

# Training course material for Response to HNS incidents

## MARINER



Workshop Demonstrating Innovative Tools and  
Training for Response to Maritime HNS Incidents



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- I. Presentation of Cedre
- II. Methodology to prepare training material
- III. Course content



# Presentation of Cedre

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**Private non profit  
organisation funded by  
French Ministry of  
Environment**

**Steering board**

**French government**

- **General Secretariat for the Sea**
- **Ministries:** Environment, Defense, Transportation, Interior, Industry, Research, Agriculture and fisheries

**Partners**

Research institutes: IFREMER, IFP EN  
Professional syndicates: UFIP, UIC  
Water quality agencies  
Fisheries and mariculture committee  
Meteo France  
French ship-owner association

**Elected members**

Regional councils : PACA, Normandy  
Cities : Brest  
Vigipol  
Total

- Historic mission is to assist French authorities in charge of response to marine water pollution by hydrocarbons in order to improve the processes of:
  - **Preparing response**
  - **Conducting response**
- But missions also include accidental pollution incidents in inland waters involving all types of pollutants including **Hazardous and Noxious Substances** and support can also be provided to foreign authorities or private sector structures

- Emergency response advices 24/7
- Research and development
- Test and evaluation of equipment and products (potential pollutants and response products)
- Post pollution monitoring, environmental impact assessment
- Emergency response plans (private and public)
- Training
- Publication



# Main activities on HNS:

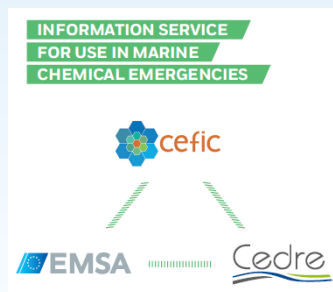
7

- physical / chemical / Behavior / Impact analysis and studies:

- ✓ Lab
- ✓ Chemical reactor
- ✓ Flume test
- ✓ Water column
- ✓ Ecotoxicity test bench
- ✓ Experimentation greenhouse
- ✓ And many others

- 24-hour emergency hotline to assist response managers in the event of a spill:

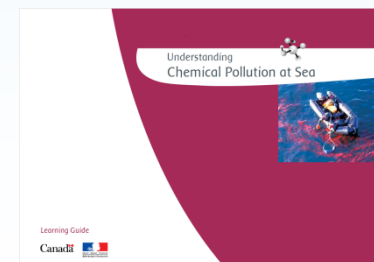
- ✓ MARICE network focal point
- ✓ ERCC expert



- Working groups: IMO, EMSA/TCG, GESAMP

- Publications

- Training: EMSA, IMO...



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## More information

[www.cedre.fr](http://www.cedre.fr)

Email: [contact@cedre.fr](mailto:contact@cedre.fr)



24 h/24

+33 2 98 33 10 10



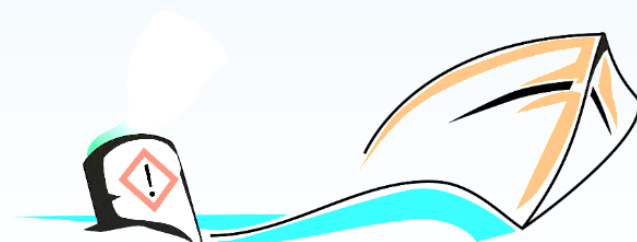
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# Methodology to prepare training material



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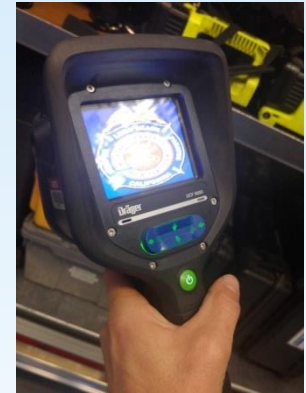
## Objective of INTECMAR and Cedre

It aims to identify key expertise, knowledge and relevant protocols utilized by the chemical industry, civil defence and fire brigades in the targeted areas and to develop the basis for the production of adapted protocols to deal with HNS spills in the marine environment

- DGMM – Sasemar -MAGRAMA
- Gietma (Unidad Militar de Emergencias- UME. Emergency Army Group)
- National College of Civil Protection
- Fire brigades in Galicia
- Industry



Name of the company / institute	Location
Curium	Lyon (FR)
Sobegi (Industrial fire-fighters)	Lacq (FR)
French Navy fire-fighters	Brest (FR)
Séché Urgences Interventions	Rennes (FR)
Canadian public organisms	Canada
SARP	Brest (FR)
Fire-fighters / Hazmat response team	Brest (FR)
Los Angeles Fire Department	USA
HNS SCOPE exercise participants	Norway





# Course content

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Design a set of power-point, posters and tutorials (power-point and posters with notes and comments) to be used during training courses.

