 5  
MRS

Art 7  
SRS

Art 8  
Monitoring  
VTS rules

Art 6  
(AIS)

Art 6b  
(LRIT)

Art 10  
(VDR)

Art 13 (2)

DPG decl.

24h prior

Art 4



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## Title III

### Monitoring of Hazardous ships and intervention in the event of incidents and accidents at sea

16. **Transmission** of information concerning certain ships

17. **Reporting** of incidents and accidents at sea

18. **Measures** in the event of exceptionally **bad weather**

18a. **Measures** in the event of risks posed by presence of **ice**

20. **Places of refuge**

21. Information of the parties concerned

# Article 16: Transmission of information concerning certain ships

- Ships meeting [specific] criteria ... shall be considered to be **ships posing a potential hazard** to shipping or a threat to maritime safety, the safety of individuals or the environment

- Coastal stations holding relevant information...**shall communicate it to... MSs** located along the planned route

- ...MSs shall carry out any **appropriate inspection...**[and] inform all MSs concerned

## Objectives:

- Establish criteria for ships posing a potential risk

- Establish how to exchange information on hazardous ships (distribute along the planned route)

- Warn MSs of potential threats and results of inspections



## IRs distribution





## IRs distribution



- ... MSs shall monitor and take all appropriate measures to **ensure that the master** of a ship sailing within their search and rescue region/exclusive economic zone or equivalent, **immediately reports** to the coastal station responsible for that geographical **area...any incident or accident...**

- The report message sent...shall include at least the [required information]

## Objectives:

- Oblige masters to report incidents and accidents at sea under the area of responsibility of a MS
- MSs should ensure the reporting
- Define the minimum set of information to be reported, including information referred to in IMO Resolution A 851(20)

- MSs shall **designate competent authorities** ... to take independent decisions on their own initiative concerning the accommodation of ships in need of assistance.
- The authority or authorities ... may...in the event of a threat to maritime safety and protection of the environment, take any of the **measures included in the list set out in Annex IV**, which is non-exhaustive.
- The authority or authorities ... **shall meet regularly to exchange expertise** and improve measures taken pursuant to this Article.

### Objectives:

- Designate authority for the accommodation of ships in need of assistance
- Identify the tasks of competent authorities for the accommodation of ships in need of assistance.

*Following recent maritime incidents involving ships in distress in waters outside the jurisdiction of any one State, the Member States of the European Union, together with the European Commission and the European Maritime Safety Agency (EMSA), decided to review the framework for co-operation and co-ordination between States in such cases, to improve the existing arrangements.*

*As a matter of principle, each State involved in the response operation should examine their ability to provide a place of refuge.*

*These Operational Guidelines have been prepared in a spirit of enhanced co-operation and coordination among all parties involved, including Member States' Authorities and concerned Industry.*

EU Operational Guidelines on Places of Refuge

## VTMIS

Places of Refuge

EU Operational Guidelines

Version 3 - Final 13 November 2015

## TITLE IV

### Accompanying measures

22. **Designation & publication** of a list of **competent bodies**

22a. SafeSeaNet

23. **Co-operation** between MSs and the Commission

24. **Confidentiality** of information

25. Monitoring the implementation and **sanctions**

26. **Evaluation**



- MSs shall establish **maritime information management systems... to process information referred to in this Directive.**
- The systems ... shall allow the **information gathered to be used operationally ...**
- ... MSs shall ensure ... [that] systems ... **can be interconnected with SafeSeaNet.** SafeSeaNet ...[shall be] operational on a 24 hour-a-day basis...description and principles ... laid down in Annex III.
- MSs shall ensure that information systems or networks comply with the requirements of this Directive and are **compatible with and connected to SafeSeaNet.**

## Objective:

Establish a system for the exchange of information between Member States - SafeSeaNet

# Article 23: Cooperation between Member States and the Commission

MSs and Commission shall cooperate in:

- **making optimum use** of the information notified
- **developing** and enhancing the **effectiveness of telematic links**
- extending the cover of the Community vessel traffic monitoring and information system
- drawing up, if appropriate, **concerted plans** to accommodate ships in distress
- ensuring the interconnection and interoperability of the national systems
- **developing and updating SSN**

