



European
Maritime
Safety
Agency

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Inventory of EU Member States Policies and Operational Response Capacities for HNS Marine Pollution



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Summary

In accordance with Regulation (EC) No 1891/2006 amending Regulation (EC) No 1406/2002, EMSA is given the task to “draw up on a regular basis a list of the private and state pollution response mechanisms and response capabilities in the various regions of the European Union”. To this effect, the Agency has made an inventory of existing capacities for responding to pollution incidents involving hazardous and noxious substances (HNS).

The Agency initiated its work on HNS with the *EMSA Action Plan for HNS Pollution Preparedness and Response* which was adopted by the Agency's Administrative Board in June 2007. This action plan provides the framework document defining the Agency's role and activities in the field of marine response to HNS. HNS are defined, according to the OPRC-HNS Protocol 2000, as “*any substance other than oil which, if introduced into the marine environment, is likely to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the Sea*”.

This inventory is meant to provide a general description of the status of preparedness and response capabilities for marine incidents involving HNS in coastal EU and EFTA Member States. It includes a description of the competent authorities, the policies, and the preparatory arrangements of each Member State. Furthermore, it gives an in-

dication on which types of government owned or contracted resources are available.

Describing the status of the HNS response capability around Europe has proven to be rather difficult. The level of preparedness and availability of specialised resources varies significantly between countries, and hence does the connotation of ‘high’ versus ‘low’ capacity. This means that what is considered as a very important resource in one country can be seen as not worth mentioning in another country.

The type of equipment commonly used in marine incidents involving HNS is not as straightforward as in oil pollution response. There are a vast number of chemicals that could potentially be encountered in a marine HNS incident. Since each chemical may behave in a different way once released in the marine environment, a variety of equipment and tools may be needed. This equipment is not necessarily stored by any one agency or authority, but may in case of a real incident be called in from various sources. It can therefore be extremely difficult to know exactly what is available beforehand, which is particularly true for private companies and the salvage industry.

Member States with less developed preparedness to HNS incidents generally rely on the assistance of neighbouring states through the regional agreements (HELCOM, Bonn Agreement, REM-

PEC, and the Black Sea Commission). Considerable amounts of work on preparedness for marine incidents with HNS have also been done within these regional agreements, including contingency plans, response manuals, risk assessments, and inventories of response capacities.

Information on previous experience of marine incidents involving HNS has been included in some country profiles when considered relevant. The listed incidents should not be seen as a comprehensive description of EU-wide experience, but rather as an indication of which Member States can provide further information on past marine incidents involving HNS.

The information provided in this inventory has been collected by the Agency from various sources including dedicated questionnaires, EMSA workshop proceedings, as well as national and regional manuals and contingency plans. The country profiles have been verified¹ by the respective national administrations, and the Agency would like to extend its gratitude to those who have contributed with information. This inventory will be updated on a regular basis.

¹ All Member States have been asked to verify the information in their respective country profile. Three Member States (BE, FR, and PT) have not replied.

Country Profiles

Policy and Operational Capacity for HNS Marine Pollution: **BELGIUM****I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS****1.1 Competent authority**

The competent authority for dealing with marine pollution involving HNS is the DG Environment (Federal Public Service for the Environment), which can be assisted with scientific advice, environmental impact assessment and monitoring from the Management Unit of the North Sea Mathematical Models (MUMM), which is a department of the Royal Belgian Institute of Natural Sciences (RBINS). On an operational level, the Belgian Coastguard is responsible.

The Civil Protection (Federal Public Service of Interior) is in charge of response teams and logistics support and the Maritime Inspectorate (Federal public service of Transport) provide support on ship safety issues and nautical advice. The Navy (Ministry of Defence) can also be called upon for communications, command and control, and logistics issues. While these entities would be called upon in case of a chemical spill, Belgium has no specific expertise in this field.

Belgium has not ratified the OPRC-HNS Protocol 2000. However, all the provisions of the OPRC-HNS Protocol 2000 are covered by existing national legislation.

Belgium is a contracting party of the Bonn Agreement.

1.2 Risk assessment

Future work includes a review of existing risk assessment studies for the Belgian North Sea area, including the validation of methodology and results, as well as an inventory of possible HNS accidents. The results will then be used when complementing the Belgian national contingency plan with specific operational plans for HNS response at sea.

1.3 Contingency planning

Belgium does not specifically cover response to HNS in their national contingency plan.

1.4 Previous experience

Belgium has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
1984	MONT LOUIS	Uranium hexafluoride
1987	HERALD OF FREE ENTERPRISE	Mixed packaged hazardous substances
1993	SHERBRO	Bags of pesticides
1999	EVER DECENT	Containers on fire, toxic gas cloud, dioxins

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS**2.1 Response capability**

Belgium's capability for responding to marine incidents involving HNS is rather limited and mainly relies on the same resources as for oil pollution response.

The development of HNS response capacity is currently in progress, and will be based on experience gained in dealing with chemical accidents in the chemical industry and in rail/road transport.

2.2 Monitoring capacities

The Management Unit of the North Sea Mathematical Models (MUMM) is responsible for the monitoring of a pollutant at sea or coordination thereof.

2.3 Specialised vessels

Belgium does not have any specialised vessels for dealing with marine incidents involving HNS.

The Belgian Navy has mine hunters with sonar equipment available.



Policy and Operational Capacity for HNS Marine Pollution: **BELGIUM**

2.4 Response teams

Belgium does not have a specialised response team for marine incidents involving HNS.

Belgium does not have any training courses available in this field.

2.5 Scientific support

The Management Unit of the North Sea Mathematical Models (MUMM), a department of the Royal Belgian Institute of Natural Sciences (RBINS), can assist with scientific advice, environmental impact assessment and monitoring.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	Yes	No	Yes	Yes	No	No	Yes



Policy and Operational Capacity for HNS Marine Pollution: **BULGARIA**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent Authority

The competent authority for dealing with marine pollution involving HNS is the Executive Agency “Maritime Administration” under the Ministry of Transport. It shall exercise control for prevention and minimisation of pollution by vessels of the territorial sea, internal waters and inland waterways and establish a procedure and arrangements for search and rescue at sea and on inland waterways and for detection of sources of environmental pollution.

Bulgaria has not ratified the OPRC-HNS Protocol 2000. The development of a policy regarding HNS marine pollution has been initiated and will, after a risk assessment, be done as an extension of scope of the national policy on oil pollution.

Bulgaria is a contracting party of the Bucharest Convention.

1.2 Risk assessment

Bulgaria has not made any risk assessment specifically aimed at marine transport of HNS.

To collect and analyse statistical information on seaborne transport of HNS to and from Bulgarian ports for risk assessment purposes is considered to be an important issue before ratification of the OPRC-HNS Protocol 2000.

1.3 Contingency planning

There is no specific coverage of the response to HNS in the Bulgarian national contingency plan as such a plan has not been completed yet.

The development of the Black Sea contingency plan, Volume II: Response to harmful substances other than oil is at its beginning. In accordance with the decision of the recent 16th meeting of the Advisory Group on Environment aspects of shipping (AG ESAS) to the Black Sea Commission, the process of checking the availability of HNS transportation data has been initiated.

1.4 Previous experience

Bulgaria has not been involved in any major marine accidents involving HNS; only a small incident has occurred:

Year	Vessel	Substance
2005	ODIN	Styrene

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Bulgaria’s capability for responding to marine incidents involving HNS is very limited and mainly relies on the same resources as for oil pollution response.

There are no special storage devices or storage arrangements in place for recovered HNS. Floating cranes and barge may be used for recovery and as a temporary storage of package goods.

2.2 Monitoring capacities

Bulgaria has vessels for visual monitoring of floating coloured substances and for locating floating packaged goods.

2.3 Specialised vessels

Bulgaria does not have any specialised vessels for dealing with marine incidents involving HNS, but there is the possibility of using fire-fighting tugs for the suppression of water soluble gas clouds.



Policy and Operational Capacity for HNS Marine Pollution: **BULGARIA**

2.4 Response teams

Bulgaria does not have a specialised response team for marine incidents involving HNS. There are trained personnel only for shore response - Department on radiological, chemical and biological protection in National

Civil Protection Service Directorate General under the Ministry of State Policy for Disasters and Accidents. Bulgaria does not have any training courses available in this field.

2.5 Scientific support

The Bulgarian Ministry of Transport does not have a specialised body which provides scientific advice on marine incidents involving HNS.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	No	No	No	No	No	No	No



Policy and Operational Capacity for HNS Marine Pollution: **CYPRUS**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Department of Fisheries & Marine Research (DFMR) of the Ministry of Agriculture, Natural Resources and Environment. The Department of Fisheries & Marine Research is the contact point responsible for receiving reports on marine pollution accidents and will be in charge for dealing with matters related to mutual assistance in case of emergency. Cyprus has not ratified the OPRC-HNS Protocol 2000. Cyprus is a contracting party of the Barcelona Convention.

1.2 Risk assessment

Cyprus has not made any risk assessment specifi-

cally aimed at marine transport of HNS.

1.3 Contingency planning

Cyprus does not specifically cover response to HNS in their national contingency plan.

1.4 Previous experience

Cyprus has not been involved in any marine incidents with HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Cyprus' capability for responding to marine incidents involving HNS is very limited and mainly relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Cyprus does not have any specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Cyprus does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

Cyprus does not have a specialised response team for marine incidents involving HNS. Cyprus does not have any training courses available in this field.

