



# A European level of prevention of and Response to Marine pollution.

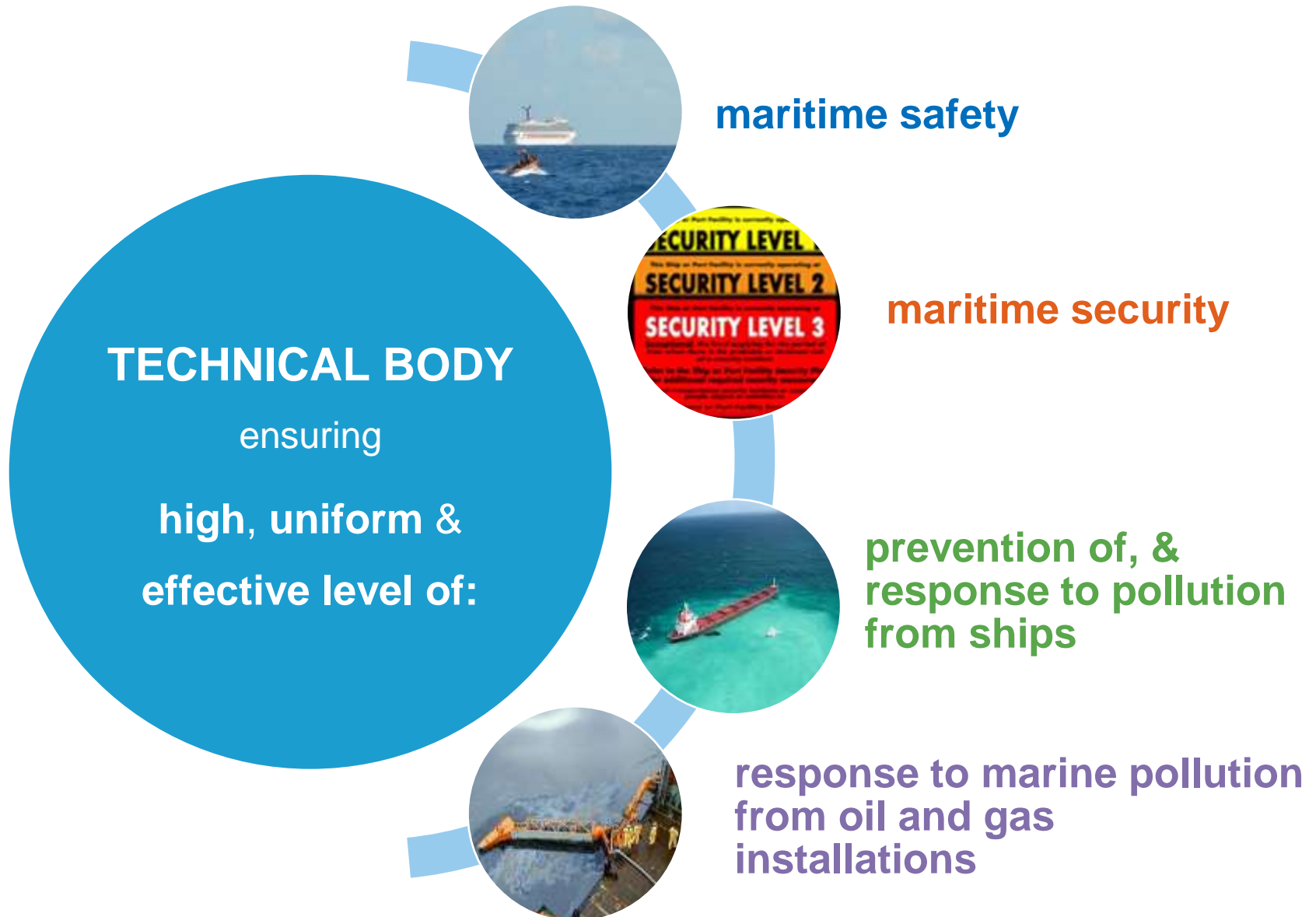
ADRIATIC 2017 conference

Frédéric HEBERT Head of Unit C1 « Pollution Response Services »/ Department C  
« Operations »

Split 10 October 2017



# EMSA - Purpose and Objectives (Art. 1 of Reg. 1402/2002 as amended)



## Implementation tasks

- providing **technical and scientific assistance** to MS and the Commission in **development and proper implementation of EU legislation**
- **monitoring the implementation** of EU legislation through visits and inspections

## Capacity building

- **capacity building** and improving cooperation with, and between, MS
- providing **technical and operational assistance to non-EU countries** around EU sea basins at the request of the Commission

- 1. Port Reception Facilities**
- 2. Air pollution (Sox + Nox)**
- 3. Greenhouse gases & MRV**
- 4. Ship Recycling – Title II**
- 5. Ship source pollution prevention**
- 6. Insurance of ship-owners for maritime claims**
- 7. Ballast Water and invasive species**



