



WORKSHOP MARINER HNS



AUTORIDADE MARÍTIMA NACIONAL
Direção do Combate à Poluição do Mar

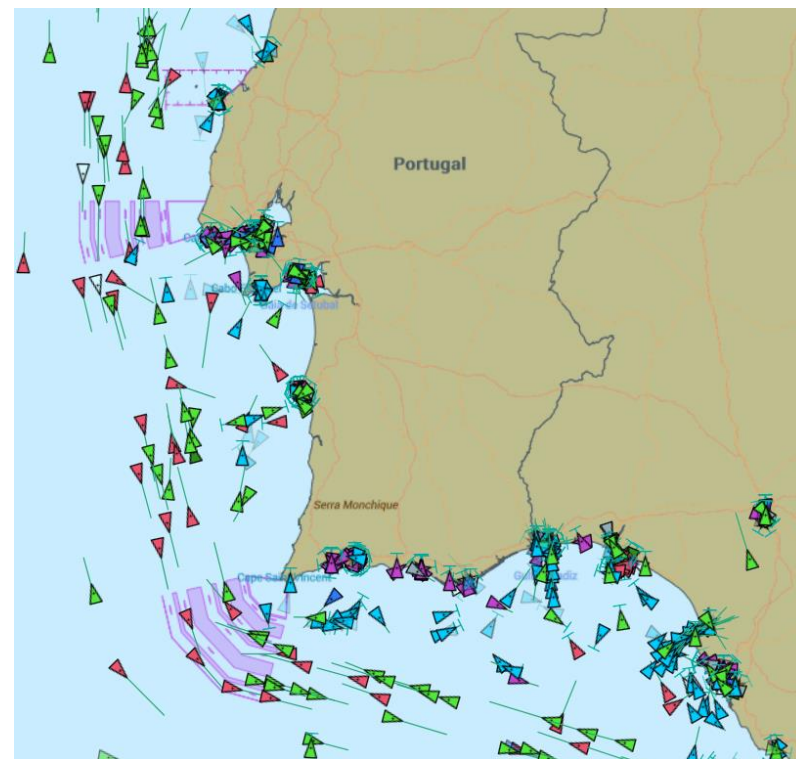
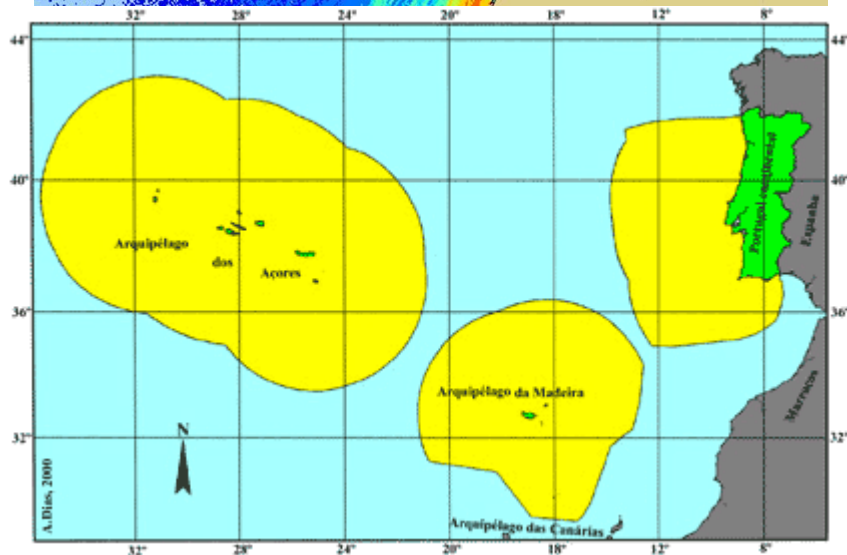
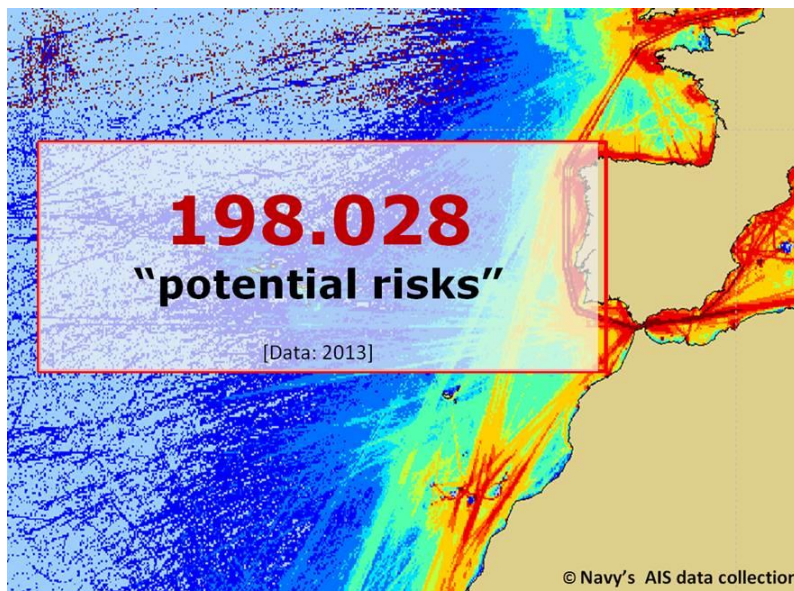


