European Maritime Safety Agency

Workshop Report

Illegal discharges in the marine environment

4-5 June 2013, Lisbon

Contents

Introduction

In February 2011, the European Maritime Safety Agency (EMSA) organised a workshop entitled 'Enhancing the effectiveness of the law enforcement chain in combating illegal discharges'. The workshop brought together representatives from the main stakeholder groups involved in the illegal discharge enforcement chain in Europe: 1) operational actors responsible for spill detection and response, including CleanSeaNet users; 2) authorities responsible for vessel inspections in port; and 3) administrative and judicial enforcement authorities.

The workshop conclusions indicated that EMSA and the Member States should work together to support the enhancement of the illegal discharge response chain by hosting training events on related issues, holding more regular meetings to share best practice in relation to law enforcement of ship-source pollution regulations, and by facilitating an informal working group to draft an introductory overview and guidance document, *Addressing illegal ship-source pollution in the marine environment*.

For this workshop, held on 4-5 June 2013, 'Illegal discharges in the marine environment', EMSA has once again brought together Member State participants representing the same three stakeholder groups. The workshop was intended to establish a shared knowledge and understanding among key stakeholders from operational authorities, vessel inspection authorities, and administrative and judicial enforcement authorities, on the current status and likely future trends in the law enforcement chain for countering illegal discharges. As well as presentations from key authorities, there was an emphasis on sharing use cases in order to talk through a range of practical issues experienced by participants and highlight common issues. One of the main objectives of the workshop was also to present and obtain feedback from the Member States on the introductory overview and guidance document *Addressing illegal ship-source pollution in the marine environment* drafted by the working group, which was circulated in advance and discussed in a dedicated session.

Opening speech, Markku Mylly, Executive Director

Ladies and gentlemen,

It is a pleasure for me to welcome you here today. I would like to thank-you for taking time out of your busy schedules to attend this workshop, which addresses an issue of importance to us all.

As many of you know, this is the second workshop on this theme that has been held here at EMSA. The first workshop on 'Enhancing the effectiveness of the law enforcement chain in combating illegal discharges' was held in February 2011.

Over the past two years, since the last workshop, there have been a number of developments in the area of addressing illegal discharges in the marine environment. Many of these have taken place at national level and through Regional Agreements and other organisations; you will have ample opportunity to discuss these developments, and to share experiences during the course of the workshop. I will therefore limit my few words to tell you a little about some of the activities which are taking place at EMSA.

The European Maritime Safety Agency (EMSA) was established under in 2002 for the purpose of ensuring a high, uniform and effective level of safety. Amongst its tasks, the Agency has the role of providing technical assistance and support to both Member States and the Commission for the implementation of legislation in the field of prevention of pollution by ships.

EMSA's role in addressing issues related to unlawful discharges of ship-source pollution was reinforced in 2013, with the revision to the Agency's Founding Regulation, which states that EMSA should, as one of its core tasks, 'facilitate cooperation between the Member States and the Commission… in improving the identification and pursuit of ships making unlawful discharges in accordance with Directive 2005/35/EC.'

Directive 2005/35/EC has always provided a strong basis for EMSA's work on illegal discharges through, in particular, the development of CleanSeaNet. CleanSeaNet is the European satellite-based oil spill monitoring and vessel detection system. It has been operated by EMSA since it was established in 2007. The CleanSeaNet data centre has been hosted in house since 2011. Over 2,000 images are acquired per year and pollution alerts delivered to users in 26 coastal states.

Evidence from CleanSeaNet shows that there has been a trend towards an overall reduction in the number of spills detected in European waters. In 2008, the first full year of the service, almost 11 possible spills per million km^2 were detected. In 2012, just five years later, this figure had more than halved, to just 4.53 possible spills per million km^2. This shows that the work being done across Europe to deter polluters is having an effect, but also that there is still a lot more to be done.