2.5 Scientific support

Cyprus does not have a specialised body which provides scientific advice on marine incidents involving HNS.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	No	No	No	No	No	No	No



Policy and Operational Capacity for HNS Marine Pollution: **DENMARK**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Ministry of Defence. The Ministry of Defence has delegated the contingency functions to Defence Command Denmark, which for its part has delegated the contingency functions to the Admiral Danish Fleet (Royal Danish Navy).

The Admiral Danish Fleet is responsible for response to pollution on the high seas and in coastal waters, while the regional or local councils are responsible for response to pollution on the shoreline. The local authorities are responsible for response to pollution in ports and harbours.

The Environmental Protection Agency (EPA) under the Ministry of the Environment and Energy is responsible for the administration of legislation concerning environmental protection (the Danish Act for the Protection of the Marine Environment) and environmental regulation of offshore activities.

Denmark has not ratified the OPRC-HNS Protocol 2000.

Denmark is a contracting party of the Bonn Agreement and the Helsinki Convention.

1.2 Risk assessment

Denmark has made a risk assessment which specifically included marine transport of HNS.

1.3 Contingency planning

Denmark does not specifically cover response to HNS in their national contingency plan.

1.4 Previous experience

Denmark has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
1984	DANA OPTIMA	Dinitrobutylphenol (Dinoseb)

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Denmark's capability for responding to marine incidents involving HNS is very limited and mainly relies on the same resources as for oil pollution response.

With the existing resources, only recovery of undamaged drums and containers can be undertaken.

2.2 Monitoring capacities

Denmark does not have any specialised equipment for monitoring of marine spills of HNS.

Aircraft from the Royal Danish Air Force can carry out aerial surveillance. The planning of aerial surveillance is done in direct coordination between the Royal Danish Air Force and the Admiral Danish Fleet.

2.3 Specialised vessels

Denmark does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

Denmark does not have a specialised response team for marine incidents involving HNS.

Denmark does not have any training courses available in this field.

2.5 Scientific support

Denmark does not have a specialised body which provides scientific advice on marine incidents involving HNS.



Policy and Operational Capacity for HNS Marine Pollution: **DENMARK**

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	Yes	No	Yes	No	No	No	No



I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution including HNS is the Estonian Border Guard, situated under the Ministry of the Interior. The Estonian Ministry of the Environment has the overall responsibility in managing and supervising pollution issues.

The National Rescue Board and local authorities are responsible for shoreline pollution response and contractors may also be called in for assistance when feasible. Port authorities are responsible for pollution response in ports.

The more demanding operations will be undertaken with combined resources from various national authorities. These actions will be initiated, supported and coordinated by the Border Guard and commanded by the National Crisis Committee (NCC). The National Crisis Committee shall decide whether any request for assistance is to be made to the HELCOM Contracting Parties.

Estonia has ratified the OPRC- HNS Protocol 2000.

Estonia is a contracting party to the Helsinki Convention.

1.2 Risk assessment

Estonia is annually compiling national risk assessments, in which marine transport of HNS is one of the topics.

The ecological and socio-economic areas sensitive to marine spills have been identified and mapped.

1.3 Contingency planning

Estonia does not specifically cover response to HNS in their national contingency plan.

1.4 Previous experience

Estonia has not been involved in any marine incidents with HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Estonia's capability for responding to marine incidents involving HNS is very limited and relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Estonia has some specialised equipment for monitoring of marine spills of HNS.

A LET-410 aircraft is available for surveillance and is equipped with SLAR (Side Looking Airborne Radar), FLIR (Front Looking Infrared Radar), and a search and weather radar RDR-1400c. Also available is a Mi 8 helicopter which is equipped with LIDAR (Light Detecting and Ranging). These devices are mainly specified to detect oil pollution, but LIDAR can also be re-calibrated for HNS purposes.

2.3 Specialised vessels

Estonia does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

Estonia does not have a specialised response team for marine incidents involving HNS.

Estonia does not have any training courses available in this field.

2.5 Scientific support

Estonia has a specialised body involving scientists and specialists called the Operational Experts Group which provides scientific advice on marine incidents. However, its capabilities in the field of HNS are not ascertained.



III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	Yes	No	No	Yes	No	No	No



I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Ministry of the Environment, which has given the operational tasks to the Finnish Environment Institute (SYKE). The Finnish Environment Institute is responsible for the operational response organisation at sea, which will include municipalities, marine defence vessels, Finnish Border Guard vessels and Finstashes vessels equipped with response equipment.

Finland has not ratified the OPRC-HNS Protocol 2000.

Finland is a contracting party of the Helsinki Convention.

1.2 Risk assessment

Finland has made a risk assessment which included marine transport of HNS. The report Transportation

of liquid bulk chemicals by tankers in the Baltic Sea, published by VTT in 2006, provides an overview of the Baltic HNS traffic and the associated risks.

1.3 Contingency planning

Finland does not specifically cover response to HNS in their national contingency plan.

A specific plan for HNS incidents is under preparation and will then be a part of the existing national contingency plan.

1.4 Previous experience

Finland has only been involved in some minor marine incidents with HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Finland's capability for responding to marine incidents involving HNS is rather limited and mainly relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Finland has some specialised equipment for monitoring of marine spills of HNS.

Finland has two surveillance aircraft with remote sensing equipment (optical instruments and scanners). IR/UV for observation of floating substances can be used if a chemical is not totally colourless.

The available vessels can take air and water samples, and can locate lost packaged goods.

2.3 Specialised vessels

Finland has two specialised vessels, MERIKARHU and TELKKÄ, for dealing with marine incidents involving HNS.

Three ships have the possibility of being over-pressurised for one to two hours to work with evacuation of the crew and other important tasks in the vicinity of a chemical spill.

Finland has ordered a new multipurpose vessel which



Policy and Operational Capacity for HNS Marine Pollution: **FINLAND**

will be classified as a chemical response vessel. It will have a tank for chemicals that can be pumped from a chemical cargo ship under an emergency situation.

2.4 Response teams

Finland does not have a specialised response team for marine incidents involving HNS.

Some expert officers and water divers are available together with search and rescue personnel, but very few are experts on working in chemical atmosphere or hydrosphere.

Finland does not have any training courses available in this field.

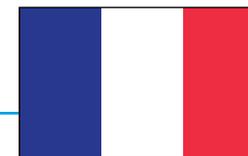
2.5 Scientific support

Finland does not have a specialised body which provides scientific advice on marine incidents involving HNS.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	Yes	No	Yes	Yes	Yes	No	No



Policy and Operational Capacity for HNS Marine Pollution: **FRANCE**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is one of the three maritime prefectures (PREMAR) in the Mediterranean, Atlantic and North Sea/Channel.

France has ratified the OPRC-HNS Protocol 2000.

France is a contracting party of the Bonn Agreement and the Barcelona Convention.

1.2 Risk assessment

France has made some risk assessments specifically aimed at marine transport of HNS.

1.3 Contingency planning

The French response to HNS spills is not the object of a specific rule or organisation. It is instead integrated with response to oil spills in the dispositions of the Polmar instruction.

All Polmar plans include a chapter on the related means and dispositions.

1.4 Previous experience

France has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
2003	ADAMANDAS	Deoxidized iron ore balls
2002	BOW EAGLE	Ethyl acetate
2001	BALU	Sulphuric acid
2000	IEVOLI SUN	Styrene, methyl ethyl ketone, isopropyl alcohol
1999	JUNIOR M	Ammonium nitrate
1997	ALBION II	Calcium carbide
1997	KAIRO	Lead tetraethyl

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Polmar stockpiles include specific equipment for response to spills of HNS (suits for intervention in

toxic atmosphere, containers for leaking barrels, etc.).

2.2 Monitoring capacities

France has some specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

France has a specialised vessel for dealing with marine incidents involving HNS, the ABEILLE BOURBON (a high sea tug).

2.4 Response teams

France does not have a specialised response team for marine incidents involving HNS.

Training is provided in the oil and chemicals training sessions of Cedre and in specific HNS training sessions for firemen.

2.5 Scientific support

Specialised advice during the response to a marine spill involving HNS will be provided by Cedre and IFREMER (specialised institutes with expertise in evaluation and monitoring of chemical pollutants).

Policy and Operational Capacity for HNS Marine Pollution: **FRANCE**

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **SPECIALISED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	Yes	Yes	Yes	Yes	Yes	No	Yes



Policy and Operational Capacity for HNS Marine Pollution: **GERMANY**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Central Command for Maritime Emergencies (CCME), under the Federal Ministry of Transport, Building and Urban Affairs. The Central Command for Maritime Emergencies also works with the Federal Ministry for the Environment and the state ministries for the environment.

Germany has ratified the OPRC-HNS Protocol 2000.

Germany is a contracting party of the Bonn Agreement and the Helsinki Convention.

1.2 Risk assessment

Germany has made some risk assessments specifically aimed at marine transport of HNS.

1.3 Contingency planning

Germany covers response to HNS in their national contingency plan.

1.4 Previous experience

Germany has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
2003	ANDINET	Arsenic pentoxide
2000	IEVOLI SUN*	Styrene, methyl ethyl ketone, isopropyl alcohol
1989	OOSTZEE	Epichlorohydrin
1977	BURGENSTEIN	Sodium peroxide

*The accident happened in French waters, but Germany was involved in the response.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Germany's capability for responding to marine incidents involving HNS is limited to the recovery of mainly packaged goods. However interventions in highly explosive and toxic atmospheres are possible because of the very sophisticated gas protection and analysing systems on board of the multipurpose vessels. Insofar these vessels are ideal as basis and support platforms for HNS intervention teams.

