



Resources to respond to marine emergencies

Gardacostas de Galicia



*Lino Sexto Bermudez
Vigo, February 1st 2019*



OBJECTIVES DURING THE RESPONSE:

- To protect the population, the marine resources and the marine environment in the affected area
- To contain and control the contamination
- To minimize the consequences of the contingency





Main response actions

- Control the source of contamination
- Containment of spill to avoid the contamination of new areas
- Recovering of contaminant by the use of skimmers, drifting booms, sorbents, etc.





Resources to face spills acting in Galicia

- European Union (EMSA)
- National (SASEMAR and National Ports)
- Galicia (Gardacostas and Portos de Galicia)
- Local administrations
- Private companies



European Maritime Safety Agency (EMSA)



R/S “RIA DE VIGO”

Eslora: 68 m

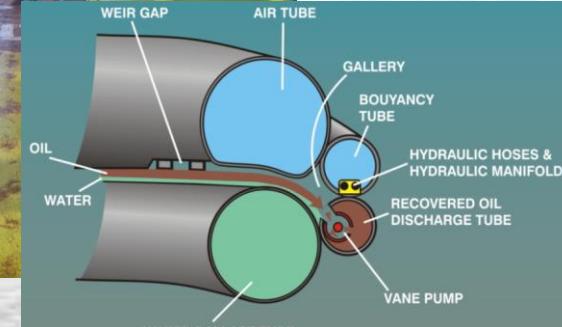
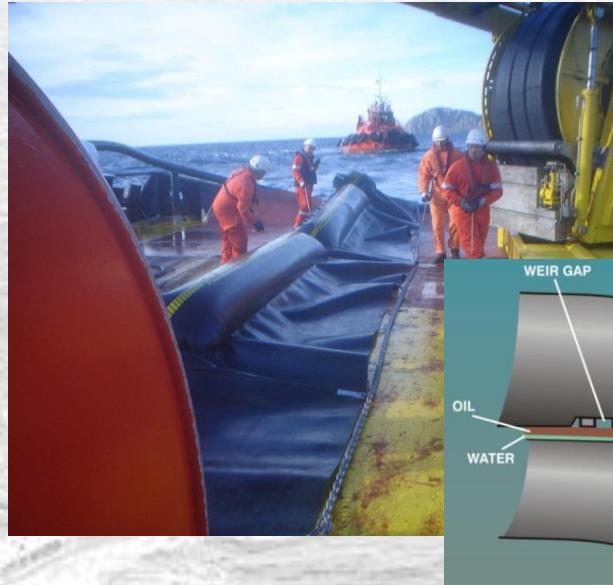
Tanques R: 1.522 m³

Sweeping arms

Weir skimmer

Barreras: 2 x 250 m

Radar de detección



Containment and recovery in one unit





SASEMAR

R/S “DON INDA”

Eslora: 80 m

Tanques de almacenamiento: 1.700 m³

Base estratégica de contaminación

“BEC A Coruña”

- Parcela: 20.000 m²
- Naves: 6.300 m²



A/S “SASEMAR 102”





Medios del Servicio de Guardacostas

Galician Coastguard Resources

ALMACENES/STOCKPILES

Base de Tragove / Storage base

Contedor de Ribeira / Container





Medios del Servicio de Guardacostas

Galician Coastguard Resources

R/S “SEBASTIÁN DE OCAMPO”

Eslora / Length: 41 m

Tanques R / Tanks: 118 m³

Tanques flotantes / Floating tanks: 6 x
25 m³

Barrera / Boom: 300 m

2 skimmers

Sistema localización FLIR / FLIR System





Medios del Servicio de Guardacostas

Galician Coastguard Resources



B/S “IRMÁNS GARCÍA NODAL”

Eslora / Length: 39 m

Tanques R / Tanks: 72 m³

Tanques flotantes / Floating tanks: 6 x 25 m³

Barrera / Boom: 300 m

2 skimmers

Sistema localización FLIR / FLIR System





Medios aéreos

Aerial Resources



PESCA 1

Marca e modelo	SIKORSKY S-76C+
Ano de fabricación	2004
Velocidade máxima	145 nós
Radio de acción	230 millas (teóricas) / 180 millas (reais)
Capacidade de rescate	10 persoas, como máximo, nunha soa operación