Also on basis of Directive 2005/35/EC, and as an action identified during the workshop of 2011, EMSA has coordinated a Working Group for the drafting of a Manual on Combating Illegal Discharges in the Marine Environment. The Working Group comprised national representatives, and representatives of Regional Agreements, of the North Sea Network of Investigators and Prosecutors, of ENPRO, and of INTERPOL, and has met four times. You will all have had a chance to read this document by now, and tomorrow morning you will have an opportunity to give feedback and

suggest changes and improvements. Please think critically about this document could be made more useful to you in carrying out your functions and activities, and in enhancing the cooperation between different parties across the enforcement chain.

Another action identified for EMSA was the provision of more training in this area. In 2011, we held the first marine pollution surveillance training course for aerial surveillance operators, organised under the umbrella of the CTG-MPPR (the Consultative Technical Group on Marine Pollution Prevention and Response). This was followed in 2012 by a dedicated training on illegal discharges and MARPOL regulations. This year, we will hold two more CTG-MPPR marine pollution surveillance courses, one in August and one in October. For participants from third countries participating in the SafeMed Programme, there will also be a meeting on implementing the latest amendments to MARPOL Annexes I, II, III and V, and a seminar on ship source pollution.

In all these activities, we rely on Member States: to give feedback on what is useful and what is not, and to tell us how we can continue to support the Member States in preventing ship-source pollution across Europe. I hope that this workshop will prove as fruitful as the last one did, not only on an individual or organisational basis, but also developing a common understanding of how best to enhance the effectiveness of the law enforcement chain in combating illegal discharges and in defining actions for the future.

Presentation: EMSA information systems

A brief overview was given of the information systems hosted by EMSA which are most likely to be of use in addressing ship-source pollution: CleanSeaNet, SafeSeaNet, and Thetis. Information made available through these systems, even if not always explicitly designed for enforcement purposes, can be extremely valuable to authorities engaged in combatting illegal discharges. Combining information from more than one system reinforces the added value to be obtained.

Effective use of EU maritime information systems is essential for fast and structured information exchange on ship-source pollution incidents, vessel movements, and the condition of ships calling in EU ports. EMSA hosts and operates a number of EU information systems, of which CleanSeaNet, SafeSeaNet and THETIS are most relevant for detecting and providing supporting information on possible illegal discharges. The added value of the information systems is reinforced when they are used in conjunction with one another and information is integrated. However, none of the systems was developed for enforcement purposes, and it should be noted that there are both technical and legal limitations.

The Agency has set up and operates CleanSeaNet, the European satellite-based oil spill and vessel detection service. CleanSeaNet covers all European sea areas and, for a number of coastal States is the only remote sensing tool available to detect and monitor oil spills at sea. The service is based on the near real time analysis of synthetic aperture radar images in order to detect possible oil spills on the sea surface, and to detect possible polluting vessels associated with the spills. Vessel traffic information based on e.g. Automatic Identification Systems (AIS) data extracted from SafeSeaNet is used in CleanSeaNet to identify, whenever possible, the source of the spill.

When a possible spill is detected within the alert area of a participating coastal State, an alert is immediately sent to the relevant authorities in the coastal State. Enforcement actions by affected States may then include on site verification and follow-up, and/or inspection in the next port of call.

Synthetic Aperture Radar (SAR) emits electromagnetic pulses. The radar signal is then bounced back by sea ripples created by the wind. Oily film on the sea surface appears as a dark shape on the resulting satellite image, while vessels appear as bright spots. CleanSeaNet can provide in near real time a clear indication of the location and the dimensions of a possible floating pollution but cannot discriminate the type of pollution.

Directive 2002/59/EC, as amended, established a Community vessel traffic monitoring and information system. This system, SafeSeaNet, consists of a network of national maritime information systems, interconnected with a central system which was developed and is now operated and maintained by EMSA on behalf of the Commission. SafeSeaNet enables the 'receipt, storage, retrieval and exchange of information for the purpose of maritime safety, port and maritime security, marine environment protection and the efficiency of maritime traffic and maritime transport'. It enables the EU Member States, plus Iceland and Norway, to exchange information on vessel traffic and cargo movements. Notifications are sent by designated authorities in participating countries.