2.2 Monitoring capacities

Germany has specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Germany has specialised vessels for dealing with marine incidents involving HNS, including four



Policy and Operational Capacity for HNS Marine Pollution: **GERMANY**

gas-protected multipurpose vessels (NEUWERK, MELLUM, SCHARHÖRN, ARKONA) of which two are located in the North Sea and two in the Baltic Sea.

They are all equipped with detection, recovery and storage devices for hazardous substances and accommodation and equipment facilities for additional strike units of 30 persons each.

They can also do sampling of air and water and in situ monitoring of atmosphere (quantifying and qualifying).

2.4 Response teams

Germany has specialised response teams for marine incidents involving HNS.

Trained fire brigades are also available. Regular exercises and training programmes are established for vessels

and personnel involved in HNS pollution response.

2.5 Scientific support

Germany does not have a specialised body which provides scientific advice on marine incidents involving HNS but has several experts of varying qualifications and specialisation which come together on a case by case mode to advise the CCME. These experts are from scientific agencies and industry.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **SPECIALISED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



Policy and Operational Capacity for HNS Marine Pollution: **GREECE**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Ministry of Mercantile Marine, Aegean and Island Policy (MMMAIP) and the Marine Rescue Coordination Centre (MRCC). Greece has ratified the OPRC-HNS Protocol 2000. Greece is a contracting party of the Barcelona Convention.

1.2 Risk assessment

Greece has not made any risk assessment specifically aimed at marine transport of HNS.

1.3 Contingency planning

Greece covers response to HNS in their national contingency plan. According to the plan, in order

to help the MMMAIP and the MRCC for all types of pollution, a National Advisory Committee has been established, consisting of representatives from all the bodies involved. Special scientific advisors may also help this Committee.

1.4 Previous experience

Greece has not been involved in any marine incidents with HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Greece's capability for responding to marine incidents involving HNS is very limited and mainly relies on the same resources as for oil pollution response. Although there is a plan to respond to HNS pollution incidents there is a lack of antipollution means

and equipment for response to HNS pollution at sea.

2.2 Monitoring capacities

Greece does not have any specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Greece does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

Greece does not have a specialised response team for marine incidents involving HNS. Greece does not have any training courses available in this field.

2.5 Scientific support

The Hellenic Centre for Marine Research can provide scientific advice on marine incidents involving HNS.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	No	Yes	No	No	No	No	Yes



Policy and Operational Capacity for HNS Marine Pollution: **ICELAND**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Environmental Agency of Iceland (EA). Due to very limited chemical industry, no special expertise has been considered necessary in the Environmental Agency. However, the local fire brigades are trained to respond to chemical spills on land and it is under discussion to extend the training of some units to marine HNS spills. Iceland has not ratified the OPRC-HNS Protocol 2000.

1.2 Risk assessment

Iceland has not made any risk assessment specifically aimed at marine transport of HNS. There is limited chemical industry in Iceland and transport of substantial

amounts of HNS in Icelandic waters is infrequent, if any.

1.3 Contingency planning

Iceland does not specifically cover response to HNS in their national contingency plan.

1.4 Previous experience

Iceland has not been involved in any marine incidents with HNS.

2.2 Monitoring capacities

Iceland does not have any specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Iceland does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

Iceland does not have a specialised response team for marine incidents involving HNS. Iceland does not have any training courses available in this field.

2.5 Scientific support

Iceland does not have a specialised body which provides scientific advice on marine incidents involving HNS. General information about HNS is sought from the fire brigades and the Environment Agency, as the supervising body.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Iceland's capability for responding to marine incidents involving HNS is very limited and mainly relies on the local fire brigades. Apart from that, Iceland relies on international agreements and cooperation in case of a larger incident.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	No	No	No	No	No	No	No



Policy and Operational Capacity for HNS Marine Pollution: IRELAND

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Department of Transport through the Irish Coast Guard (IRCG). In cases outside the expertise of the Irish Coast Guard, international assistance is requested.

Ireland has enacted the national legislation to implement the OPRC-HNS Protocol 2000. This legislation commenced in June 2007. The formal ratification papers are currently in the process of being lodged.

Ireland is a contracting party of the Bonn Agreement.

1.2 Risk assessment

Ireland is currently preparing a risk assessment specifically aimed at marine transport of HNS.

1.3 Contingency planning

Ireland will cover response to HNS in their national contingency plan which is in the course of preparation.

1.4 Previous experience

Ireland has not been involved in any marine incidents with HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Ireland's capability for responding to marine incidents involving HNS is very limited and mainly relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Ireland does not have any specialised equipment for monitoring of marine spills of HNS.

Ireland has some modelling capacity and has the ASA CHEMMAP modelling system in place.

The Irish Coast Guard has contracted four civilian Sikorsky S61N Search and Rescue helicopters deployed at bases around the coast. These aircraft can be used for pollution aerial surveillance during daylight hours. Fixed wing aircraft of the Irish Air Corps can be utilised during daylight hours when avail-

able. Ireland also has a fully functional AIS system in place around its coastline.

2.3 Specialised vessels

Ireland does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

Ireland does not have a specialised response team for marine incidents involving HNS.

During a major HNS spill, the Director may deploy the Irish Coast Guard's Marine Pollution Response team (MPRT) as part of the Irish Coast Guard's Incident Command System to assume local command of Counter Pollution operations. This team is made up of Irish Coast Guard and local harbour/port authority personnel.

Ireland does not have any training courses available in this field. Personnel from the MPRT have participated in the UK Chemical Strike team training.

2.5 Scientific support

Ireland does not have a specialised body which provides scientific advice on marine incidents involving HNS.



Policy and Operational Capacity for HNS Marine Pollution: **IRELAND**

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	Yes	No	No	No	No	No	No



Policy and Operational Capacity for HNS Marine Pollution: **ITALY**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Ministry of Environment and the Italian Coast Guard. In case of national emergency, the responsibility of coordination of response action is in the hands of the Department of Civil Protection, structured under the Presidency of the Council of Ministers. Other entities involved in an HNS incident are the Agency for Environmental Protection and Technical Services (APAT), the Central Institute for Applied Marine Research (ICRAM) and the Regional Agencies for the Environmental Protection (ARPAs).

Italy has not ratified the OPRC-HNS Protocol 2000.

Italy is a contracting party of the Barcelona Convention.

1.2 Risk assessment

Italy has not yet made any risk assessment specifically aimed at marine transport of HNS. The first step of the evaluation of the risk assessment has been undertaken, producing the vulnerability map of the Italian coastal areas.

1.3 Contingency planning

The Italian national contingency plan of the Ministry of the Environment for facing accidental marine pollution by hydrocarbon and other dangerous goods approved in late 1987 is now in course of general updating. The draft of the new plan which takes in due consideration procedures to face HNS incidents is at this point almost finished and it is waiting for the administrative approval.

1.4 Previous experience

Italy has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
1990	VAL ROSANDRA	Propylene
1991	ALESSANDRO PRIMO	Acrylonitrile, dichloroethane

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Italy's capability for responding to marine incidents involving HNS is rather limited and relies on the Harbour's Fire Brigades who are prepared to face this kind of emergency (and also in the field of NBC in-

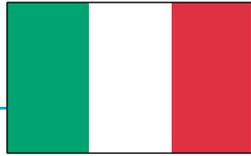
tervention) and have special boats; the assistance of the Harbour's Chemist (a service existing in all Italian major ports to advise the Harbour Master) is also used. All these operate under the coordination of the Harbour Master (Capitaneria di Porto).

2.2 Monitoring capacities

Italy has some specialised equipment for monitoring of marine spills of HNS.

The Italian Coast Guard Flight service has got two aircrafts ATR 42 MP equipped with remote sensing sensors, like SLAR (Side Looking Airborne Radar), multi-spectral scanners (Sensytech ATM Enhanced), infrared cameras, and camcorders. ITCG has got seven aircrafts Piaggio P166DL3 equipped with FLIR (Forward Looking InfraRed), two-spectral scanners (Sensytech 3505) and aerial photography systems VINTEN. By means of these devices it is possible to detect, in real time, wide marine areas polluted by various classes of noxious substances, in addition to hydrocarbons.

The Ministry of Environment, under an outsourcing agreement, has at its disposal one vessel equipped with radar oil detection system (Seadarq), able to detect HNS behaving as hydrocarbons on the sea surface. In 2009 four other



Policy and Operational Capacity for HNS Marine Pollution: **ITALY**

vessels will be able to perform the same monitoring activity.

Moreover, 21 of the 58 naval units of the Italian anti-pollution fleet are equipped with:

- Multi-parametric probes
- Water sampler (Niskin and Shoemaker bottles)
- Sediment sampler
- Biological sampler

The same ships should be promptly equipped with air sampler. Other analysis kits are stocked in warehouses ready to be used.

2.3 Specialised vessels

The Ministry of the Environment does not have any specialised vessel for dealing with marine incidents

involving HNS, but the Harbour Fire Brigades have some boats fit for intervention in this field. In addition, the Contractor of the antipollution service for the Ministry of the Environment has some vessels classified by RINA as “HNS antipollution vessel”.