The materials will be available for free on <http://mariner-project.eu/>

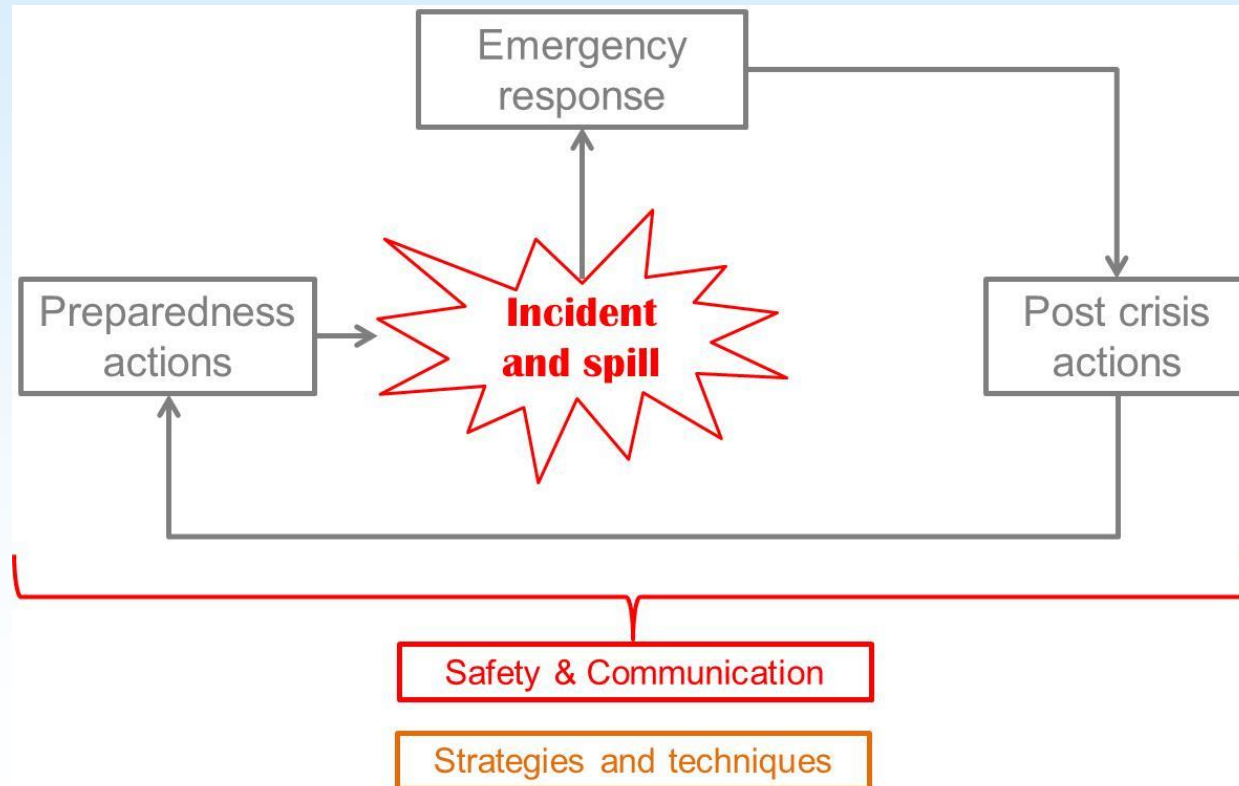
Who is the target of the training materials?

**Trainers:** with sufficient background and knowledge in emergency response with HNS to be able to deliver the right information and message

**Trainees:** Professionals involved in the preparation of emergency response plan, on scene commanders, crisis managers



## Methodological approach



## 4 modules proposed

Name of the module
General aspects on HNS
Prevention and preparedness
Response
Post-crisis actions

## Module 1

Name of the module
<b>General aspects on HNS</b>
Prevention and preparedness
Response
Post-crisis actions

Title of the courses	Content
<b>Methodological approach</b>	Description of the methodological approach, to what corresponds each phase of the dynamic management of the crisis. Example with one scenario.
<b>Behaviour, properties and impact of HNS</b>	Definition, SEBC, GHS, impacts on human health, environment, goods and socio-economic activities
<b>Types of transport at sea and accidentology</b>	Types of ships and stats on accidents (by product, type of ships)

## Module 2

Name of the module	Title of the courses	Content
General aspects on HNS	<b>Prevention</b>	Definition and differences between prevention and preparation Laws, agreements, regulations (IMDG, IBC, etc.), safety/security definitions, etc.
<b>Prevention and preparedness</b>		
Response		
Post-crisis actions		
	<b>Response Preparedness</b>	Contingency plans, training, exercises, purchase of equipment (PPE, CPE detectors, etc.), organization (Incident Management System), wastes (storage and treatment)

## Module 3

Name of the module
General aspects on HNS
Prevention and preparedness
<b>Response</b>
Post-crisis actions

Title of the courses	Content
<b>Approach of a disabled vessel: challenges and limits</b>	Difficulties of maritime approach and decision-making depending on : environmental conditions, properties of the chemical(s)
<b>Response on liquefied gas carriers</b>	
<b>Response on bulk carriers: liquid and solid</b>	
<b>Response on containers carriers</b>	
<b>4 Incident reviews</b>	leveli sun and others to be defined