Mandatory information exchanged through SafeSeaNet consists of:

- Ship notifications (AIS and MRS - sent when ships are in mandatory reporting areas);

- Incident reports (Member State information submitted about accidents and incidents which occur at sea e.g. pollution reports [POLREP]);
- PortPlus notifications: Pre-arrival (72h - 24 hours), Arrival and Departure;
- Hazmat notification (information on dangerous and polluting goods on board ships - embedded in PortPlus).

EMSA has also been tasked to develop, in cooperation with Member States and the European Commission, a new information system, which will support the New Inspection Regime for Port State Control (PSC) and the requirements of Directive 2009/16/EC on port State control. The system, THETIS, supports the implementation of New Inspection Regime and assists Member States with harmonization of PSC procedures and execution through centralized storage and distribution of reports. The requirements stemming from Directive 1999/35/EC introducing an inspection system for RoRo ferries and High Speed Passenger craft is also catered for. The system handles similar information from the two non-EU members of the Paris MoU (Canada and Russia).

In summary, THETIS provides:

- an information system for Port state control and Ferry surveys,
- a tool for PSC inspectors to target ships and report inspection results,
- ship call management for operational and monitoring Member State obligations,
- a reference repository of information on ships connected to several internal and external databases,
- publication of information as per Directive and Implementing Rules,
- statistical analysis in real time.

The data in THETIS is collected under various EU provisions. Although the system is hosted and operated by EMSA, the Member States own the data, and there are strict limitations on data use and access to the system.

The mechanism by which the NIR targets ships for inspection is based on the ship risk profile (SRP), updated daily. A ship risk profile is based on criteria such as its type, age, flag, recognized organization, inspection history and notably, managing company. Consequently, the SRP determines the periodicity of inspection. In addition to the periodic inspections, additional inspections may be carried out in case of ‘overriding‘ or ‘unexpected factors’. THETIS also calculates the inspection share of the inspection commitment of each Paris MoU Member State.

Another important feature of THETIS is the processing of ship call information. The system receives ship arrival and departure information from SafeSeaNet. Connections have been established with Canadian and Russian equivalents of SafeSeaNet which allow THETIS to work as the central system of the Paris MoU. THETIS uses this ship call information to automatically indicate the ships due for inspection.

An example was given of the entire chain of information systems used in conjunction. On the 22 March 2013, a possible pollution was detected by CleanSeaNet in Croatian territorial waters. Based on information available in SafeSeaNet, the possible source was identified (MMSI number), and vessel track generated. An overriding factor was added to the THETIS system, which made an inspection in the next port of call (identified in THETIS based on SafeSeaNet information) mandatory. The inspection found evidence that illegal discharge of oily waste had taken place (oil residues in the

Oil Water Separator, and oil spots on starboard side hull), and therefore imposed a fine on the vessel.

Use cases on national and international cooperation

Introduction

During the morning of 4 June, the session on national and international cooperation comprised an examination of various use cases provided by four of the workshop participants illustrating the importance of structured and organised national and international cooperation for the successful prosecution of marine pollution regulation offenders.

Each of the four presenters gave a short introductory presentation, presenting the basic facts of the case and the initial actions taken. The participants then formed four working groups (of 18-20 participants), each of which discussed one of the cases in detail for an hour. The participants had a chance to exchange views and opinions, and to assess the various enforcement options, bringing to bear their different national and professional experiences. The groups discussed: what type of cooperation would be effective (within countries and between countries); the advantages and disadvantages of the different cooperation structures and tools; legal and/or practical constraints or limits within the respective institutional frameworks; and possible improvements.

The working groups met again in plenary after the coffee break to present their main conclusions and share lessons learnt. The presenters then gave a short conclusion, stating how each case was finally resolved, what the main 'real life' problems were from their perspective, and what the post-case actions were, if any.