2.4 Response teams

Italy has five specialised teams of Fire Fighters Brigade (CBNR) able to work during HNS accidents and equipped with appropriate PPE (highest level of protection). They have personal decontamination equipment and tools for the containment of the products.

These special Fire Fighters Brigades are able to operate along the shoreline and on vessels. Fire Fighters Brigades have 12 centres, around the country, with heli-

copters that can transport the CBNR Teams on scene.

Due to the low number of HNS marine accidents no special exercises are organised in cooperation with the Italian Coast Guard.

The CBNR Teams of Fire Fighters Brigade have special training courses (three steps 1°, 2° and 3°) organised by themselves. Italy does not have any other training courses available.

2.5 Scientific support

Scientific institutes which can provide scientific advice during HNS marine pollution are the Agency for Environmental Protection and Technical Services (APAT), the Central Institute for Applied Marine Research (ICRAM), and the Italian National Institute of Health (ISS).

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	No	No	Yes	Yes	Yes	Yes	Yes



I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

A competent authority for dealing with marine pollution involving HNS has not been appointed in Latvia, since Latvia has not ratified the OPRC-HNS Protocol 2000 yet. In practise, however, the authority which responds to any maritime accident including HNS accidents is the Latvian Coast Guard.

Latvia has not ratified the OPRC-HNS Protocol 2000. Latvia is in a process of ratification and therefore has just started preparations to build up necessary capacities, but no special chemical expertise exists at this time.

In case of an incident, an MRCC Committee will be convened and other organisations, such as the Latvian Maritime Administration, Crisis Medical Centre, State Fire Fighting Service and Port Authorities will be consulted during the response operation.

Latvia is a contracting party of the Helsinki Convention.

1.2 Risk assessment

Latvia has made a risk assessment which included marine transport of HNS. As there are not so many HNS substances carried through the Latvian ports, risk assessment and hazard profiles has been elaborated for each particular substance and are part of the preliminary national contingency plan for HNS.

1.3 Contingency planning

Latvia does not yet specifically cover response to HNS in their national contingency plan.

In 2004 a specific national contingency plan for HNS incidents was prepared and it is foreseen that this plan will be a part of the existing national contingency plan for oil.

1.4 Previous experience

Latvia has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
2007	GOLDEN SKY	Muriate of potash

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Latvia’s capability for responding to marine incidents involving HNS is very limited and mainly relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Latvia does not have any specialised equipment for monitoring of marine spills of HNS. Only visual observation of pollution can be carried out either from aircraft or vessel.

Samples can be taken at sea by the Marine and Inland Water Administration inspectors from the Coast Guard vessels and brought to the National Laboratory of the Ministry of Environment for analysis.

2.3 Specialised vessels

Latvia does not have any specialised vessels for dealing with marine incidents involving HNS. The same vessels will be used to respond to HNS which are used for response to oil.

Policy and Operational Capacity for HNS Marine Pollution: **LATVIA****2.4 Response teams**

Latvia does not have a specialised response team for marine incidents involving HNS.

Latvia does not have any training courses available in this field.

2.5 Scientific support

Latvia does not have a specialised body which provides scientific advice on marine incidents involving HNS, but if it is necessary, experts may be consulted from scientific institutions such as the Institute of Marine Ecology.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	Yes	No	Yes	No	No	No	No



Policy and Operational Capacity for HNS Marine Pollution: **LITHUANIA**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Lithuanian Maritime Safety Administration (LMSA) under the Ministry of Transport and Communication. However, the Government of the Republic of Lithuania has approved a proposal to reorganise the existing national SAR and pollution response system, which will be handed over from the Lithuanian Ministry of Transport to the Lithuanian Ministry of National Defence. Lithuania has not ratified the OPRC-HNS Protocol 2000. Due to the ongoing reorganisation of the current SAR and pollution response system, there is some uncertainty about the date of ratifying the OPRC-HNS Protocol 2000. Nevertheless, the Government of the Republic of Lithuania is making all the necessary preparations and consider ratifying the OPRC-HNS Protocol 2000 in the near future.

Lithuania is a contracting party of the Helsinki Convention.

1.2 Risk assessment

Lithuania has not made any risk assessment specifically aimed at marine transport of HNS.

1.3 Contingency planning

Lithuania does not specifically cover response to HNS in their national contingency plan.

1.4 Previous experience

Lithuania has not been involved in any marine incidents with HNS.

relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Lithuania does not have any specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Lithuania does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

Lithuania does not have a specialised response team for marine incidents involving HNS. Lithuania does not have any training courses available in this field.

2.5 Scientific support

Lithuania does not have a specialised body which provides scientific advice on marine incidents involving HNS. In case of chemical spills, the Marine Research Centre is contacted for expert advice.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

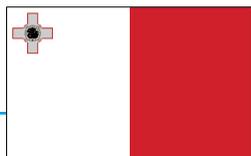
2.1 Response capability

Lithuania's capability for responding to marine incidents involving HNS is very limited and mainly

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	No	No	No	No	No	No	No



Policy and Operational Capacity for HNS Marine Pollution: **MALTA**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authorities for dealing with marine pollution involving HNS is the Malta Maritime Authority under the Ministry for Infrastructure, Transport and Communications, as well as the Civil Protection Department under the Ministry for Justice and Home Affairs. Other entities that may be involved include the Armed Forces of Malta and the Malta Environment and Planning Authority. Malta has ratified the OPRC-HNS Protocol 2000. Malta is a contracting party of the Barcelona Convention.

1.2 Risk assessment

Malta has not made any risk assessment specifically aimed at marine transport of HNS. However, this is in the process of being formulated between this year and the next through a project funded by the EEA Financial Mechanism which aims to set up oil

spill and HNS response capability for the protection of Maltese Seas.

1.3 Contingency planning

Malta does not specifically cover response to HNS in their current national contingency plan, but the plan will be reviewed in the coming year.

1.4 Previous experience

Malta has not been involved in any major marine incidents with HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Malta's capability for responding to marine incidents involving HNS is very limited. The Civil Protection Department has equipment specifically designed for combating HNS and protective clothing to carry out the task.

2.2 Monitoring capacities

Malta does not have any specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Malta does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

The Civil Protection Department has HNS response equipment and individuals from the Civil Protection Department have been trained to utilise the available equipment. Malta does not have any training courses available in this field.

2.5 Scientific support

Malta does not have a specialised body which provides scientific advice on marine incidents involving HNS. The University of Malta and the Malta Environment and Planning Authority (MEPA) can provide scientific support on marine pollution in general.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	No	No	No	No	No	No	No



I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Director of the Netherlands Coastguard. In this task he is assisted by Rijkswaterstaat North Sea, the organisation that also executes the plan for responding. A policy making team is chaired by the director of RWS North Sea.

The Netherlands is preparing a Maritime Emergency Response Service. In this service, apart from search and rescue and emergency towing, response to HNS will be covered.

The Netherlands has ratified the OPRC-HNS Protocol 2000.

The Netherlands is a contracting party of the Bonn Agreement.

1.2 Risk assessment

The Netherlands has not made any risk assessment specifically aimed at marine transport of HNS.

1.3 Contingency planning

The Netherlands does not specifically cover response to HNS in their national contingency plan. A specific national contingency plan for HNS incidents is under construction and will then be part of the existing national contingency plan for oil.

1.4 Previous experience

The Netherlands has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
1988	ANNA BROERE	Acrylonitrile
1992	ARIEL	White spirit
1998	APUS	Flammable solids
1998	BAN-ANN	Sulphur phosphine
2003	ANDINET	Arsenic pentoxide

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

The Netherlands' capability for responding to ma-

rine incidents involving HNS is rather limited and mainly relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

The Netherlands has some specialised equipment for monitoring of marine spills of HNS. There are two remote sensing aircraft available and there are vessels for monitoring the sea area, taking water samples, and locating lost packaged goods.

Modelling exists through the RWS Centre for Water Management in Lelystad. All national institutes of interest are organised in a web based group of experts, called BOT-mi (Policy Advising Team for Environmental Incidents). This includes gas cloud modelling, health risks and military experts.

2.3 Specialised vessels

The Netherlands does not have any specialised vessels for dealing with marine incidents involving HNS. Some Navy vessels have gas tight citadels and can go into hazardous areas for measuring the air.

2.4 Response teams

The Netherlands does not have a specialised re-



Policy and Operational Capacity for HNS Marine Pollution: **THE NETHERLANDS**

response team for marine incidents involving HNS. Industries, through a combination of salvage companies and chemical experts and if needed in cooperation with fire brigades, could be called in to deal with the situation onboard a vessel in distress.

Industry in the Netherlands provides training courses in this field.

2.5 Scientific support

The Dienst Centraal Milieu Rijnmond (DCMR) in Schiedam provides advice on human risk issues.

The RWS Centre for Water Management provides advice on ecological aspects and possible response options. The National Institute for Applied Science and others may also be contracted in case of an incident to provide support or conduct long term effect studies.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	No	No	Yes	Yes	No	No	Yes



Policy and Operational Capacity for HNS Marine Pollution: **NORWAY**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Norwegian Coastal Administration (NCA). A national system for preparedness and response to HNS incidents at sea similar to that for oil pollution is not established, except for the capability to handle HNS pollution with behaviour similar to oil spills. The Norwegian Coastal Administration is about to start the preparatory work on marine pollution involving HNS.

Norway has not ratified the OPRC-HNS Protocol 2000. Norway is for the time being evaluating if it should ratify the Protocol.

Norway is a contracting party of the Bonn Agreement.