Agenda

- ✓ Introduction – Chemical Pollution
- ✓ Our equipment and training
- ✓ MARINER project
- ✓ Conclusion



Introduction



- Portugal – largest EEZ of the EU
- Last year - 540 vessels per day

Chemical pollution



Chemical spills – much lower frequency than oil spills



Consequences can be more wide reaching

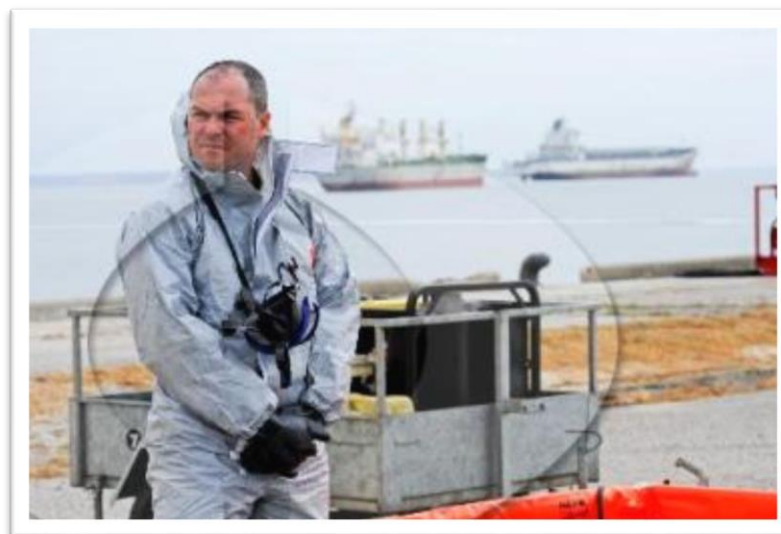


Wide variety of chemicals transported, physical and chemical properties, behaviour in the environment, effects on human health

Our equipment

Where we are?

- Material acquisition
- Training



Source: PORTUGUESE NAVY/ AMN, 2005

Material acquisition



- Power unit 8kva
- Air compressor



- Emergency tent
- Decontamination showers
- Protection clothing – Class 1A and 3

Material acquisition



•Air distance lines



•Self contained Breathing apparatus



Communications systems



•Monitoring equipments
•Collection Containers
•Oversize barrels

Material acquisition

- Electric devices and tools (Atex)
- Chemical pumps



- Expansion plugs
- Leak sealing devices
- Bottles with compressed air



Training



« Principes d'intervention en mer en cas de pollution chimique »



Training



Regimento de Sapadores Bombeiros

Curso de Ambiente e Controlo de Matérias Perigosas - Nível II



Training



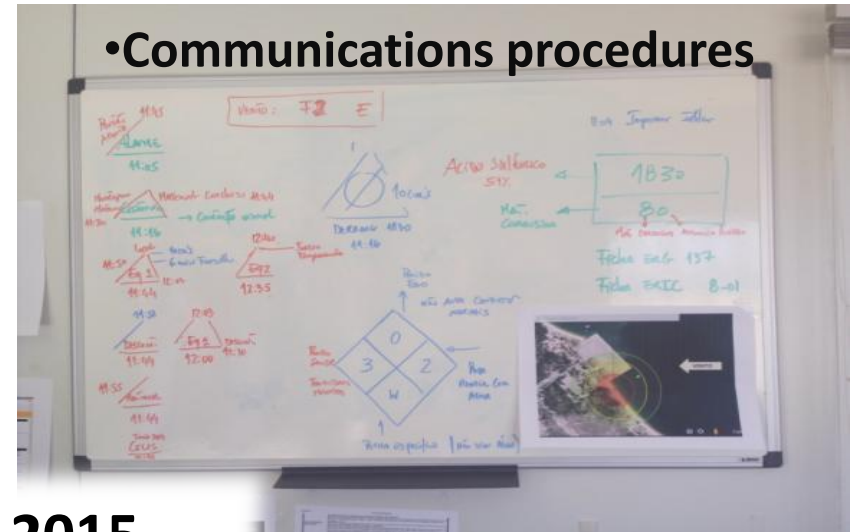
TRÓIA 2015 HNS



Training



- Logistic demands



- **Communications procedures**

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HNS



- **Equipment adaptation**



- Identified the risk and characterize the needs

MARINER

✓ In Atlantic context MARINER is an useful project for a few reasons:

- increase knowledge of the problem;
- develop training on HNS response;
- Improve understanding on HNS behaviour when spilled at sea.


✓ Nevertheless, MARINER is also the continuity of cooperation between DGAM and the national partners of the project – CIIMAR and Action Modulers, on risk assessment and pollution response at sea. This cooperation has been stablished through projects, exercises, technology and experiences sharing.



Conclusion

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- ✓ Policies: Define the goals
 - ✓ Strategic: Management and definition of the guidelines and best practices to adopt
 - ✓ Tactical and operational: Definition of logistic structure (human and material resources)

Conclusion



Intervention in an HNS scenario should be mandatory,
but always taking in mind the risks and how to avoid
them!

All options should be always considered!

Source: PORTUGUESE NAVY/ AMN, 2005



“When it is asked how much it will cost to protect the environment, one more question should be asked: how much will it cost our civilization if we do not?”

Gaylord Nelson