Case study A

On the night of 21-22 November 2010 a Frontex aircraft, operated by Sweden, detected a possible oil spill of over 12 nm in Greek territorial waters. The aircraft, which carried infra-red, SLAR and AIS, first detected the slick at 23:07 UTC, and made subsequent passes over the slick, with a third and final pass at 03:14 UTC. The aircraft noted that, via AIS, they were able to identify the vessel Hafez at the end of the slick. There was no slick in front of the vessel.

The Hafez was in transit to Limassol, Cyprus, with an ETA of 7:00 on 22 November. On 25 November, Cyprus received a request from Greece to investigate the vessel. With the request, Greece included a faxed copy of the Frontex aircraft report; the quality of photos received was poor.

Cyprus undertook a detailed Port State Control inspection on 25-26 November. During interviews, the crew denied having discharged illegally. The inspection found several deficiencies, including two detainable items (improperly fitted 3-way valve for measuring 15 ppm discharge; STCW training requirements). In addition, the ORB was filled in incorrectly, and the Chief Engineer was not properly trained and had a false certificate of competency. The vessel was detained, and released when deficiencies were rectified and the Chief Engineer was replaced. No fines were imposed, only Port State Control related fees.

The flag State (Syria) and the requesting State (Greece) were informed of the findings of the PSC inspection. Included in the report sent to Greece were: the overall investigation report and main findings; a copy of the PSC report; copies of oil record book entries; copies of other relevant information such as bridge log book entries, IOPPC certificate, bunker delivery receipts, etc.

There has been no feedback on whether Greece also began a case against Hafez.

From the perspective of Cyprus, it was noted that: 1) it would have been useful if more information had been available relating to the oil spill; 2) oil samples would have helped the case advance; 2) better communication and exchange between the state parties involved could have facilitated the case.

Case Study B

At 04:16 UTC on 4 October 2009, a Spanish remote sensing aircraft detected at night an oil spill connected to a ship located inside the French environmental protection zone (EPZ), approximately 180 nautical miles south-east of the port of Marseille. The spill was documented by SLAR and scanner IR.. The vessel was identified using AIS as the Tunisian-flagged Ro-Ro carrier *Carthage*, destined for Marseille as next port of call.

The Spanish flight was conducted in the framework of an international operation, OSCAR-MED, a pollution control operation of REMPEC. All the flights departed from Hyères. The operational centre, located at Hyères, received information from the aircraft after landing, and sent the pollution report to the French MRCC in charge and to the prosecutor at Marseille (specific jurisdiction dedicated to pollution offense in the Mediterranean). An investigation was requested by the prosecutor, which was conducted by the inspection centre in charge of Paris MoU.

Following reports from the inspectors and investigators, the Marseille prosecutor decided to bring a case against the Carthage. The hearing took place in the court of Marseille on 19 September 2012, and the decision was pronounced on 5 December. The company was sentenced to a fine of €500,000 and the captain a fine of €150,000 (of which €125,000 was paid by the company). In addition, three environmental NGOs each received €2,500. The court decision was published in two papers. The case is being appealed.

For France, this case presents a number of interesting points. It was the first legal case in France which involved a pollution at night, and demonstrates the importance of having effective detection equipment and the importance of combining evidence. It also shows the importance of training aspects, and of having specific courts for dealing with cases such as these.

Case Study C

On 1 September 2004, a unit from the Belgian marine air surveillance forces, in flight over the North Sea, detected an oil spill in connection with a cargo ship, *Tor Belgia*. The spill was documented by SLAR and video, and the quantity was estimated (by colour code) to be a minimum of 1.4 and a maximum of 14 m^3. The discharge was located in the Danish Exclusive Economic Zone (EEZ). The Belgian air unit contacted Tor Belgia by radio and the duty officer on board confirmed all information but denied any discharge and stated, “we are not discharging”.