1.2 Risk assessment

A risk assessment for the transport of HNS in the

Norwegian coastal areas was made in 2004, and recommendations have been made based on specific relevant scenarios.

1.3 Contingency planning

Norway partly covers response to HNS in their national contingency plan.

1.4 Previous experience

Norway has not been involved in any major marine incidents with HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Norway's capability for responding to marine incidents involving HNS is very limited and mainly relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Norway has some specialised equipment for monitoring

of marine spills of HNS. Norway has vessels for monitoring the sea area (gas measurement) and taking samples. There is an aircraft, specialised for oil spill detection, but no aircraft or vessel dedicated to handling HNS in a specific way.

2.3 Specialised vessels

Norway does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

Norway does not have a specialised response team for marine incidents involving HNS.

Norway mainly focuses on oil spills in their training courses. There are no training courses available for HNS Marine pollution.

2.5 Scientific support

Norway does not have a specialised body which provides scientific advice on marine incidents involving HNS.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	Yes	Yes	No	Yes	No	No	No



Policy and Operational Capacity for HNS Marine Pollution: **POLAND**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Director of the Maritime Office (depending on the area this can be a director from Gdynia, Slupsk or Szczecin offices). In this particular task he is assisted by the Maritime Search and Rescue Service, the organisation which prepares and also executes the contingency plan for responding to marine pollution.

Poland aims to establish a legal framework for the Maritime Emergency Response Team (so far it is based on the operational agreement between the SAR Service and the Commander of the State Fire Service). At present the National System for Detection and Warning of Hazardous Contamination (SWS) is under preparation. Maritime Search and Rescue Service and maritime administration information centres are included in the SWS.

Poland has ratified the OPRS-HNS Protocol 2000.

Poland is a contracting party of the Helsinki Convention.

1.2 Risk assessment

Poland has not made any risk assessment specifically aimed at marine transport of HNS.

As part of the local contingency planning a threat identification analysis has been made for particular chemicals, including the type of chemical and probable quantity to be involved. This covers response plans for big Polish harbours, such as Gdansk, Gdynia, Szczecin and Swinoujscie.

Additionally, there is a list of HNS cargo handling terminals which are obliged to have their own preparedness and response systems. For areas with heavy traffic, the VTS (VTMS) systems are established where the Dangerous Goods Manifest is obligatory as well as reporting procedures related to IMO Res. A.851(20).

1.3 Contingency planning

The national contingency plan and the port/facility

contingency plans for big harbours cover response to HNS.

1.4 Previous experience

Poland has not been involved in any marine incidents with HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Poland's capability for responding to marine incidents involving HNS is rather limited and mainly relies on the same resources as for oil pollution response.

Maritime Search and Rescue Service are able to search and recover HNS in packaged form. Poland has a number of over-packs (over-drums) and has access to multipurpose, 20' containerised storage tanks for about 70 different chemicals.

2.2 Monitoring capacities

Poland has some specialised equipment for monitoring of marine spills of HNS.



Policy and Operational Capacity for HNS Marine Pollution: **POLAND**

The monitoring is an integral part of the response action, appointed in the national contingency plan. Sampling and chemical analyses should be done both by responders for operational purposes and the State Monitoring System for the consequences assessment purpose. Air and water surveillance systems are in place similarly to oil incidents but their presence has to be preceded by the safety assessment.

The monitoring capability of the National System for Detection and Warning of Hazardous Contamination (SWS) is still unknown as the system itself is under development.

2.3 Specialised vessels

Poland does not have any specialised vessels for dealing with marine incidents involving HNS.

Poland’s main oil response vessel has an installation

for detecting some substances but is not gas-tight. Some Navy vessels have gas-tight citadels and are prepared for quick escape from a hazardous atmosphere, but as they have different responsibilities the possibilities for using them have not been explored. However, the Navy is still appointed in the national contingency plan as a cooperating institution.

2.4 Response teams

Poland does not have a specialised response team for marine incidents involving HNS.

In case of an incident, there would be direct operational cooperation with the chemical response team from the Provincial State Fire Service units of the cities of Gdansk, Gdynia and Szczecin. This has been agreed between the SAR Service and the Commander of the State Fire Service and regional

SFS commanders of Gdansk, Olsztyn and Szczecin.

Poland does not have any training courses available in this field and exercises are rather rare. The last, small one was in 2005. Within the building of the National System for Detection and Warning of Hazardous Contamination (SWS) a national table top exercise was conducted in November 2007 (SWS exercises cover only communication and reporting procedures).

2.5 Scientific support

Poland does not have a specialised body which provides scientific advice on marine incidents involving HNS. In the frame of the National Contingency Plan there is an advising body. A Research Group is nominated in advance by the competent minister, and can be activated within the plan and the chemical (HNS) expert is a member of this team.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	No	Yes	No	Yes	No	Yes	No



Policy and Operational Capacity for HNS Marine Pollution: **PORTUGAL**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Direcção-Geral da Autoridade Marítima (DGAM), under the auspices of the National Maritime Authority and the Ministry of Defence.

The Direcção-Geral da Autoridade Marítima carries out, at national level, the coordination of the means of responding to marine pollution at sea and ashore. The DGAM has a central service with technical competence in the field of maritime pollution, the Serviço de Combate à Poluição no Mar (SCPM).

Portugal has ratified the OPRC-HNS Protocol 2000.

1.2 Risk assessment

Portugal has not made any risk assessment specifi-

cally aimed at marine transport of HNS.

1.3 Contingency planning

Portugal covers response to HNS in their national contingency plan.

The Portuguese Contingency Plan for combating pollution by oil and other harmful substances at sea and on coastline, called "Plano Mar Limpo" (Clean Sea Plan), includes Regional Emergency Plans and Local Emergency Plans.

1.4 Previous experience

Portugal has not been involved in any marine incidents with HNS.

idents involving HNS is very limited and mainly relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Portugal does not have any specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Portugal does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

Portugal does not have a specialised response team for marine incidents involving HNS.

Portugal does not have any training courses available in this field.

2.5 Scientific support

Portugal does not have a specialised body which provides scientific advice on marine incidents involving HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Portugal's capability for responding to marine inci-

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	No	Yes	No	No	No	No	No



Policy and Operational Capacity for HNS Marine Pollution: ROMANIA

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The Ministry of Environment and Sustainable Development is the competent authority responsible for the elaboration and updating of the national plan, and acts as the national contact point for international authorities.

Romania was assisted in the preparation of the National Contingency Plan for preventing and combating marine pollution by noxious and harmful substances (HNS) by the Matra Pre-accession Projects Programme. The counterpart and the project beneficiary were the former Ministry of Water and Environmental Protection, currently the Ministry of Environment and Sustainable Development.

The Constanta County Prefect or his legal replacement person, in accordance with the Plan of Rules, coordinates all activities which are connected to the national system, acting as a general coordinator for pollution incident response through an operative commandment for marine pollution, a structure for

planning and monitoring of actions for mitigation in case of marine pollution.

The Ministry of Transport, through the Romanian Naval Authority (RNA), has the lead role of the Maritime Division for at-sea spill response operations.

Romania has not ratified the OPRC-HNS Protocol 2000, but has initiated the necessary internal procedures in order to achieve this.

Romania is a contracting party of the Bucharest Convention.

1.2 Risk assessment

The risk assessment specifically aimed at marine transport of HNS is a part of the above mentioned PSO Pre-Accession Programme (PPA02/RM/7/7).

According to the National Contingency Plan, HNS cargo operators must have their own preparedness and response local plans. As per national legislation, all masters of vessels arriving in a Romanian maritime port have to send a notification to VTS,

which includes details about dangerous or polluting goods carried on board. All vessels that have dangerous goods on board when entering Romanian maritime ports are obliged to be assisted by an additional tug for manoeuvring.

1.3 Contingency planning

In 2006, Romania approved a common national contingency plan for both oil and HNS by the Governmental Decision 893/2006.

1.4 Previous experience

Romania has not been involved in any marine incidents with HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Romania's capability for responding to marine incidents involving HNS is very limited and relies on the same resources as for oil pollution response. As a conclusion of the Matra project PPA02/RM, when it is suitable and safe to do so, existing oil spill equipment is available to support a marine HNS spill.



Policy and Operational Capacity for HNS Marine Pollution: **ROMANIA**

2.2 Monitoring capacities

In Romania, the monitoring of marine incidents involving HNS is assured by some companies which are part of the Maritime Division. These companies have specialised teams and equipments for air and water monitoring. Visual monitoring of floating coloured substances and for locating floating packaged goods can be carried out from vessels.

Samples can be taken at sea and brought for analysis to the National Institute for Marine Research and Development "Grigore Antipa", the Rompetrol Quality Control or to the Environmental Protection Agency. The Rompetrol Quality Control also has mobile devices for air monitoring and for noise testing.

2.3 Specialised vessels

According to the risk assessment in project Matra PPA02/RM, it is not feasible for Romania to acquire specialised vessels at this time.

However, dedicated oil pollution vessels belonging to national agencies with responsibilities in pollution response or hired specialised vessels can be used in case of an incident involving HNS.

2.4 Response teams

The Romanian specialised response teams, belonging to national agencies with responsibilities in marine oil pollution response, can deal with marine incidents involving HNS.