## Objective:

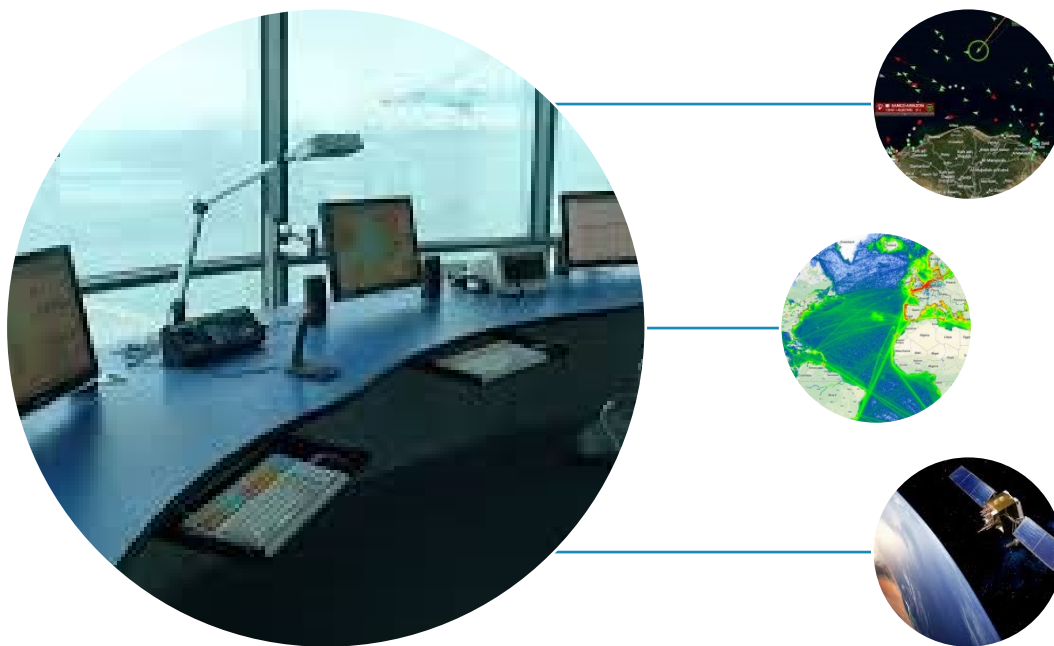
Define the necessary cooperation between Member States and Commission for implementing the Directive

- **Pre-arrival information (Article 4)**
  - Ship identification (name, call sign, IMO or MMSI number)
  - Port of destination;
  - ETA and ETD;
  - Persons on Board
  - Similar to IMO FAL 1 (General Declaration) information requirements
- **Information to be notified to the master/operator by shipper (Article 12)**
  - Correct technical names of DPG
  - UN numbers
  - IMO hazard classes (IMDG, IBC and IGC Codes and, where appropriate, quantities etc..)
  - Data contained in the safety data sheet in accordance with IMO Resolution MSC.286(86)
  - Address of detailed information on the cargo

- **HAZMAT Information (Article 13)**
  - General information:
    - Ship ID (name, call sign, IMO or MMSI)
    - Port of destination;
    - ETD (ship leaving MS);
    - ETA (ship coming from outside the Community);
    - PoB
  - Cargo information:
    - correct technical names of DPG
    - UN numbers where they exist
    - IMO hazard classes
    - quantities + location on board etc.
    - confirmation manifest / loading plan on board;
    - Address to obtain detailed info on the DPG
- similar to IMO FAL 7 (Dangerous Goods Manifest) information requirements

- Ship identification (name, call sign, IMO identification number or MMSI number),
- Date and time, position, course, speed,
- Port destination and ETA,
- Cargo and, if dangerous goods present on board, quantity and IMO class,
- Address for the communication of cargo information,
- Total number of POB ,
- Miscellaneous:
- Characteristics and estimated quantity of bunker fuel, for ships of more than 1 000 gross tonnage,
- Navigational status.







## Annex III

# ELECTRONIC MESSAGES & THE UNION'S MARITIME INFORMATION AND EXCHANGE SYSTEM (SAFESEANET)

- **SSN:**
  - receipt, storage, retrieval and exchange of information for maritime safety, port + maritime security, marine environment protection, and efficiency of maritime traffic and transport.
- **National SSN:**
  - MSs: establish-maintain a national SSN under the responsibility of a national competent authority (NCA).
- **Central SafeSeaNet system**
- **Commission: policy level in cooperation with MSs**
- **EMSA with MSs + Commission:**
  - technical implementation + documentation
  - development, operation and integration of the electronic messages
  - maintenance interfaces with the central SSN, including S-AIS + different systems (CSN-THETIS, NSW etc..)

- **SSN HIGH Level Steering Group (SSN HLSG)**
  - recommendations to improve the system
  - guidance for the development of the interoperable data exchange platform combining information from SafeSeaNet with information from the other information systems
  - approve the interface and functionalities control document (IFCD)
  - adopt operational guidelines etc..
- **IFCD**
  - describe the central and national SSN standards to ensure compliance with the Union legislation:
    - performance requirements
    - Procedures including access rights, rules for integration of data, security, archiving etc.

# SafeSeaNet in General



- ▶ **SSN enables 29 Countries (EU Member States, plus Iceland & Norway), to exchange information on:**
  - Vessel traffic monitoring
  - Dangerous and polluting goods carried on board ships



Countries Participating in SafeSeaNet (2014)