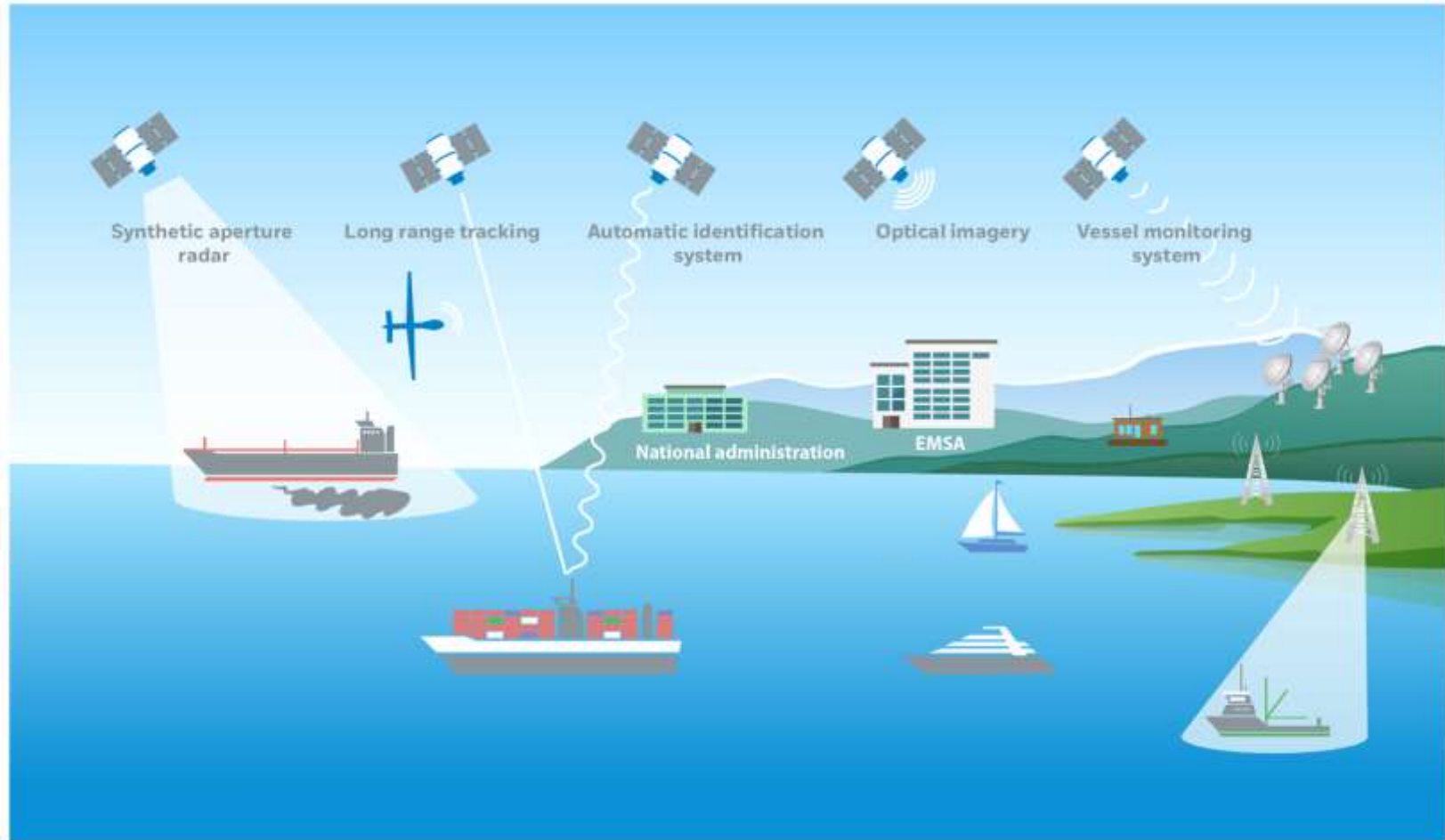
## Operational tasks

- providing **operational assistance**, including developing, managing and maintaining **maritime services** related to ships, ships' monitoring and enforcement
- carrying out **operational preparedness**, detection and response tasks with respect to **pollution** caused by ships and marine pollution by oil and gas installations



- 1999:** « ERIKA » incident
- 2002:** Regulation 1406/2002 establishing an European Maritime Safety Agency
- 2002:** « PRESTIGE » incident
- 2004:** Regulation amended to cover pollution response operations
- 2010:** « DEEP WATER HORIZON » blow out
- 2013:** Regulation amended to include pollution response to spill from oil and gas installations
- 2016:** Regulation amended to assist in Coast Guard Functions