As a part of the Matra PPA02/RM project, an introductory course on the National Contingency Plan was organised for the institutions with responsibilities in the National Plan application. Moreover, in 2004 and as a part of the same project, a complex exercise was organised to test the structure of the Oil and HNS Spill Emergency Response Plan. In November 2007 the exercise "Ovidius 2007", which included a HNS scenario, was organised by the Constanta County Inspectorate for Emergency Situations.

2.5 Scientific support

Some companies (private or state owned), as part of the Maritime Division, can provide scientific advice on marine incidents involving HNS.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	Yes	Yes	No	Yes	No	Yes	Yes



Policy and Operational Capacity for HNS Marine Pollution: **SLOVENIA**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Environmental Agency (EA) under the Ministry for Environment and Spatial Planning (MESp) and the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR) under the Ministry of Defence (MD). Slovenia has ratified the OPRC-HNS Protocol 2000. Slovenia is a contracting party of the Barcelona Convention.

1.2 Risk assessment

A risk assessment aimed at marine transport of HNS was conducted in 2005 as a part of the development of a new National Oil and Chemical Spill Contingency Plan for Slovenia (NOCSCP). The risk assessment comprised hazard identification, hazard analysis and sensitivity analysis.

1.3 Contingency planning

Slovenia does not specifically cover response to

HNS in their national contingency plan. The new National Oil and Chemical Spill Contingency Plan for Slovenia (NOCSCP) will cover also response to incidents with HNS in the marine environment, but has not yet been implemented.

1.4 Previous experience

Slovenia has not been involved in any marine incidents involving HNS.

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Slovenia's capability for responding to marine incidents involving HNS is very limited and mainly relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Slovenia does not have any specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Slovenia does not have any specialised vessels for dealing with incidents involving HNS.

2.4 Response teams

Slovenia does not have a specialised response team for incidents involving HNS in the marine environment. Slovenia does not have any training courses available in this field.

2.5 Scientific support

Slovenia does not have a specialised body which provides scientific advice on marine incidents involving HNS based on a regular contract. Expert support is available at the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR). Non-formal cooperation is established with the Faculty of Maritime Studies and Transport (University of Ljubljana), which has expert and simulation capacities (Transas – PISCES simulator) for incidents involving HNS in the marine environment.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **VERY LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	Yes	No	No	No	No	No	Yes



Policy and Operational Capacity for HNS Marine Pollution: **SPAIN**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution at sea involving HNS is the Maritime Authority: The Directorate General of the Merchant Marine (DGMM), part of the Ministry of Transport and Public Works.

On-site coordination and response are provided by the Sub-director General for Maritime Safety and Pollution Control under the Directorate General of the Merchant Marine through a network of Maritime Rescue Coordination Centres (MRCC). The MRCC at Madrid provides central control and establishes links with foreign coordination centres.

Spain is divided in 12 coastal Autonomous Regions with environmental competences. If marine pollution reaches the shore, they are the main responders. In the event of a serious spill, when more than one Autonomous Region is affected, the on-site coordination is jointly performed by the Ministry re-

sponsible in the Autonomous Region and the Government Delegate responsible for the area.

The Spanish Marine Safety Agency (SASEMAR), under the overall coordination of the DGMM, provides maritime SAR, marine pollution response at sea, and maritime traffic control services. Response to pollution at sea is provided by SASEMAR by coordination of air and sea resources and any other means from different administrations. SASEMAR has 22 regional MRCC centres around the coast.

Spain has ratified the OPRC-HNS Protocol 2000.

Spain is a contracting party of the Barcelona Convention, and is also an observer within the Bonn Agreement.

1.2 Risk assessment

Spain has not made any risk assessment specifically aimed at marine transport of HNS.

1.3 Contingency planning

Spain does not specifically cover response to HNS in their national contingency plan.

1.4 Previous experience

Spain has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
1987	CASON	A number of hazardous substances, including diphenyl methane diisocyanate (MDI) ortho-cresol, aniline, and sodium

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

Spain's capability for responding at sea to marine incidents involving HNS is rather limited and mainly relies on the same resources as for oil pollution response.

2.2 Monitoring capacities

Spain does not have any specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Spain has two new multipurpose vessels (with a bol-



Policy and Operational Capacity for HNS Marine Pollution: **SPAIN**

lard pull of 234 MT) named CLARA CAMPOAMOR and DON INDA, which have pressurised bridges and gas detector systems for HNS.

2.4 Response teams

Spain does not have a specialised response team

for marine incidents involving HNS.

2.5 Scientific support

Spain does not have a specialised body which provides scientific advice on marine incidents involving HNS.

For remote product information, the DGMM has recently signed an agreement with the Spanish Chemical Industry Association (FEIQUE) on voluntary cooperation between the chemical industry and the national competent authorities.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **LIMITED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	No	No	Yes	No	Yes	No	No

Policy and Operational Capacity for HNS Marine Pollution: **SWEDEN****I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS****1.1 Competent authority**

The competent authority for dealing with marine pollution involving HNS is the Swedish Coast Guard.

Sweden has ratified the OPRC-HNS Protocol 2000.

Sweden is a contracting party of the Bonn Agreement and the Helsinki Convention.

1.2 Risk assessment

Sweden has made a risk assessment including marine transport of HNS.

1.3 Contingency planning

Sweden covers response to HNS in their national contingency plan.

1.4 Previous experience

Sweden has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
2000	MARTINA	Hydrochloric acid

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS**2.1 Response capability**

Sweden's capability for responding to marine incidents involving HNS is based on a number of emergency responders, specifically trained to deal with marine pollution from HNS.

2.2 Monitoring capacities

Sweden has specialised equipment for monitoring of marine spills of HNS.

2.3 Specialised vessels

Sweden does not have any specialised vessels for dealing with marine incidents involving HNS.

Several of the oil response vessels have an over-pressure system and a special gas filter for use in hazardous atmosphere.

Sweden has ordered three new multipurpose vessels with emergency towing capacity. The third one, expected to be delivered in 2009, will be classified as a chemical recovery vessel.

2.4 Response teams

The Swedish Coast Guard (SCG) have specialised response teams for marine incidents involving HNS, consisting of 70 emergency responders trained for water diving, fire fighting and chemical spill response.



Policy and Operational Capacity for HNS Marine Pollution: **SWEDEN**

The SCG also has a contract with six municipal fire brigades along the coastline, each of which can provide a team of six fire fighters that are specially trained for HNS response at sea.

Sweden has training courses available in this field, both internally within the SCG and through the Swedish Rescue Services Agency.

2.5 Scientific support

Sweden does not have a specialised body which provides scientific advice on marine incidents involving HNS.

III. SUMMARY

OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **SPECIALISED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Yes	Yes	Yes	Yes	Yes	No	Yes	No



Policy and Operational Capacity for HNS Marine Pollution: **UNITED KINGDOM**

I. POLICY AND PREPAREDNESS FOR MARINE POLLUTION INVOLVING HNS

1.1 Competent authority

The competent authority for dealing with marine pollution involving HNS is the Maritime and Coastguard Agency.

The United Kingdom has not ratified the OPRC-HNS Protocol 2000. The UK is considering legislation to achieve the objectives stated in the HNS Protocol and are drafting a methodology for this. The UK hopes to accede to the OPRC-HNS Protocol 2000 in the near future.

The United Kingdom is a contracting party of the Bonn Agreement.

1.2 Risk assessment

The United Kingdom has carried out a substantive risk assessment with respect to the marine transport of HNS in the UK Pollution Control Zone. That work presents quantitative estimates of the risks of spills of bulk chemicals from chemical tankers in UK waters. The estimates show the geographical distribu-

tion of the risk broken down by accident type, spill size, pollution hazard and behaviour when released. Estimates are also provided on the geographical distribution of gas carrier accidents in UK waters, broken down by accident type.

A further risk assessment into the fate, behaviour and impact of HNS in the marine environment is currently underway. That work will deliver a fate and effects model for higher risk HNS allowing responders to achieve an understanding of the behaviour of HNS spilt into the sea and the subsequent effects of generic HNS on the environment given specific prevailing conditions of water depth, sea energy conditions, wind speed and direction and other factors which may influence behaviour and impact. A guidance document will be produced to support the rationale of the model, the status of model algorithms, guidance on variable data input, interpretation of model output - including confidence levels.

1.3 Contingency planning

The United Kingdom details the response to HNS in their national contingency plan. The National Contingency Plan for Marine Pollution from Shipping

and Offshore Installations covers both oil and HNS.

1.4 Previous experience

The United Kingdom has been involved in the following marine incidents with HNS:

Year	Vessel	Substance
1999	ASCANIA	Vinyl acetate
1999	EVER DECENT	Sodium cyanide, potassium cyanide
2000	IEVOLI SUN*	Styrene, methyl ethyl ketone, isopropyl alcohol
2001	AB BILBOA	Ferrosilicon
2001	DUTCH NAVIGATOR	Hydrofluorosilicic acid
2002	WESTER TILL	Various dangerous goods
2003	JAMBO	Zinc sulphide
2006	ECE	Phosphoric acid
2007	NAPOLI	Range of packaged HNS

*The accident happened in French waters, but the United Kingdom was involved in the response.



Policy and Operational Capacity for HNS Marine Pollution: **UNITED KINGDOM**

II. RESPONSE TO MARINE POLLUTION INVOLVING HNS

2.1 Response capability

The United Kingdom’s capability for responding to marine incidents involving HNS is under development.

The United Kingdom resource pool for HNS marine response consists of three layers, where level two is made up of pre-contracted fire brigades (15 teams of 50 trained fire fighters each) and level three consists of a national HNS Response Team contracted from a private company.