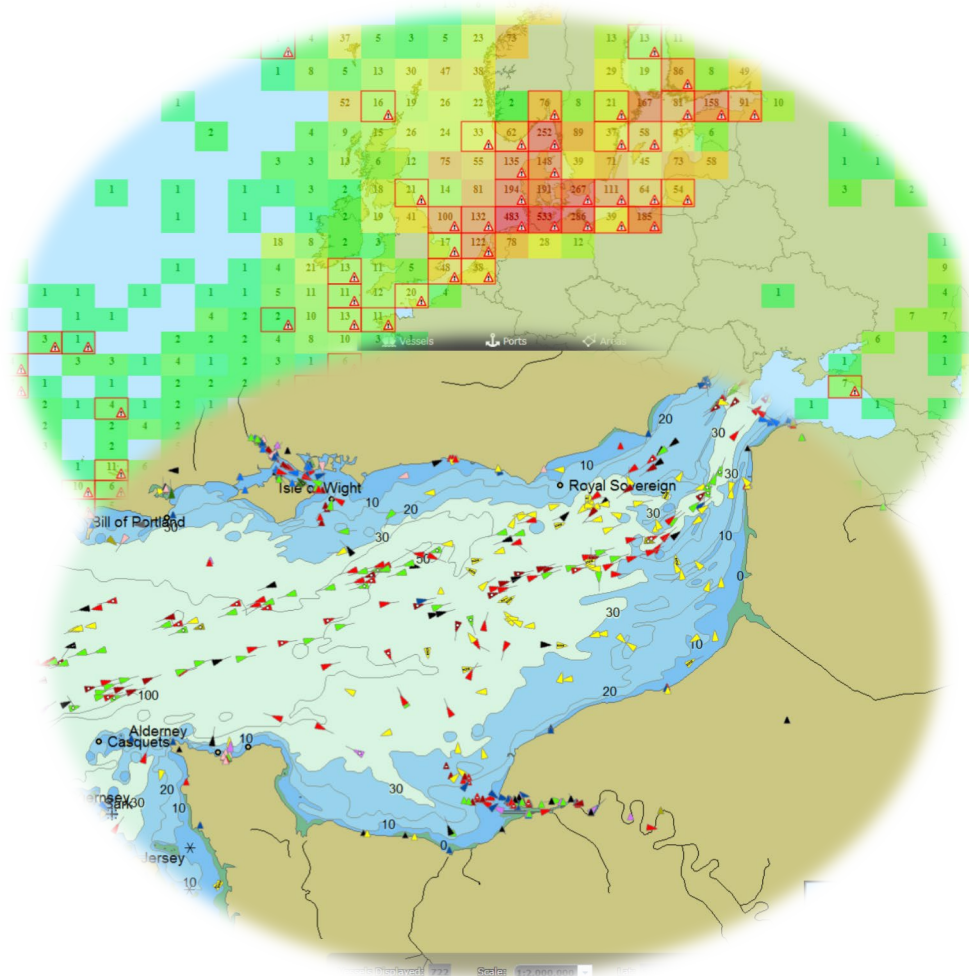
**Defined in the VTM Directive art 22 a & Annex III**

**Aim:** Union Maritime Information and exchange system for reception, storage, retrieval and exchange for:

- ➡ Maritime safety
- ➡ Port and Maritime security
- ➡ Marine environment protection
- ➡ Efficiency of maritime traffic and transport

# SafeSeaNet in General

- **Over 20,000 ships** tracked in MSs area of responsibility every day
- **> 100 million AIS positions** recorded per month
- **>160,000 messages** received per month with security & waste info







- **More than 2,300 users identified in SSN**
- **NCAs:** - overall responsibility of the National systems
  - grant access rights to national users
- **LCAs:** authorities designated by MSs to receive/transmit information pursuant to the SSN legal framework e.g. ports, VTS etc.
- Decision making: **HLSG & SSN Group**

# SafeSeaNet in General Information Exchanged



## ➤ Ship notifications:

- AIS and
- MRS

## ➤ Port Plus notifications:

- Pre-arrival (72h - 24 hours ), arrival and departure
- Hazmat information (dangerous and polluting goods on board)
- Notification of waste and residues (Article 6 of Directive 2000/59/EC)
- Notification of security information (Article 6 of Regulation (EC) No 725/2004)
- Bunkers details (reported separately from Hazmat)