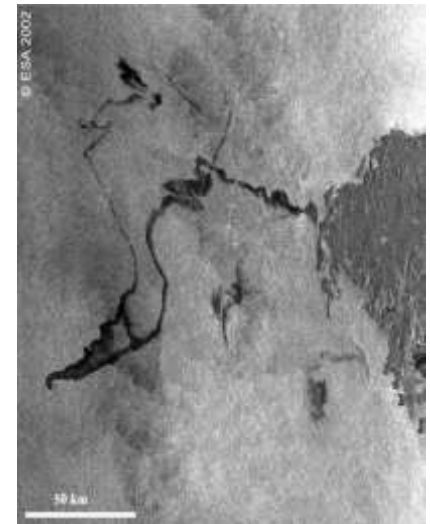
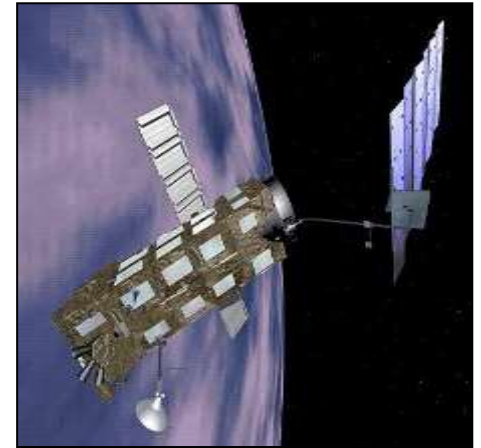
# information/ detection



# Information/ detection: CleanSeaNet



- European Service for Satellite oil pollution detection and monitoring and Satellite vessel detection and monitoring
- Provides indication of possible oil spills and potential polluters
- Linked into national/regional response chain
- Service Results are delivered in Near Real Time (NRT): approx. 30 minutes after image acquisition