## Module 4

Name of the module
General aspects on HNS
Prevention and preparedness
Response
<b>Post-crisis actions</b>

Title of the courses	Content
Restoration and environmental monitoring	
Compensation	



# Example of presentation

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Behavior,  
properties and  
impact of HNS

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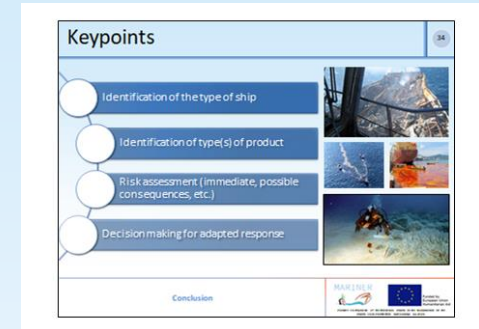
Dedicated template



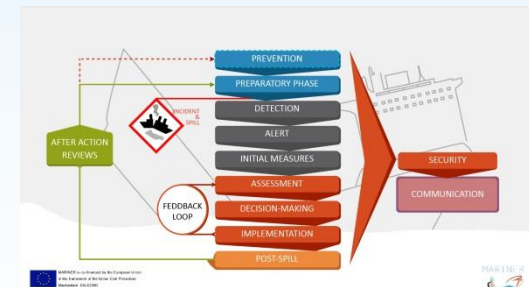
Tutorial: comments with slides



Photos and procedures from key experts



Keypoints for important  
message



New graphic materials

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- 12<sup>th</sup> – 14<sup>th</sup> September 2017: training event to test the material to assess the relevance of the content  
→ Application forms available

**Training event for Response to Maritime HNS Incidents**  
12<sup>th</sup> - 14<sup>th</sup> September 2017 Cedre, Brest

Cedre is organising a workshop to test the training materials developed in the framework of the EU project MARINER which aims at enhancing response to maritime HNS incidents. The main objectives are to present existing response protocols and equipment, teach good practice and lessons drawn from incident reviews. The course will also include the presentation of e-learning tools related to risk and impact assessment. Finally, the last afternoon will give a demonstration of a free web-based interactive tool that can generate maritime exercise scenarios to support preparations.

The event is dedicated to officers likely to attend command and control units set up during an incident such as Tactical, Scientific, Technical Advisory, Government Groups or officers who are part of the planning and response arrangements to shoreline pollution incidents.

The 3-days event will be held at Cedre and is free. Lunch and refreshments will be provided.

To register, please fill in the electronic registration form (one per attendee) on the following page and send it to [ref@mariner-codes.eu](mailto:ref@mariner-codes.eu).

Spaces on this course are limited and require approval of partners of MARINER Project.

**Registration application form**  
to be sent before **15th August 2017**

**Personal information**

SURNAME (in capital letters)  
FIRSTNAME (in capital letters)  
Company / Organisation  
Professional Address  
Phone number  
E-mail address  
National name (individual reservation)  
Accommodation

**Venue**  
715 rue Alain Colas  
CS 41836  
29218 BREST CEDEX 2  
France

**Contact us**  
(fill in on page below)

**Programme of the Workshop MARINER**  
12<sup>th</sup> - 14<sup>th</sup> September 2017 at Cedre, Brest, France

**DAY 1 Tuesday 12<sup>th</sup> September**

08:00 Welcome of participants  
08:30 Presentation of Mariner  
09:00 Presentation of Cedre  
09:30 Introduction and objectives of the course and its objectives  
10:00 Presentation of the methodological approach  
10:30 Coffee break  
11:00 Type of transport at sea and accidentology  
11:30 Behaviour, response and impact on HNS  
12:00 End of day 1

**DAY 2 Wednesday 13<sup>th</sup> September**

08:00 Presentation  
08:30 Presentation and perspectives  
09:00 Presentation  
09:30 Coffee break  
10:00 Collective protection  
10:30 Personal protection  
11:00 Lunch  
11:30 (at Cedre facilities)  
12:00 Approach of a disabled vessel - challenges and limits  
12:30 Response on damaged gas carriers  
13:00 Response on bulk carriers  
13:30 Coffee break  
14:00 Response on container carriers  
14:30 Incident review N°1  
15:00 End of day 2 / Departure to Chempapelle  
16:00 Dinner at Chempapelle offered by Cedre

**DAY 3 Thursday 14<sup>th</sup> September**

08:00 Incident review N°2  
08:30 Incident review N°3  
09:00 Incident review N°4  
09:30 Coffee break  
10:00 Restoration and environmental monitoring  
10:30 Compensation  
11:00 Presentation of the modelling tools and e-learning  
11:30 Lunch  
(Presentation by the Fisheries HNS response team)  
12:00 Exercise: use of Mariner web-based interactive tool  
12:30 Coffee break  
13:00 Presentation of e-learning tool on International Health Regulations  
13:30 Debriefing  
14:00 Round table  
14:30 Certificate and course documents delivery  
15:00 End of the course

- Revision of the course content from feedback of the trainees by the end of the project (December 2017)

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# Adapting the response to the transport

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Thanks for your attention

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