**From December 2021 (SSN v5)**

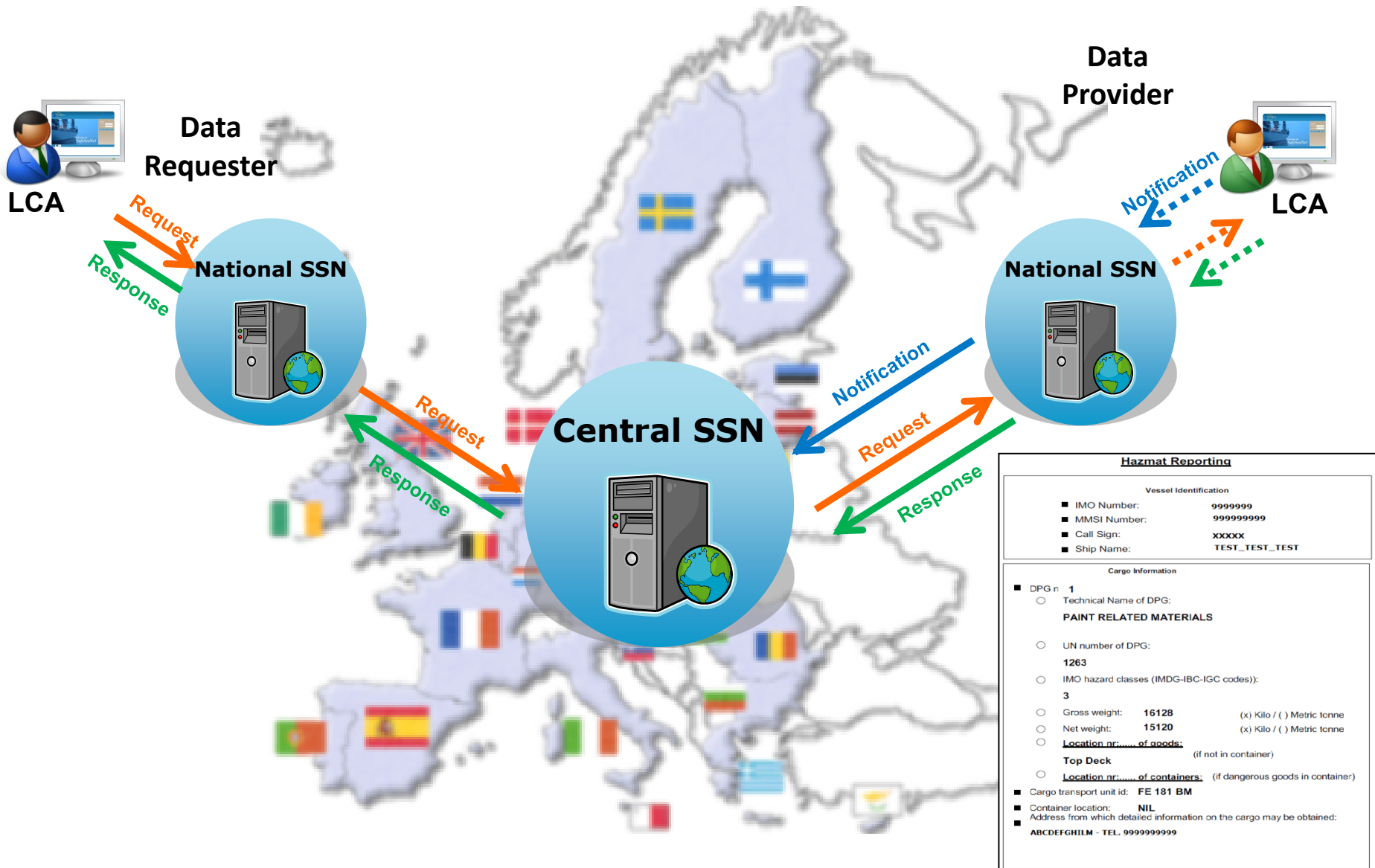
- Advance Waste Notification and Waste Receipt (Directive EU 2019/883)
- Information on persons sailing on board passenger ships (Directive 98/41/EC)

Directive  
2010/65/EU NSW

## ➤ Incident reports:

- Information submitted by MSs about accidents and incidents occurring at sea (e.g SITREP, POLREP, etc...)