Tor Belgia was on a route from Gothenburg, Sweden, to Ghent in Belgium, and was estimated to arrive in port the following morning (2 September). The vessel was owned and managed by a Norwegian company, but registered in Sweden and sailing under a Swedish flag. The Captain was Swedish and the Chief engineer was Norwegian. The second and third engineers, as well as most of the crew members, were from the Philippines.

The Belgian aircraft continued the flight to their destination near Esbjerg in Denmark. The aircraft was part of an international North Sea cooperation operation (Tour d´Horizon). The aircrew

reported the detection back to the Belgian Maritime Authorities (MUMM), which contacted the maritime inspectors in Ghent to request a "Port State Control" inspection on the ship's arrival in port. Belgium wanted to take legal action conducting a criminal investigation at the vessels arrival to the port of Ghent but did not have jurisdiction.

On the evening of 1 September, the Belgian Maritime authority got in contact with the relevant Danish law enforcement authority to present the facts and to ask whether Denmark, as coastal state with possible jurisdiction, wished to make a request for legal assistance in criminal matters. The answer from Denmark the same night was negative, due to the limitations set out in UNCLOS for a coastal state to take action against a foreign vessel discharging in the EEZ of that state (Article 220, requires major damage to the coastline or related interests). Denmark however made a request to Belgium for a Port State Control inspection.

The Belgian official then contacted the relevant Swedish law enforcement authority to ask whether Sweden, as flag state, wished to make a request for legal assistance in criminal matters. The response from the Swedish prosecutor was negative.

On 2 September, Belgium therefore carried out a Port State Control inspection, but not a fuller criminal investigation.

The report from the Belgian observation and the report of the suspected violation, along with the record of the requests made from Belgium, reached the office of environmental prosecution in Gothenburg, Sweden, on 3 September.

The vessel *Tor Belgia* was at that time on its way back to Gothenburg. Sweden decided to open a Swedish criminal investigation, making arrangements for a full on board investigation in the port of Gothenburg. That was possible based on the report that, informally, was passed on to by e-mail from Belgium, and based on the unlimited nature of flag state jurisdiction.

The investigation, including interrogations on 4 September, was the first in a total of three inspections of the vessel which were undertaken.

Mainly based on the findings of the inspection on 4 September, together with the quality of the reports from the Belgian flight officers, the case was successfully concluded. The chief engineer was imposed a penalty fine of 4,500 Euro, based on failure to instruct and supervise the pumping operations on board the Tor Belgia resulting in an overboard pumping of about 5 m3 of oily bilge water. The owner of the ship was imposed with an administrative fine of 22 000 Euro, based on the above mentioned circumstances and the principle of strict liability.

A couple of particularly key points may be made about this case:

1. The strong position of the flag state is often considered to be a problem in relation to the relatively weaker position of coastal states. In this case however, the strong position of the flag state was a clear advantage in order to initiate the case.

2. The value of establishing quick channels of communication and cooperation which doesn´t get unnecessarily stuck in formal legal bureaucracy is notable. The role of the Belgian official in passing information from Belgium to Sweden was extremely important. This factor made it possible for

Sweden to conduct the necessary technical investigations without letting too much time pass from the time of the suspected violation. Once the preliminary evidence was secured, the transfer of official reports from Belgium to Sweden could then be carried out with due regard to more formal proceedings. If Belgium - from the beginning - had only used the standard and formal channels for transfer of legal proceedings, including translation etc., valuable time would have been lost, possibly resulting in no case being brought.

Case Study D

On 2 August 2009 at 21:30, a witness called the Norwegian Coastal Administration (NCA) and reported that there had been a discharge of oil in Geirangerfjorden fjord. Geirangerfjorden, is on the UNESCO World Heritage list, and the landscape features a range of supporting natural phenomena, both terrestrial and marine, such as submarine moraines and marine mammals.

Personnel from the NCA and fire fighters arrived at the location within a short time. They estimated the discharge to be 100 – 200 litres. Fire fighters and clean-up crew placed oil booms around the spill, and an aircraft surveyed the site to get a better view of the spill. On the 2 August, oil samples were taken and AIS tracks were checked to identify vessels in the area, or which had recently transited the area.