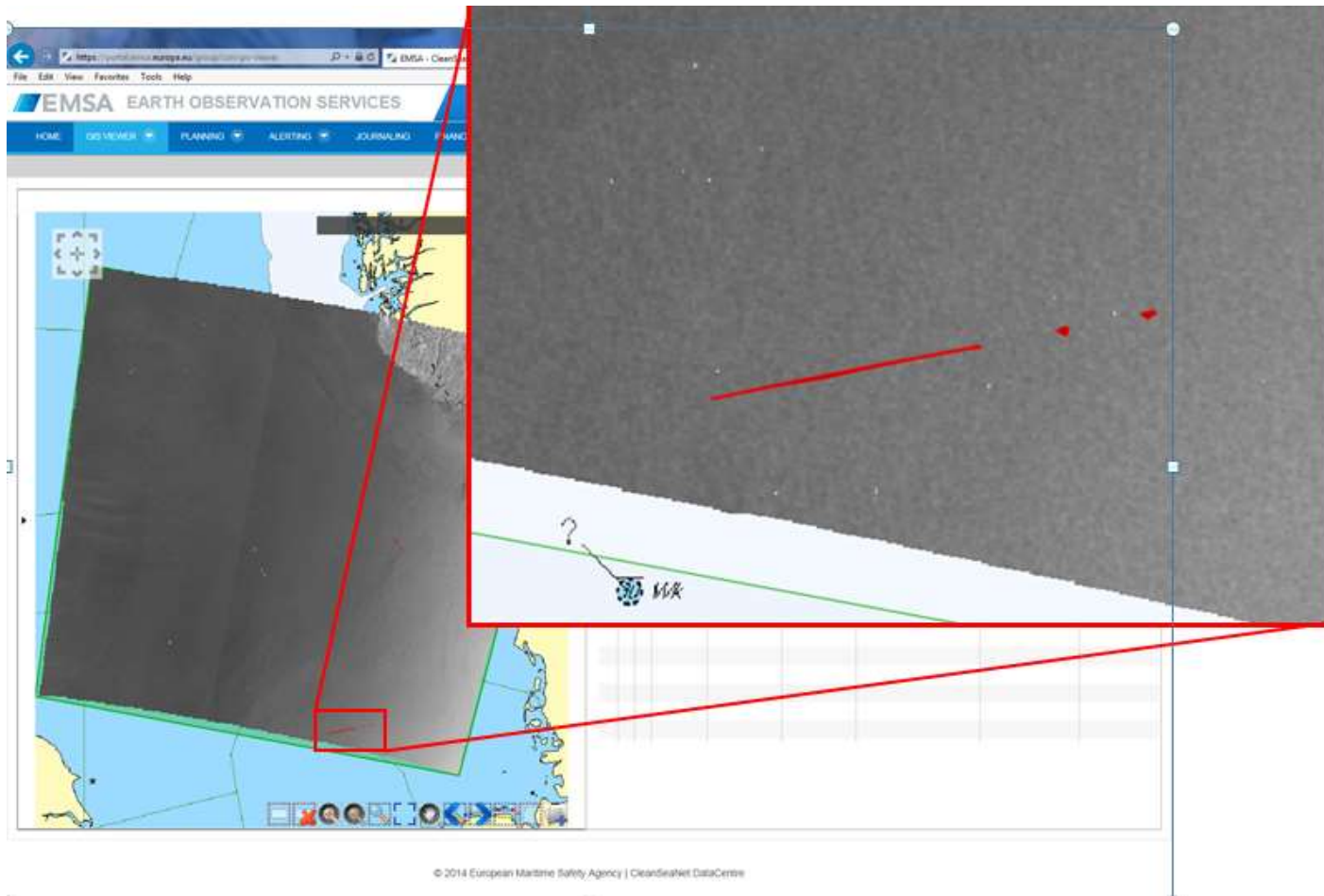




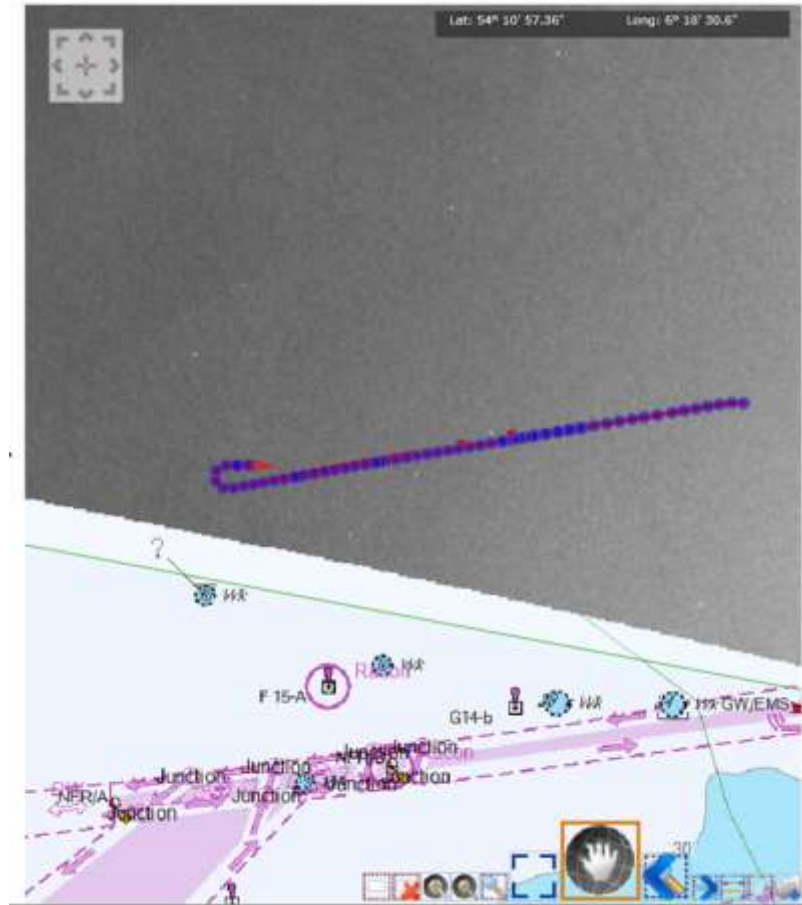


- **CleanSeaNet Routine Monitoring of Europe**
  - For 2016:
    - 3057 Satellite images have been delivered.
    - > 641 000 000 km<sup>2</sup> have been monitored.
    - 3168 possible oil spills have been detected.
- **Crisis management support in case of Emergencies**
  - Request to be addressed through the Maritime Services Support (MSS) 24/7 center at EMSA or through the Emergency Response Coordination Centre (ERCC). of DG ECHO
- **Additional support for operations**
  - Ex: Tour D'Horizon operations

# CleanSeaNet real case



# CleanSeaNet real case



# CleanSeaNet real case



# New activity: 8 RPAS contracts provide:

## ■ Heavy lifters with radar for maritime pollution detection



## ■ Emission monitoring



## ■ Maritime surveillance



## ■ Vertical-take-off-and-landing (VTOL)



## Parameters

- Provide Member States with additional means
- Taking into account the Regional Agreements
- High sea response vs shoreline response
- Ship sourced and oil and gas offshore installations
- Using the union Civil protection mechanism
- In a cost effective way (Multi Annual Funding regulation)



## **Primarily:**

- EU Member States and EFTA countries
- Acceding countries and candidate countries

## **2013 amendments:**

- third countries sharing a regional sea basin with the Union

## **Administrative Board:**

- Private entities that may cause a pollution but with the agreement of potentially affected States

# Operations: network of oil spill response vessels

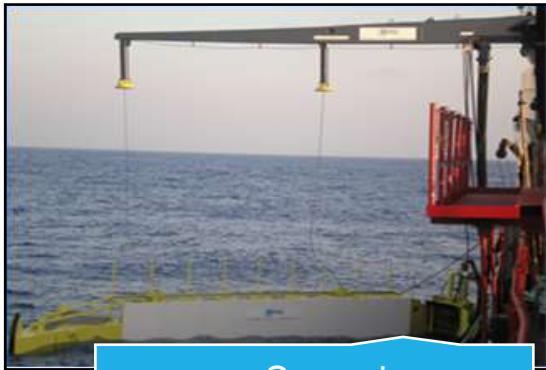


## Network of oil spill response vessels contracted for a 4 year period renewable once:

- Vessels engaged in commercial operations within a dedicated area, adapted for oil spill response (classification as « occasional oil spill response vessel ») and ready to be mobilized under a maximum of 24H
- Minimum storage, pumping and heating capacity requirements
- All of them equipped for oil recovery with fixed sweeping arms and skimmers, and an alternative set of high sea boom and skimmer (High capacity).
- Some of them (4) equipped for dispersant spraying capacities and with associated dispersant stockpiles.
- Majority adapted to deal with substances with a flashpoint below 60°C