# Sequence of notification, request and response mechanisms



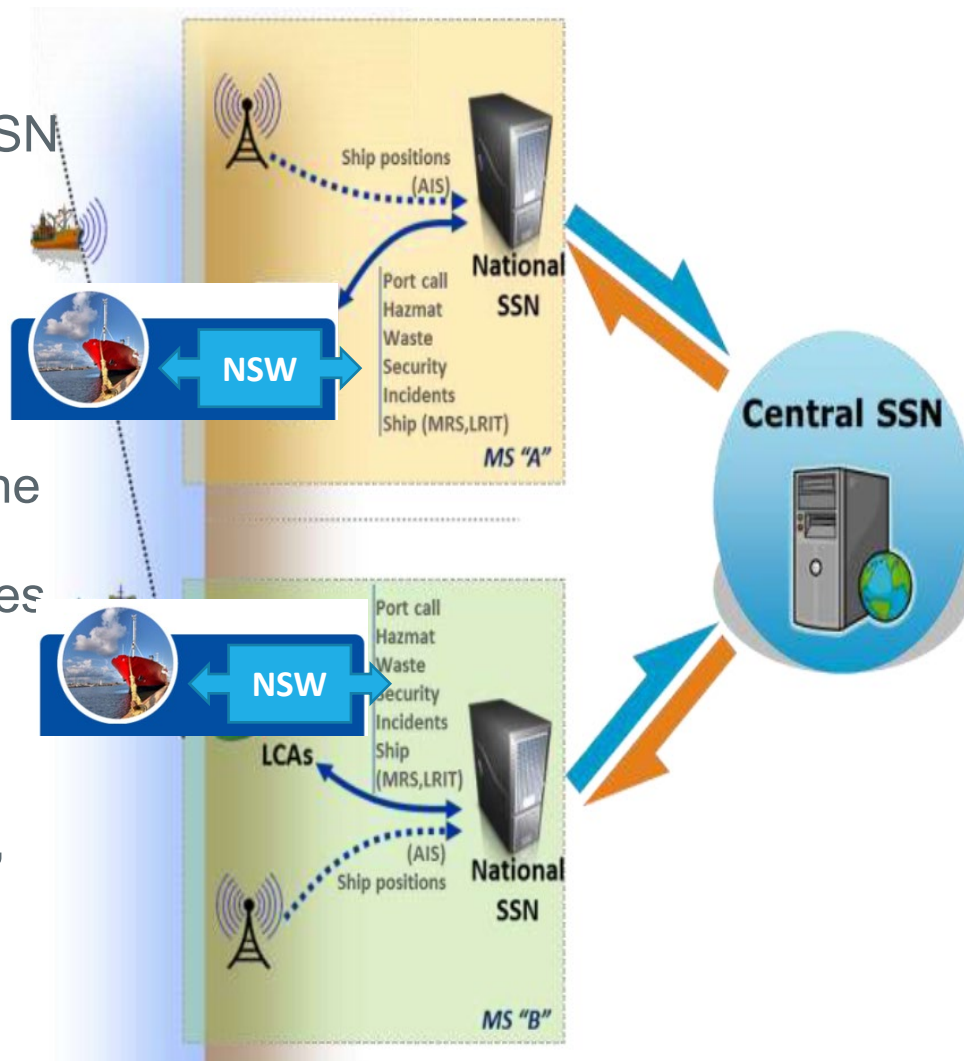
# Information exchanged through SSN

## SafeSeaNet

- Comprises a network of national SSN systems and a central SSN system acting as a nodal point, which interacts with the national systems.

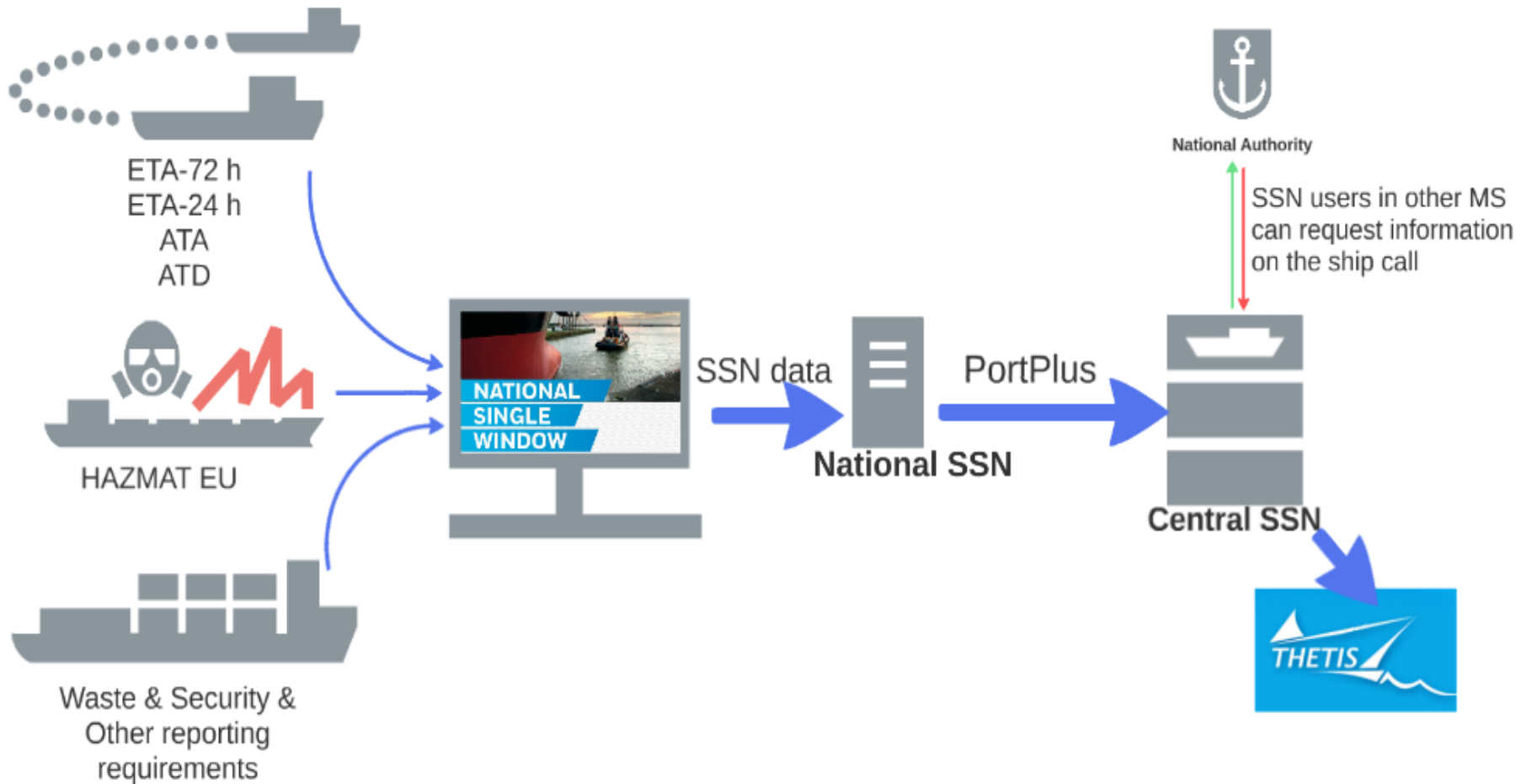
## National Single Window

- Directive 2010/65/EU provides for the development of NSWs in MS to simplify the administrative procedures in maritime transport
- The NSWs will allow the shipping industry to submit reporting formalities: electronically, only once, and in a harmonised manner
- Information is made available in SafeSeaNet for exchange between Member States