PESCA 2

SIKORSKY S-76C+
2005
145 nós
230 millas (teóricas) / 180 millas (reais)
10 persoas, como máximo, nunha soa operación



Medios del Servicio de Guardacostas

Galician Coastguard Resources

OTROS MEDIOS MARÍTIMOS

OTHER MARITIME RESOURCES

2 buques multipropósito /

Multipurpose vessels

11 patrulleras / patrol boats

3 embarcaciones semirígidas / semi-rigid boats

7 embarcaciones planeadoras





XUNTA DE GALICIA
CONSELLERÍA DO MAR

Plan CAMGAL





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PORTOS DE GALICIA

**Bases de Tragove y Caramiñal
Contenedores en los puertos autonómicos**





CONTAINMENT BOOMS





RECOVERING

- Barreras de arrastre
- Barreras absorbentes



- Configuración en “U”
- Configuración en “V”
- Configuración en “J”





Protocols for response to HNS incidents

HAZARD IDENTIFICATION

The pictograms help us graphically identify the dangers that hazardous and noxious substances entail.

In case of a spill, it is essential to:

- Quickly identify the type of substance.
- Know the dangers it poses.
- Know the correct way to handle it.

HAZARD PICTOGRAMS: !, Danger, Danger, Danger

WARNING WORDS: Danger, Danger, Danger

HAZARD STATEMENTS (H statements): H314: Causes severe skin burns and eye damage. EUH031: Contact with acids liberates toxic gas. P273: Avoid release to the environment.

PRECAUTIONARY STATEMENTS (P statements): P280: Wear protective gloves/protective clothing/eye protection/face protection.

SODIUM HYPOCHLORITE: CAS No. 7681-52-9 Na Cl (1%) ABCDE, Ltd. FGHIJ street Phone: XXXX XXXXXX

PRODUCT IDENTIFIER: COMPOSITION: SUPPLIER:

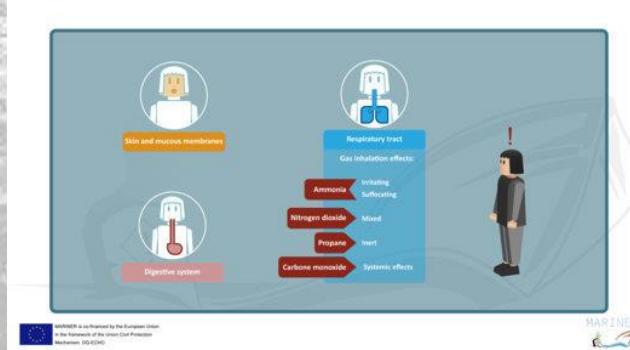
Further information on www.arcopol.eu

ARCOPOL PLATFORM European Union Atlantic Area Interreg Europe Program Intecmar Dangere



Identify HNS

Adequate PPE



PERSONAL PROTECTIVE EQUIPMENT AGAINST MARITIME SPILLS OF HAZARDOUS AND NOXIOUS SUBSTANCES (HNS)