# Oil spill response Vessels and Mechanical recovery equipment



Sweeping arms



Booms



Skimmers

Supported with Oil Slick Detection system

# Operations: network of oil spill response vessels



# Operations: network of oil spill response vessels



- Crew undergo IMO OPRC training and regular refresher courses
- Mandatory quaterly drills
- Participation in exercises with Member States (10 days/year)
- Regular maintenance and overhauling of equipment
- Once activated, the vessels are under the command and control of the requesting State (if the requesting Party is a private entity its action has to be endorsed by the potentially affected State)
- EMSA supports the yearly availability fee and the cost of equipment; Requesting party choses the equipment configuration needed and pay a daily operational fee plus fuel, port dues and cleaning costs



## **Aim: to provide additional equipment to be used by non oil spill response vessels during response operations**

- High sea standalone equipment, not frequently found in MS stockpiles
- Accessible through an EMSA contractor
- Fully containerised, ready to depart from the warehouse under 12 hours
- Technical staff able to provide quick handover
- Training programme for Member States 'operators

- Equipment provided at no cost but:
- Should be returned in full operational condition;
- Mobilisation lumpsum and transport costs to be born by the requesting State
- Requesting State to provide necessary unloading means

**Status:** currently 2 operational EAS, one in the North sea (Aberdeen) and one in the Baltic Sea (Gdansk), a 3rd one for Southern Europe (Ravenna) is in its preparation phase.

# Equipment systems



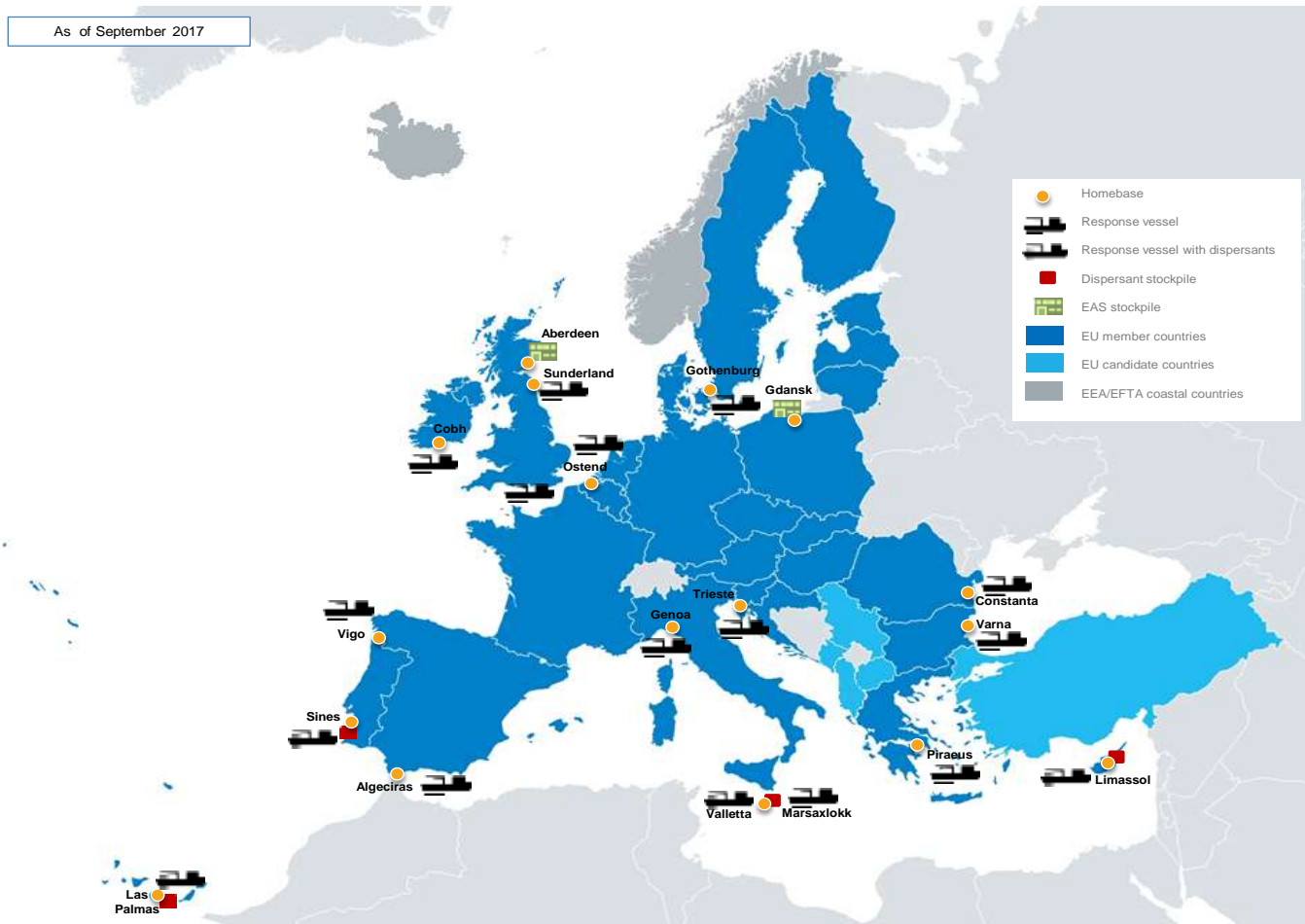
Integrated containment and recovery systems