# Sending data to Central SSN

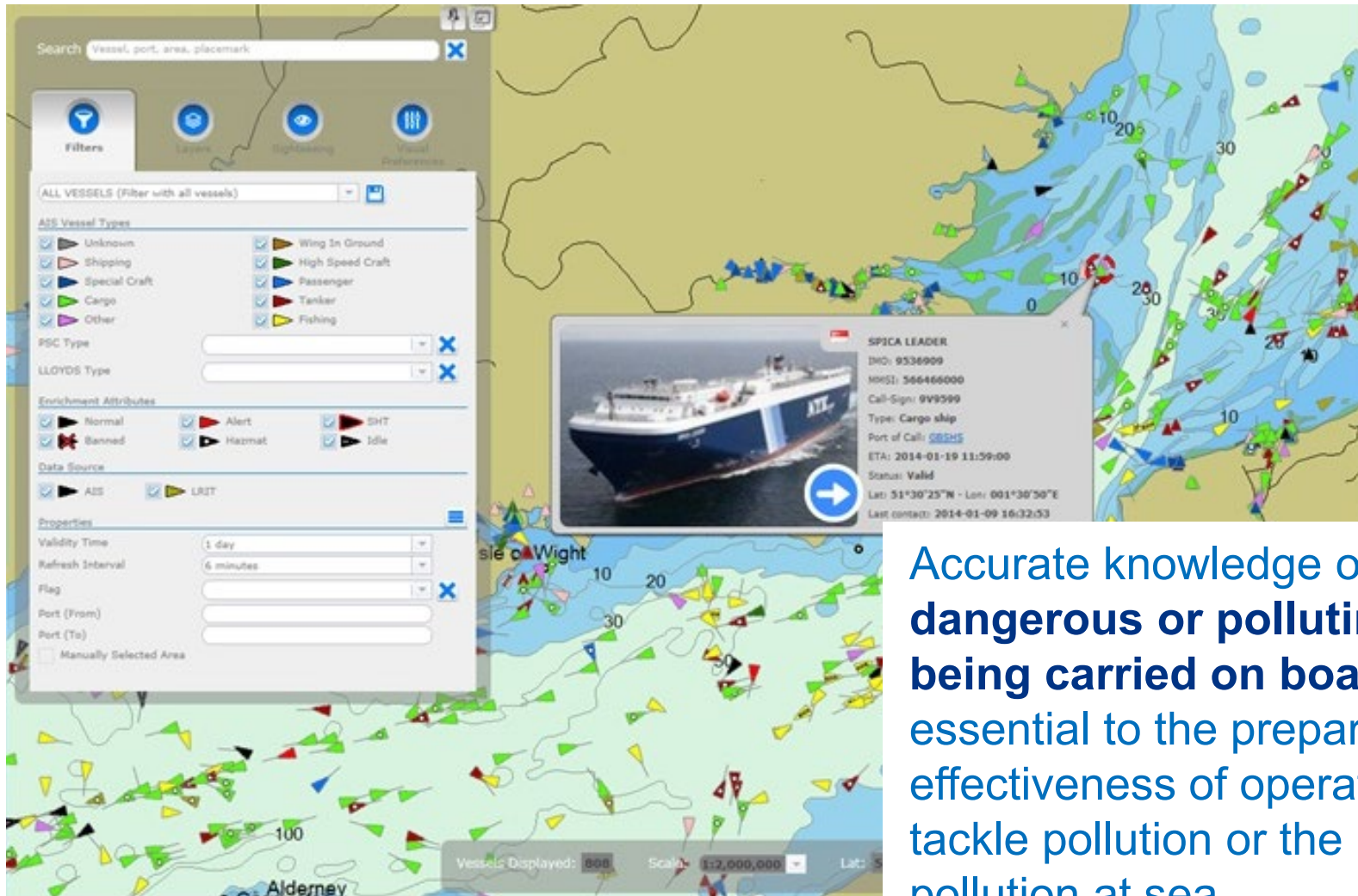
## Link NSW with national and central SSN