2.2 Monitoring capacities

The United Kingdom has in its emergency response stockpile specialised monitoring and detection equipment for mobilisation in incidents involving marine spills of HNS. MCA contractors are available to deploy that equipment on scene when required during incident response.

2.3 Specialised vessels

The United Kingdom does not have any specialised vessels for dealing with marine incidents involving HNS.

2.4 Response teams

The United Kingdom has a contract in place at the na-

tional level to provide emergency HNS response teams through a private contractor. The contractor provides appropriate training and equipment for the response teams.

The United Kingdom has HNS training courses readily available through its contractor.

2.5 Scientific support

The United Kingdom has access to scientific and technical advice on marine incidents involving HNS through a contract with the National Chemical Emergency Centre (NCEC) as well as a number of call off contracts for specialist HNS advice.

III. SUMMARY

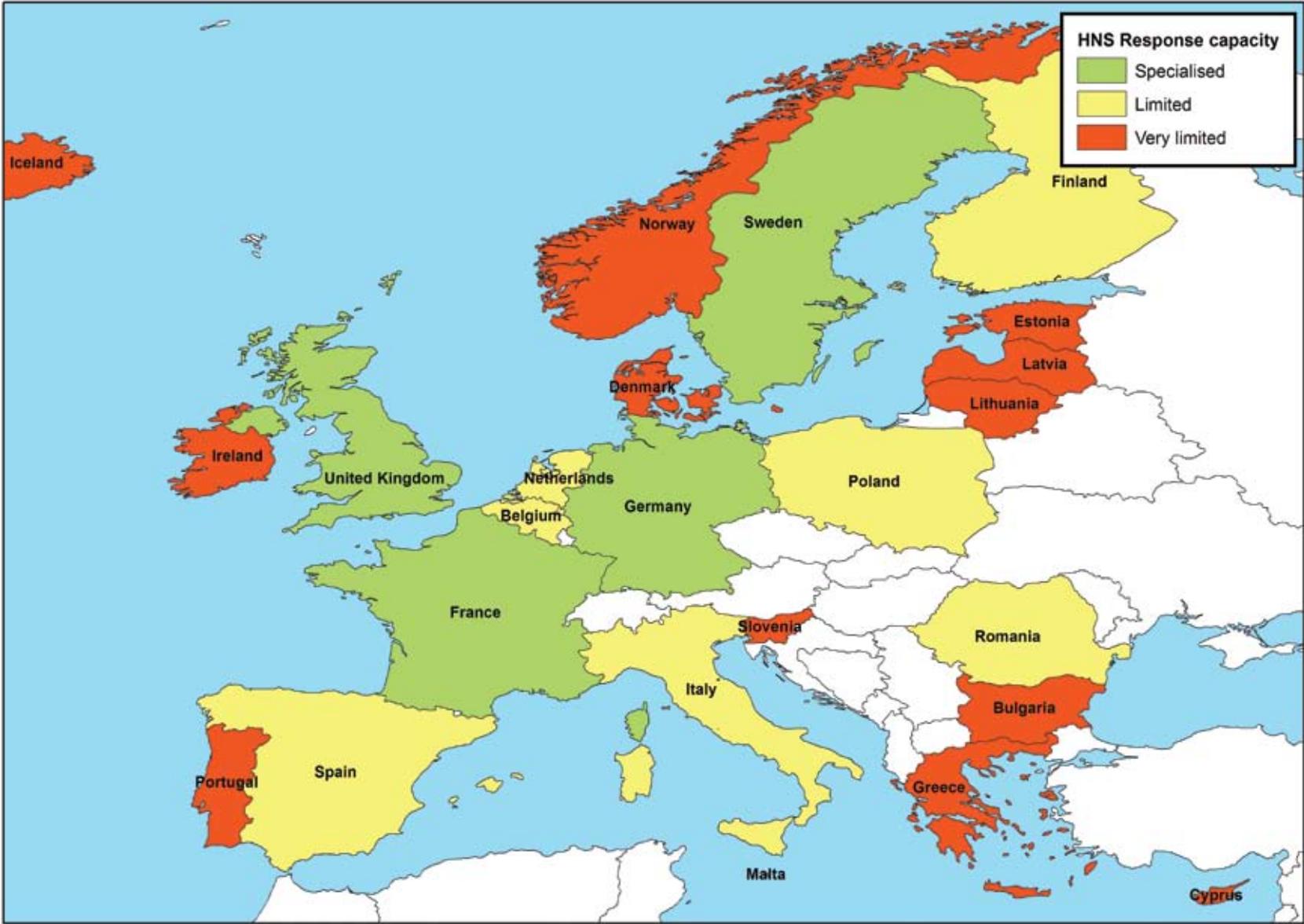
OVERALL LEVEL OF RESPONSE CAPABILITY TO DEAL WITH MARINE HNS INCIDENTS: **SPECIALISED**

Preparedness				Response capacities			
Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
No	Yes	Yes	Yes	Yes	No	Yes	Yes

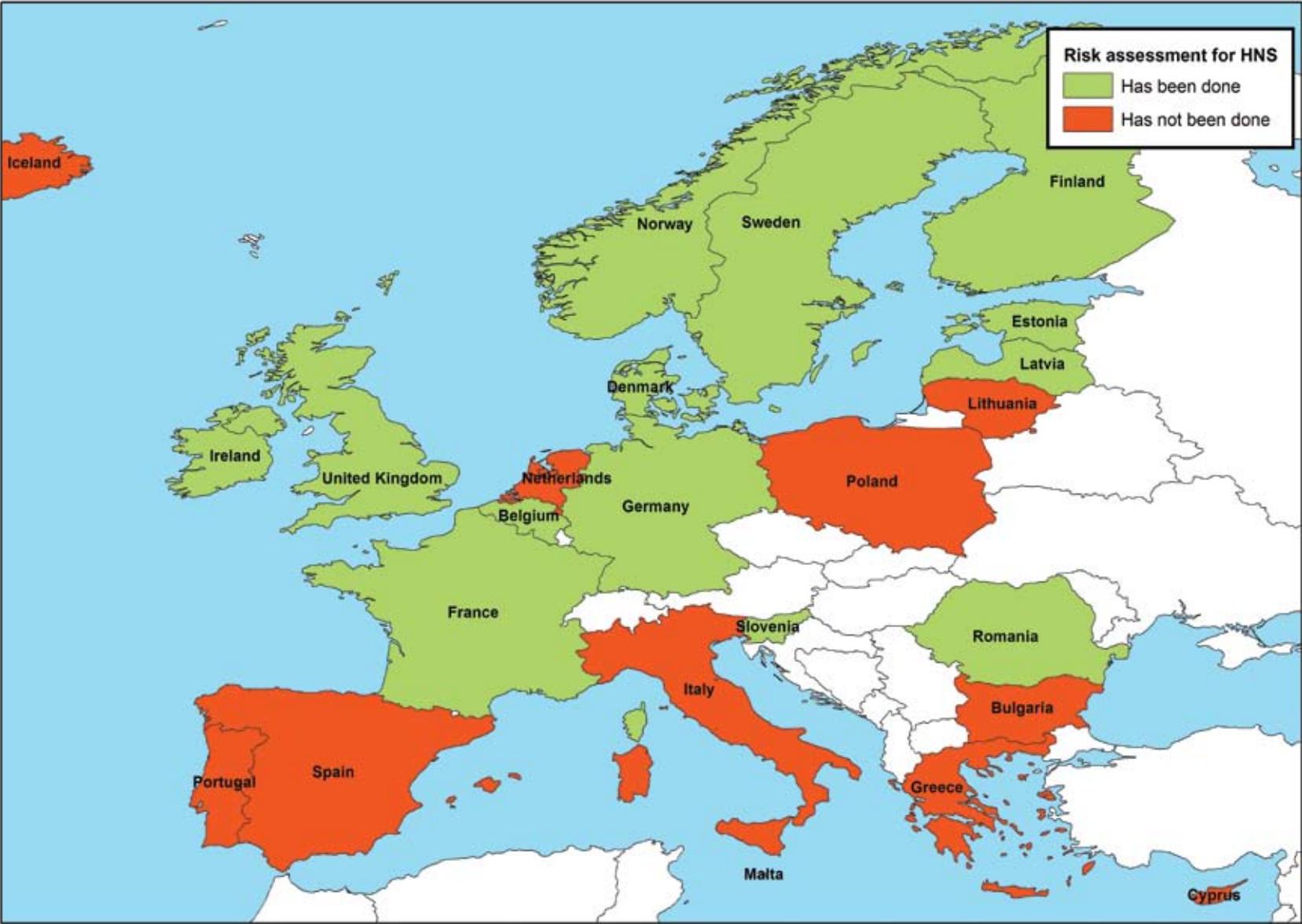
Overview

Country	Overall response capability to deal with HNS incidents	Preparedness				Response capacities			
		Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Belgium	Limited	No	Yes	No	Yes	Yes	No	No	Yes
Bulgaria	Very limited	No	No	No	No	No	No	No	No
Cyprus	Very limited	No	No	No	No	No	No	No	No
Denmark	Very limited	No	Yes	No	Yes	No	No	No	No
Estonia	Very limited	Yes	Yes	No	No	Yes	No	No	No
Finland	Limited	No	Yes	No	Yes	Yes	Yes	No	No
France	Specialised	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Germany	Specialised	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Greece	Very limited	Yes	No	Yes	No	No	No	No	Yes
Iceland	Very limited	No	No	No	No	No	No	No	No
Ireland	Very limited	Yes	Yes	No	No	No	No	No	No
Italy	Limited	No	No	No	Yes	Yes	Yes	Yes	Yes