Fire booms



Trawl nets



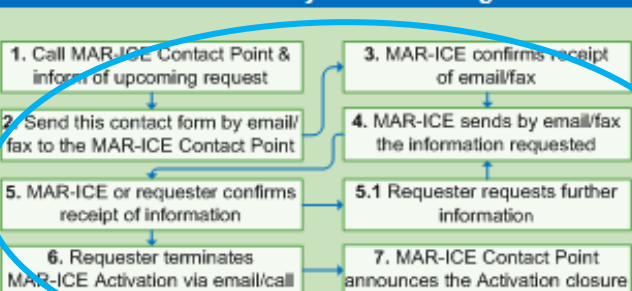


- **MAR ICE: Marine Intervention in Chemical Emergency**
- **MARCIS: Marine Chemical information Sheets**



## MAR-ICE CONTACT FORM (v.2016)

### A. Procedure summary for activating the MAR-ICE Network



#### MAR-ICE Network contact details:

(1) MAR-ICE Contact Point phone number: T: 0033 298 33 1010  
 (2) EMSA's Maritime Support Services (24/7) phone number - to be used only as backup in case (1) is not reachable T: 00351 21 1209 415  
 MAR-ICE Contact Point Fax number: F: 0033 298 44 9 138  
 MAR-ICE Contact Point Email address: [MAR-ICE@cedre.fr](mailto:MAR-ICE@cedre.fr)

### B. Information about the request

Real incident   
 Date:

#### E.1 Product-specific information requested (to be provided within 1 hour from receipt of this Form)

Physical and chemical properties	<input type="checkbox"/>	Personal protection equipment (PPE)	<input type="checkbox"/>
Substance composition	<input type="checkbox"/>	Immediate emergency & response actions	<input type="checkbox"/>
Substance stability & reactivity	<input type="checkbox"/>	Exposure information relevant for responders	<input type="checkbox"/>
Physical behaviour (e.g. E, F, D, S)	<input type="checkbox"/>	Firefighting measures	<input type="checkbox"/>
Hazards identification & prioritisation	<input type="checkbox"/>		
If required, contact the manufacturer or other relevant chemical company?			<input type="checkbox"/>

#### E.2 Additional information requested (to be provided on a case-by-case basis)

Trajectory and fate of the substance dispersion (the provision of this information is not mandatory & additional incident data may be requested from you)	<input type="checkbox"/>
Risk assessment (the provision of this information is not mandatory & additional incident data may be requested from you)	<input type="checkbox"/>
Information on transportation requirements (IMO codes)	<input type="checkbox"/>
Other information needed: (free text - please be specific)	<input type="text"/>

#### F. Additional comments (free text)

- MAR-CIS datasheets provide **maritime relevant** information for the **initial** stage of **chemical** incidents.
- There are **213** datasheets, covering **critical** information needed for **emergency** response at sea:
  - Substance identification
  - Shipping information
  - Hazards and risks
  - Emergency measures
  - ...
- MAR-CIS database was already distributed to MSs MPPR authorities, now accessible through the MARCIS web-portal (EMSA maritime applications web-portal)

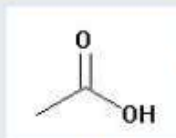
## Acetic acid

[Back](#) [PDF](#)

[Identification](#) [Substance properties](#) [Shipping information](#) [Hazards & risks](#) [Emergency measures](#) [Case histories](#) [Physical & chemical properties](#) [Other names](#)

### Physical and chemical properties

Structure :



Formula :

C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> <sup>18</sup>

Molar mass :

60.5 g/mol <sup>10</sup>

Melting point :

16.6 °C <sup>10</sup>

Boiling point :

118.1 °C <sup>10</sup>

Viscosity (at 20 °C) :

1.26 mPa\*s <sup>10</sup>

Density (at 20 °C) :

1.05 g/cm<sup>3</sup> <sup>10</sup>

Physical state (at 20 °C) :

Liquid <sup>10</sup>

Auto flammability :

485 °C <sup>18</sup>

Flash point (TAG closed vessel) :

40 °C <sup>18</sup>

Partition coefficient log (octanol/water) :

-0.17 <sup>18</sup>

Vapour pressure (at 20 °C) :

16 hPa <sup>10</sup>

Vapour density (air=1) :

2.070 <sup>10</sup>

Liquid surface tension (at 20 °C) :

27.8 mN/m <sup>10</sup>

COD :

1.03 g O<sub>2</sub>/g <sup>55</sup>

BOD :

0.6/0.74 g O<sub>2</sub>/g <sup>55</sup>

Flammability limits in air :

4 / 17 % <sup>10</sup>

Flash point (ABEL closed vessel) :

38.5 °C <sup>55</sup>

Decomposition temperature :

500 °C <sup>62</sup>

Solubility in fresh water (at 20 °C) :