# SafeSeaNet

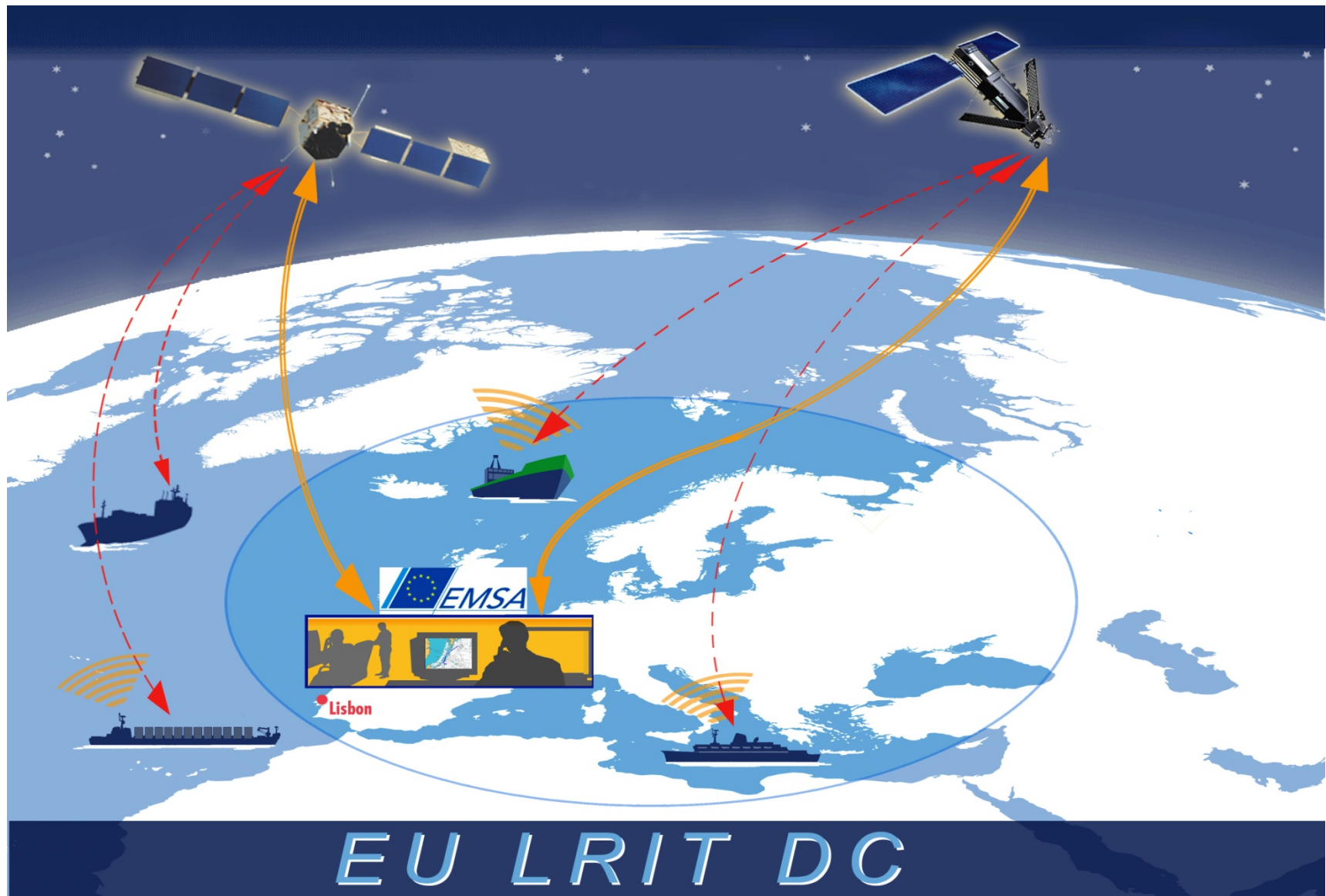
enhancing the maritime traffic safety



Accurate knowledge of **dangerous or polluting goods being carried on board** ships is essential to the preparation and effectiveness of operations to tackle pollution or the risk of pollution at sea.



# Long Range Identification & Tracking



## Legal Background

(SOLAS) V/19-1 on Maritime Security

## Objectives & application

**Search and Rescue** (ships within SAR operations area)

**Maritime safety**

**Protection of marine environment** (ships within pollution disaster area, identification of polluters)

## Four Main Types of Users:

**Flag State** – own flag ships worldwide

**Coastal State** – all ships within 1000 Nm of their coastline

**Port State** – all ships coming into their ports

**SAR** – all ships within their SAR area



## EU Legal basis

Directive 2002/59/EC, as amended, article 6.2

**The Commission shall co-operate with MS to establish an LRIT European Data Centre** in charge of processing long-range identification and tracking information

