Improving Preparedness to Face an HNS Pollution of the Marine System

DG-ECHO civil protection funding mechanism
2014 Call for Prevention and Preparedness

museum   Cedre   ARMINES   Technologies ALYOTECH

HNS = Harmful and Noxious Substances

- 2000+ HNS transported by sea

- bulk or packaged form

- Transported volumes always increasing

- Number of reported spills exponentially increasing

- Large variety of chemical and physical behaviours

SIGNIFICANT HNS INCIDENTS (1978-2013)

(Source: EMSA, 2013)

HNS = major threat for marine environment, civil protection and maritime safety

HNS-MS Objectives

Bonn Agreement
Accord de Bonn

Developing an operational decision-support tool for HNS spills in the Bonn Agreement area and Bay of Biscay

✓ A HNS data base with physicochemical parameters suitable for computing fate of HNS spilt at sea

✓ GIS layers for environmental and socioeconomic HNS-sensitive resources

✓ A 3-dimensional HNS spill drift and fate mathematical model

✓ A user-friendly web-based tool accessible 24/7 by Coastguard stations

HNS-MS administrative ID card

- A 2 year project running from 01/01/2015 till 31/12/2016
- Total budget : 645.283,00€   co-funded at 75% by EC / DG-ECHO

1. Royal Belgian Institute of Natural Sciences (ex. MUMM)
Operational marine forecast, including oil spill / Marine Chemistry /
Web & App / EIA & monitoring in case of pollution of the marine system

**2. Centre de documentation, de recherche et d'expérimentation
sur les pollutions acciedentelles des eaux**
Large knowledge on HNS (SEBC – MAR-ICE) /
Marine Chemistry facilities for HNS / Response / Socio-economic impact

3. Ecoles des mines d'Alès
Expertise in risk management / CLARA, a first HNS drift and fate model /
Lab facilities / MAIA HNS data base

4. Alyotech
Consulting in technology, including oceanographic modelling /
Modelling experience in blow-out & gas dilution in marine environment

5. Belgian DG-Environment
Belgian Maritime Authority / Outreach towards stakeholders including
Bonn Agreement / End users of the HNS-MS decision-support tool.

HNS-MS work flow