Indefinite <sup>10</sup>

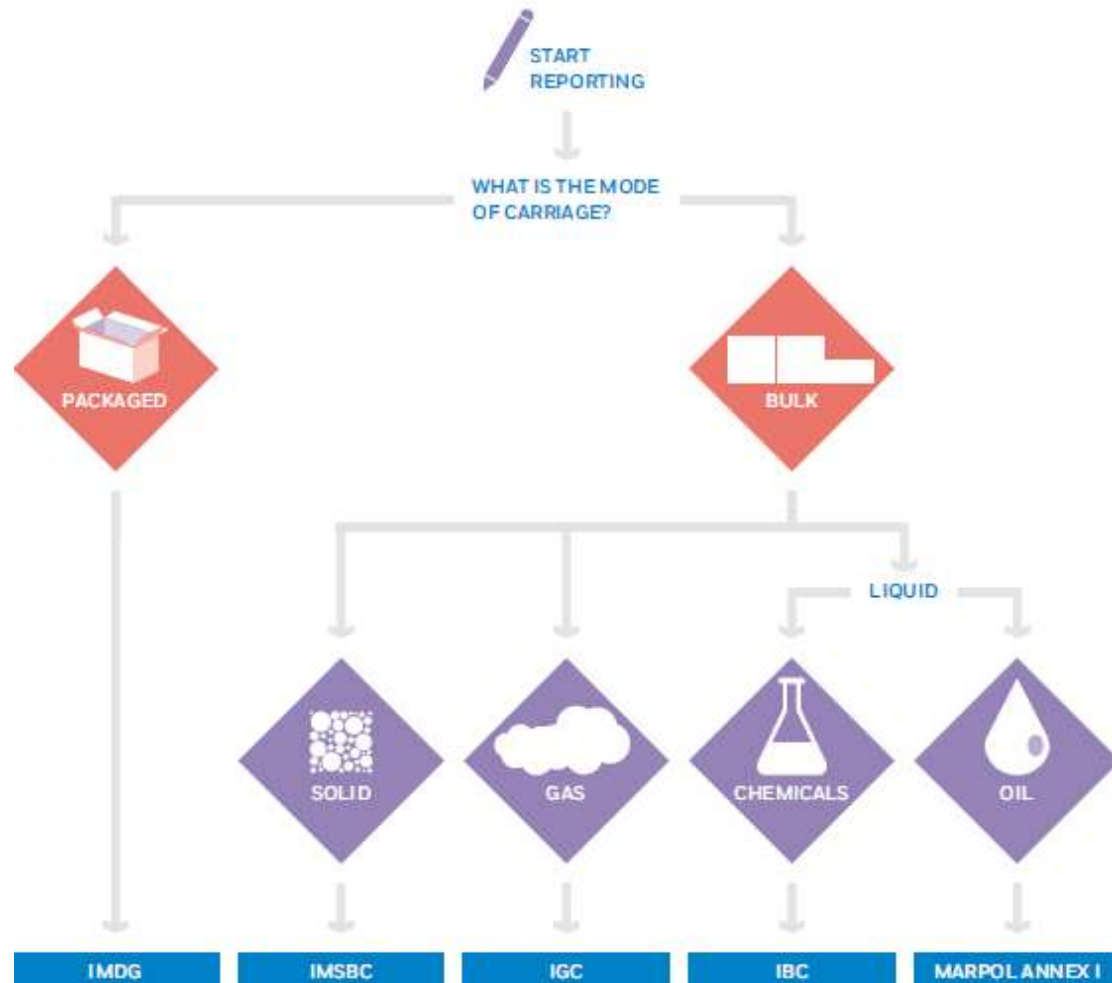
\*Physical and chemical properties parameters of the substances may vary depending on the content of impurities. The values given here are only an indication.

The purpose of CHD (Central Hazmat Database) is:

- To improve the data quality of dangerous and polluting goods notifications
- To minimise the administrative burden of ship reporting
- To support Member States emergency services, by providing **MAR-CIS information**.