WAYS OF EXPOSURE TO MARITIME SPILLS: INGESTION, INHALATION, CONTACT, INJECTION

TYPE 1 SUITS: TYPE 2 SUIT

TYPE 3 SUIT: PARTIAL PROTECTION

TYPE 4 SUIT: GASES AND VAPOURS, SPRAYS OR LOW-VOLUME SPLASHES, SOLID PARTICLES

TYPE 5 SUIT: LIQUIDS

TYPE 6 SUIT: +

Further information on www.arcopol.eu

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NRBQ Equipment

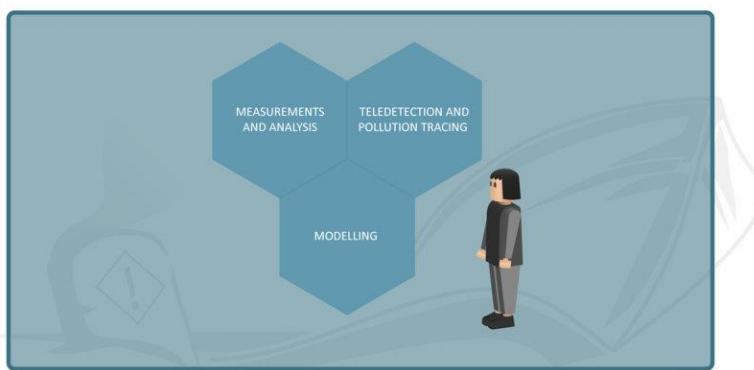
Dräger CPS 7900

- Tailor-made for use under extreme conditions
- Gastight, reusable protective suit
- Excellent protection from industrial chemicals, chemical warfare agent and other toxic substances
- Suitable for use with cryogenic substances down to -80°C and in explosive zones
- Flame retardant and self-extinguishing

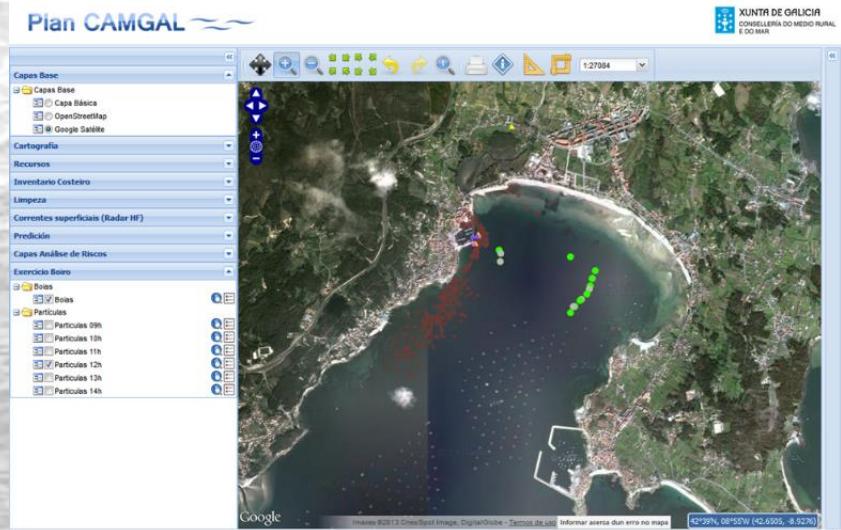
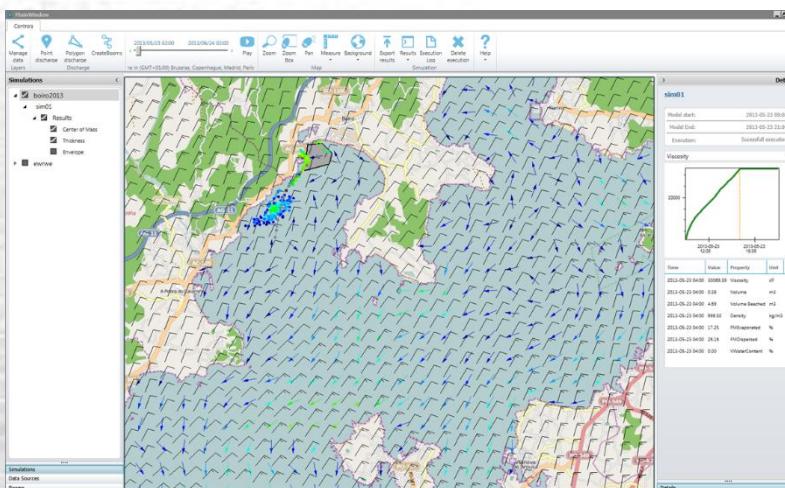