Country	Overall response capability to deal with HNS incidents	Preparedness				Response capacities			
		Ratification of the OPRC-HNS Protocol 2000	HNS risk assessment conducted	National Contingency Plan covers HNS	Previous experience of marine HNS incidents	Monitoring capacities	Specialised response vessels	Specialised response teams	Specialised scientific support
Latvia	<i>Very limited</i>	No	Yes	No	Yes	No	No	No	No
Lithuania	<i>Very limited</i>	No	No	No	No	No	No	No	No
Malta	<i>Very limited</i>	Yes	No	No	No	No	No	No	No
Netherlands	<i>Limited</i>	Yes	No	No	Yes	Yes	No	No	Yes
Norway	<i>Very limited</i>	No	Yes	Yes	No	Yes	No	No	No
Poland	<i>Limited</i>	Yes	No	Yes	No	Yes	No	Yes	No
Portugal	<i>Very limited</i>	Yes	No	Yes	No	No	No	No	No
Romania	<i>Limited</i>	No	Yes	Yes	No	Yes	No	Yes	Yes
Slovenia	<i>Very limited</i>	Yes	Yes	No	No	No	No	No	Yes
Spain	<i>Limited</i>	Yes	No	No	Yes	No	Yes	No	No
Sweden	<i>Specialised</i>	Yes	Yes	Yes	Yes	Yes	No	Yes	No
United Kingdom	<i>Specialised</i>	No	Yes	Yes	Yes	Yes	No	Yes	Yes

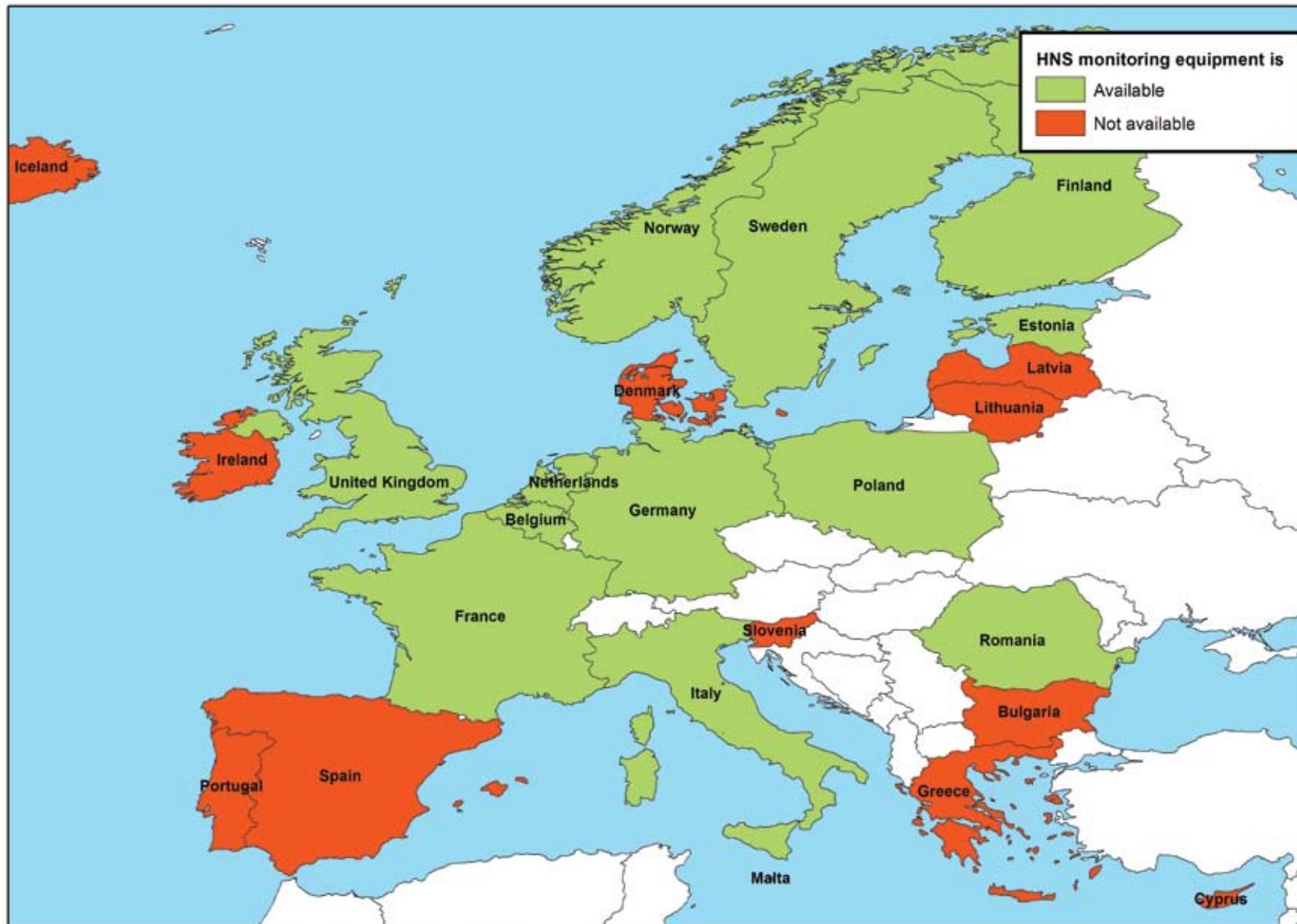




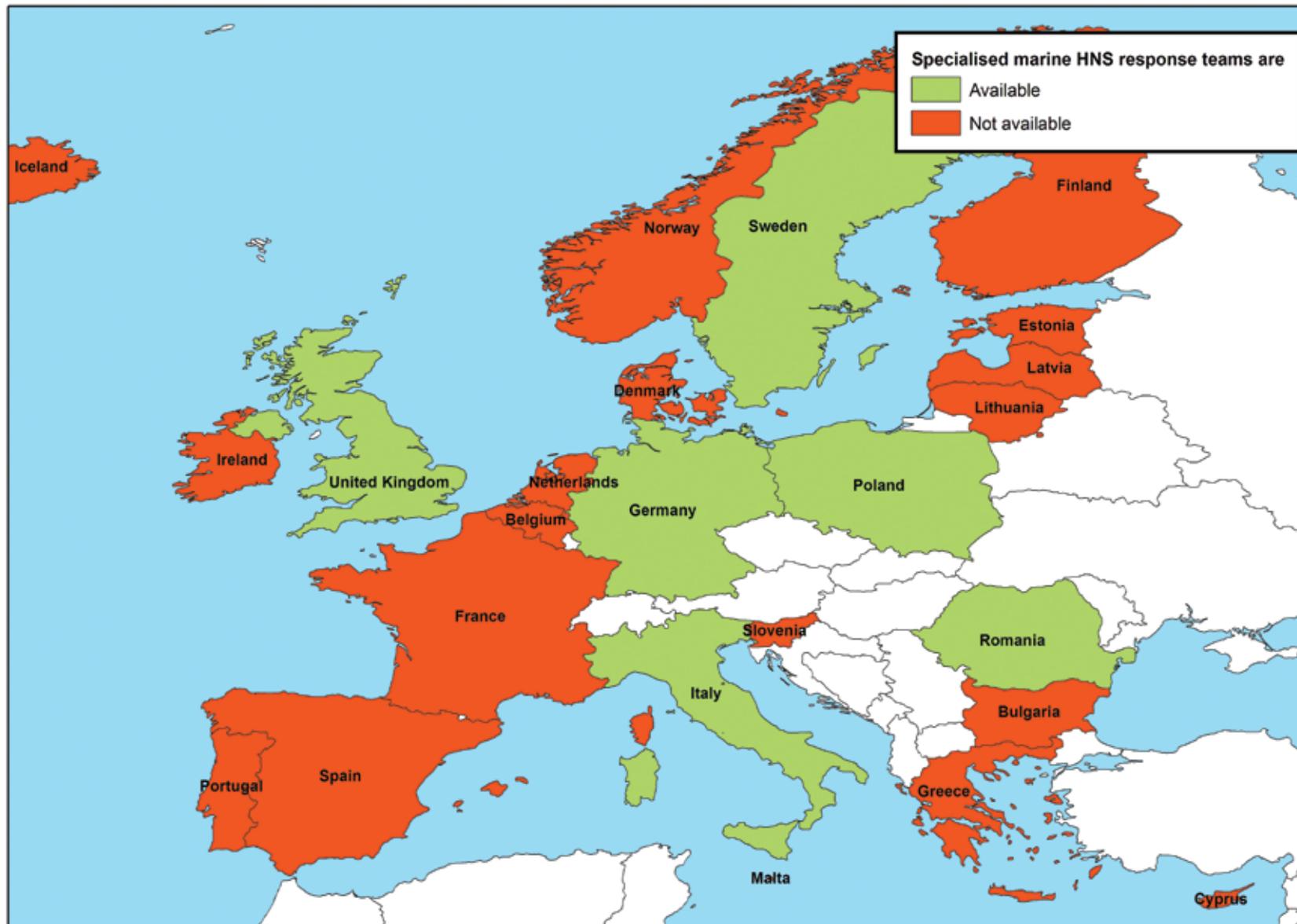














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