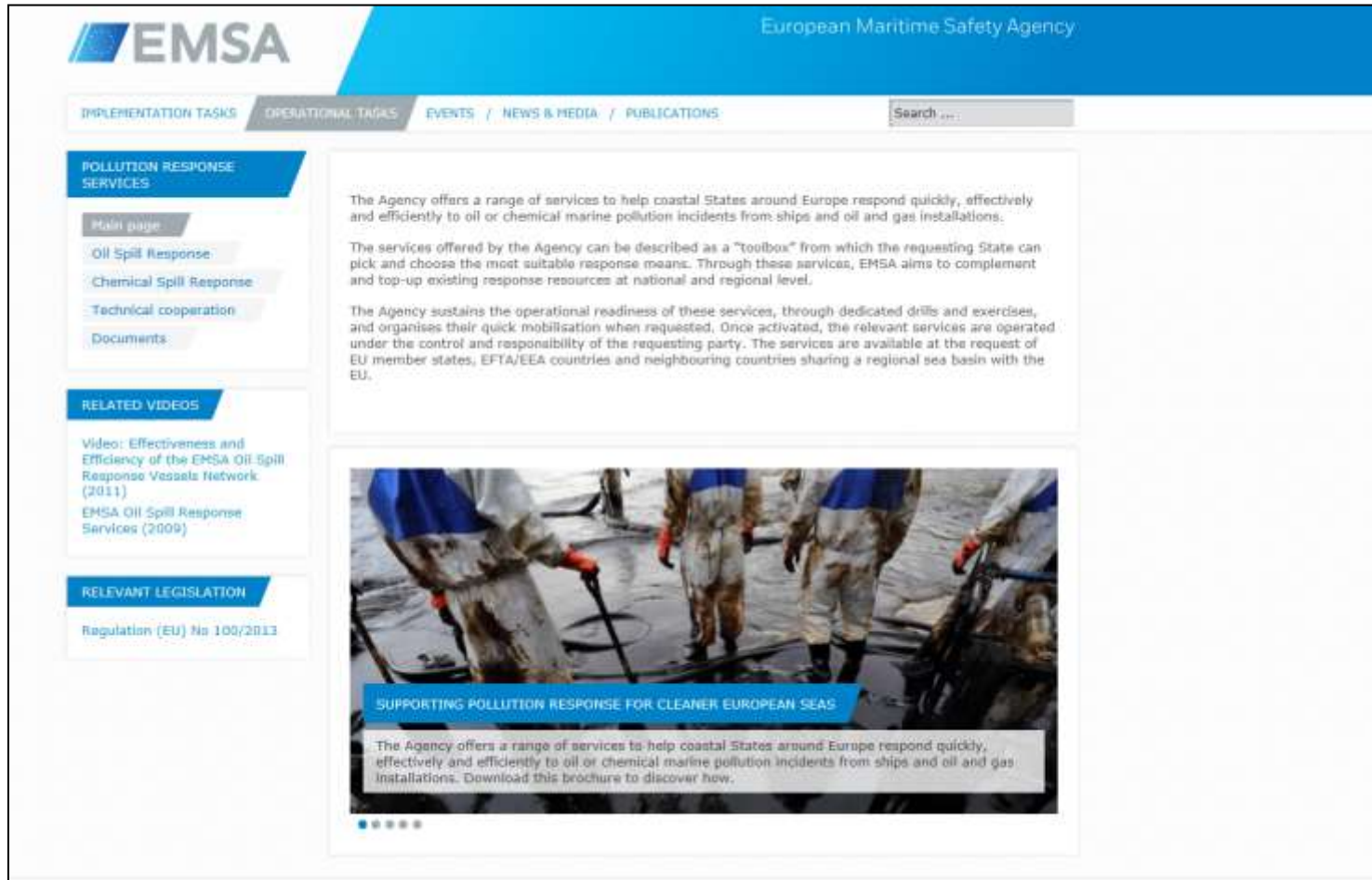
Collects all lists of dangerous /polluting goods in one database.

To be used as a reference by the industry and competent authorities for verification of HazMat reporting.





- Distinction between subsidiarity and solidarity and  
The « Polluter pays principle »**
- Costs born by EMSA/ costs born by RP**
- As regards EMSA's assets, a MoU has been  
discussed with the IOPC Funds and the IG of P&I  
associations for the hire rate of EMSA's assets, with  
the technical assistance of ITOPF.**



The screenshot displays the EMSA website interface. At the top, the EMSA logo and the text 'European Maritime Safety Agency' are visible. Below this is a navigation bar with links for 'IMPLEMENTATION TASKS', 'OPERATIONAL TASKS', 'EVENTS / NEWS & MEDIA / PUBLICATIONS', and a search box. The main content area is titled 'POLLUTION RESPONSE SERVICES'. It includes a 'Main page' section with links for 'Oil Spill Response', 'Chemical Spill Response', 'Technical cooperation', and 'Documents'. Below this is a 'RELATED VIDEOS' section with two video links: 'Video: Effectiveness and Efficiency of the EMSA Oil Spill Response Vessels Network (2011)' and 'EMSA Oil Spill Response Services (2009)'. A 'RELEVANT LEGISLATION' section lists 'Regulation (EU) No 100/2013'. The central text block states: 'The Agency offers a range of services to help coastal States around Europe respond quickly, effectively and efficiently to oil or chemical marine pollution incidents from ships and oil and gas installations. The services offered by the Agency can be described as a "toolbox" from which the requesting State can pick and choose the most suitable response means. Through these services, EMSA aims to complement and top-up existing response resources at national and regional level. The Agency sustains the operational readiness of these services, through dedicated drills and exercises, and organises their quick mobilisation when requested. Once activated, the relevant services are operated under the control and responsibility of the requesting party. The services are available at the request of EU member states, EFTA/EEA countries and neighbouring countries sharing a regional sea basin with the EU.' Below the text is a video player showing a scene of oil spill response with workers in protective gear. A blue banner over the video reads 'SUPPORTING POLLUTION RESPONSE FOR CLEANER EUROPEAN SEAS'. Below the video, a text box repeats the introductory text and includes a 'Download this brochure to discover how.' link and a star rating.

<http://emsa.europa.eu/operations/pollution-response-services.html>



**THANK YOU**

 [twitter.com/emsa\\_lisbon](https://twitter.com/emsa_lisbon)

 [facebook.com/emsa.lisbon](https://facebook.com/emsa.lisbon)

**EMSA**  
European Maritime Safety Agency