Detection & Analysis



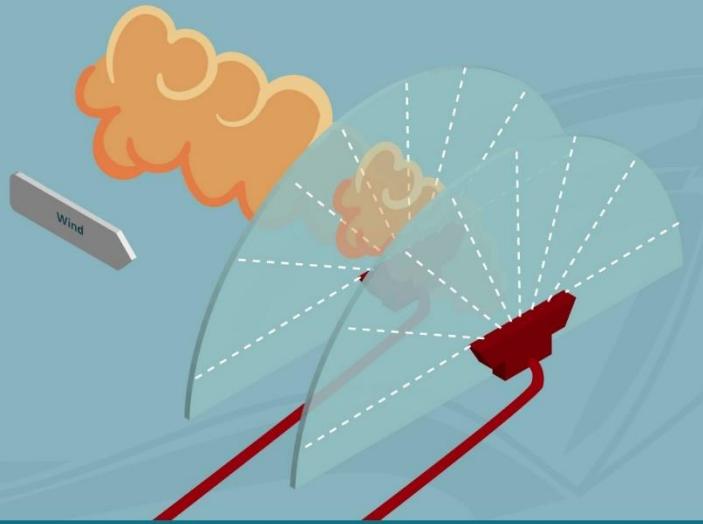
MARINER is co-financed by the European Union
in the framework of the Union Civil Protection
Mechanism - DG-ECHO



Plan Camgal – UMO Unit: use of drifters, hydrodynamic modelling, atmospheric modelling (ALOHA)



Evaporators



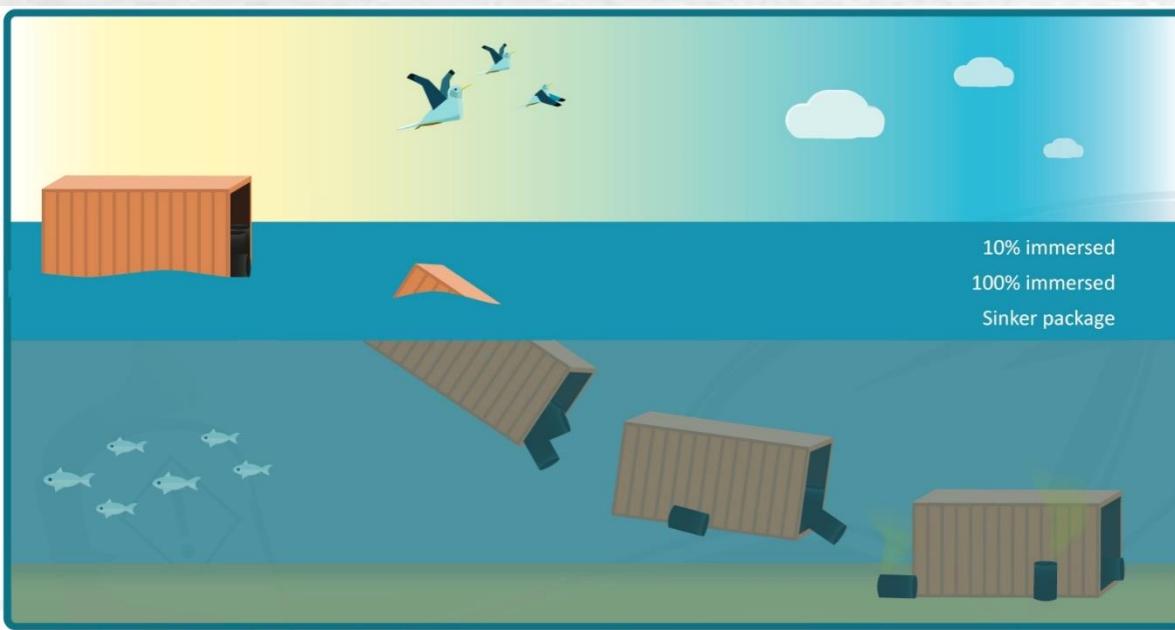


Floater





Sinkers



Unpacking and first contact with CPS 7900





Decontamination



DECONTAMINATION SHOWER





Training



Entrenamiento co-financiado por la Unión Europea
en el marco del Plan de Protección Civil
de Galicia (CAMGAL)

Entrenamiento co-financiado por la Unión Europea
en el marco del Plan de Protección Civil
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Training



Thank you