Council Resolution of 2 October 2007

**Collective approach** to set-up an EU DC and implementation & operation by EMSA

Council Resolution of 9 December 2008

**Participation of third countries**, condition of use, clarifying (cost of) messages

# Significance of EU LRIT DC (37 countries)

## EU CDC ships:

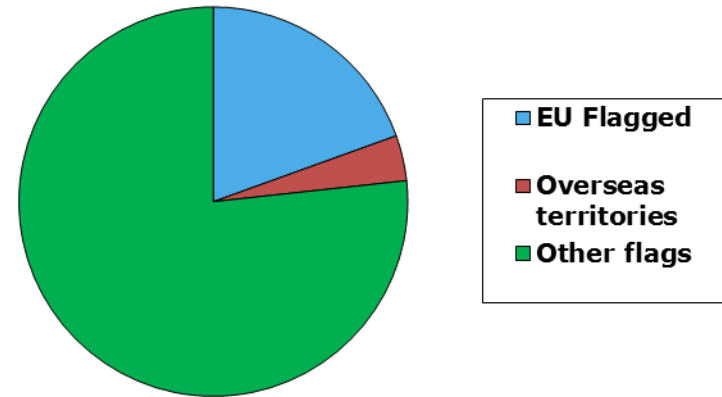
over 8700 \*

## Messages:

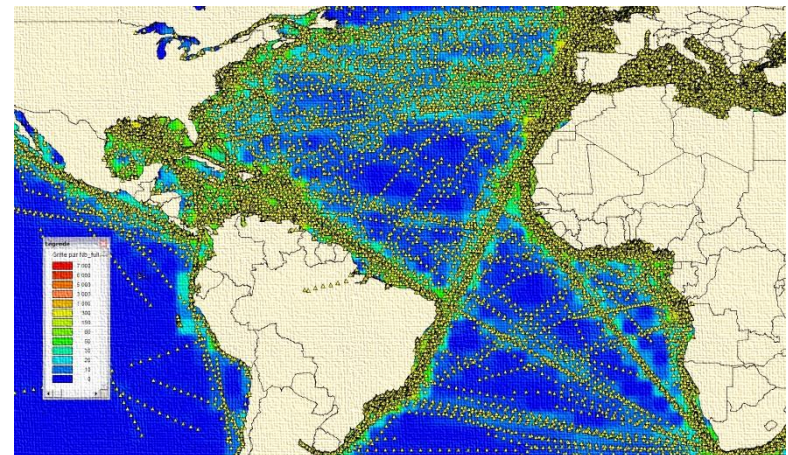
- 2.9 M /month
- >900,000+ position reports/month for EU countries
- 25,000+ position reports/month sent to non-EU countries
- 520+ users

Status: November 2013

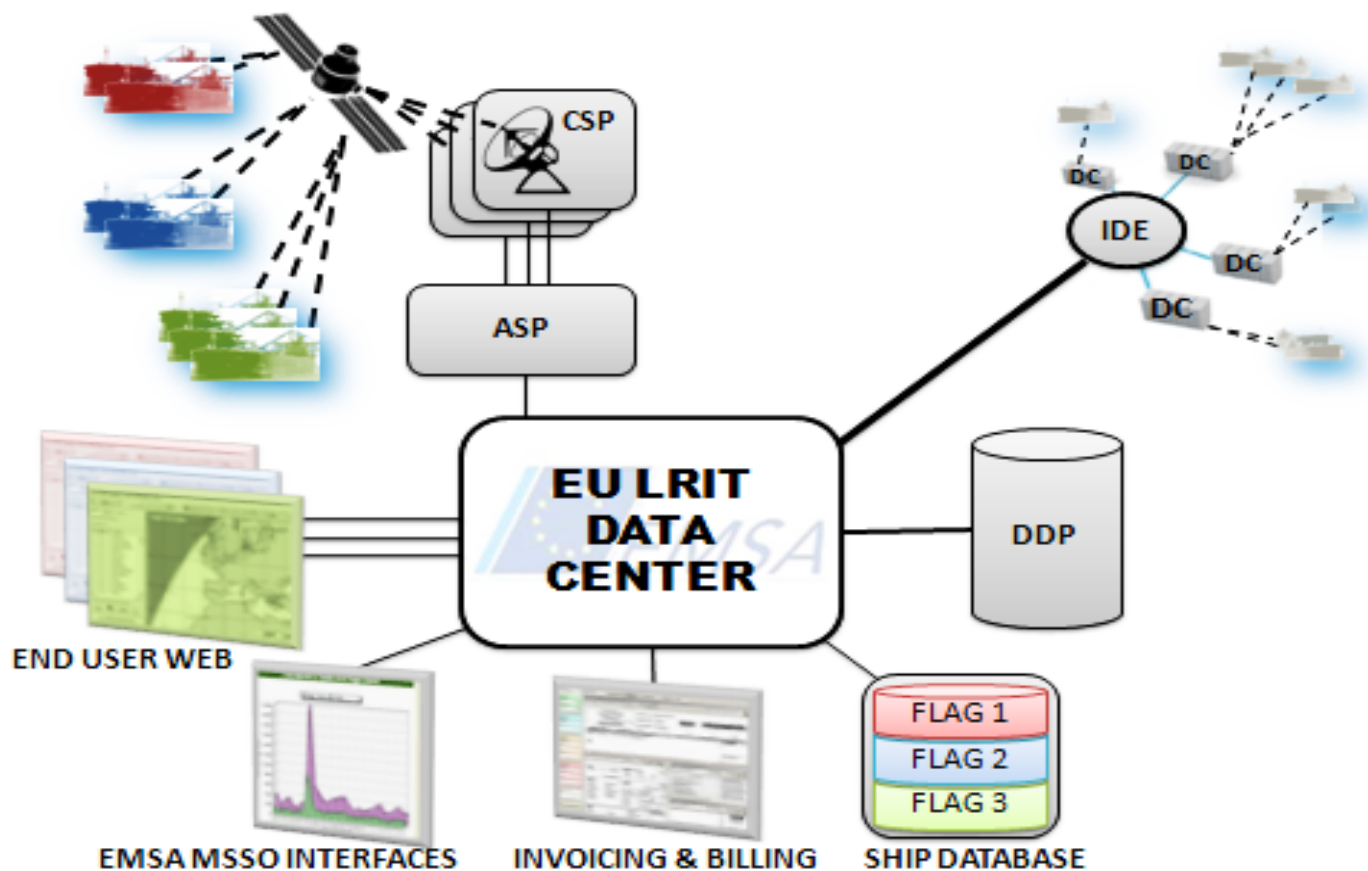
\*only vessels required to comply with the LRIT



EU CDC : nearly 25 % of world's fleet



## EU LRIT & LRIT IDE (EMSA-managed since 2011)



## EU LRIT (operational since 2009)





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