



# MARINER

Enhancing HNS preparedness through training and exercising



MARINER is co-financed by the European Union in the framework of the Union Civil Protection Mechanism. DG-ECHO



More than 2,000 types of Hazardous and Noxious Substances (HNS) are regularly transported by sea (IMO).

Around 126 ship-source HNS incidents over 10 m<sup>3</sup> were reported in the period from 1998 to 2013 (Cedre).

Due to their great complexity and variety, HNS preparedness and response is less well defined than that for oil spills.

## Mariner Goal

Improve planning, preparedness and response to HNS spills in Europe by:

1 Capitalizing and translating relevant HNS R&D outcomes into operational resources applicable by planners and responders

2 Improving training and exercise capabilities

3 Upgrading and/or improving tools to support decision making and response

4 Increasing awareness and encouraging information exchange

## Mariner Key Outcomes

### Knowledge compilation and facilitation

- Online user-friendly knowledge tool gathering relevant information on HNS preparedness and response.
- Transfer actions to assist end users on the implementation of selected knowledge/tools into their operational procedures.

### Modelling and environmental impact

- Upgraded HNS spill model integrated into a Common Operating Picture.
- Cross border guidelines for HNS environmental impact assessment.

### Response protocols

- HNS response protocols.
- 4 exercises to test the protocols.
- Video on training.

### Training

- Web based database exercise tool, as well as E-learning materials on exercises and risk assessment to assist users on the functioning of the tool.
- Training package on HNS spill management.
- Training package on HNS modelling.

### Mariner at a glance

+ TOTAL BUDGET  
998.547 €  
(75% from EU)

+ DURATION  
2 years  
(January 2016- December 2017)

+ PARTNERSHIP  
7 Partners  
(from 4 countries)

### Mariner in action

3 Workshops  
Portugal, Wales, and France (2017)

2 Field exercises  
Spain (Autumn 2017)

1 Final Conference  
Spain (Autumn 2017)

Knowledge transfer actions

### Mariner coordination



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