After the initial phase of the clean-up operation, notice was given by the NCA to the Emergency Preparedness Team at the Norwegian Maritime Authority (NMA), at 9:00 on 3 August. Port state controls were carried out on two ships which had passed the area at, or around, the time that the oil spill had been detected, ship A and ship B.

On 3 August a pilot also sent in a report regarding discharge of oil from ship B. According to the report, the pilot had contacted the Second Mate regarding his observation on 2 August, but nothing was done. After another 10 to 15 minutes, the pilot contacted the Staff Captain, and the Staff Captain called the engine room. The crew closed a valve but no further action was taken.

The NMA had not received a marine casualty report from the ship. Oil samples from the ship and the fjord were sent to SINTEF (Foundation for Scientific and Industrial Research) for analysis. A match was found with Ship B.

It was concluded that there had been a violation of MARPOL Annex 1, and moreover that there had also been a violation of Section 34 of the Norwegian Ship Security Act, which states that all discharges should be reported to the NMA immediately. The decision was made not to take a criminal case, but to impose an administrative fine for the violation.

A violation fine was issued to the shipowner, taking into account the following factors: the seriousness of the violation, whether or not the shipowner could have prevented the violation, whether or not the offence had been committed in order to promote the interest of the shipowner, whether or not the shipowner could have obtained any advantage by the offence, whether or not it was a repeated offence, and the shipowner`s financial capacity. The fine was 1.500.000 NOK (≈ € 200.000).

For Norway, the main observations were: that improved cooperation was needed with the police in cases which could potentially result in criminal proceedings; that it is sufficient to prove that oil

came from a vessel, it is not necessary to identify where on board; that sampling and AIS both had a role to play in this particular case.

Discussion in plenary

Each of the working groups discussed separately the cases presented to them, and explored options of what actions they could take given national or administrative structures in place. They then gave feedback in plenary on the individual use cases, and discussed more broadly the issues which had arisen.

Effective communication was seen by all groups as one of the key factors in successful enforcement. Good communication was a key success factor in the *Tor Belgia* case, exemplified by the proactive communication of the Belgian official, early exchange of informal information, and rapid contact between port, coastal and flag states. Poor communication on the other hand was clearly a disadvantage in the *Hafez* case, in which a delayed communication, and the lack of a clear and explicit request for particular information, impacted negatively on the capacity of Cyprus to conduct an investigation. Information exchange should be rapid and as complete as possible. Requests for information should be explicit about what sort of investigation is being requested, and what kind of evidence should be procured. To whatever extent possible, contacts should be made with counterparts in other countries to facilitate later informal exchanges of information. The importance of pre-established procedures and of templates was emphasised.

Another topical issue was what can be considered as evidence: what is needed and what is allowable under different legal systems. In almost all the discussions, issues related with the taking of samples were raised, which in some cases were seen to be useful, and in others were in fact counter-productive. The discussion on sampling was deferred to the session on the afternoon of 5 June. It was noted that AIS is frequently very useful: for identifying the vessel, for obtaining an accurate record of the location of the vessel, and for establishing next port of call. However, smaller vessels do not necessarily carry AIS transmitters, and the point was made that this could affect which pollution incidents are caught and followed up. The quality of information if it is to be transmitted was also stated as an important factor. It is more difficult for a port state to act on information passed to them, if the information is not clear (e.g. faxed photos may not have the same quality as digital images sent by email).

The issue of costs was also raised. In addition to fines, it was felt that, where legal systems permit, costs should also be recovered. There was general agreement that in many cases penalties are too low, and do not necessarily have a dissuasive effect on polluters or even cover the costs of investigating and bringing the case to court. It was felt that in countries where there are courts specialising in marine pollution offences there is more chance of pursuing a successful prosecution.

Use case on MARPOL Annex II

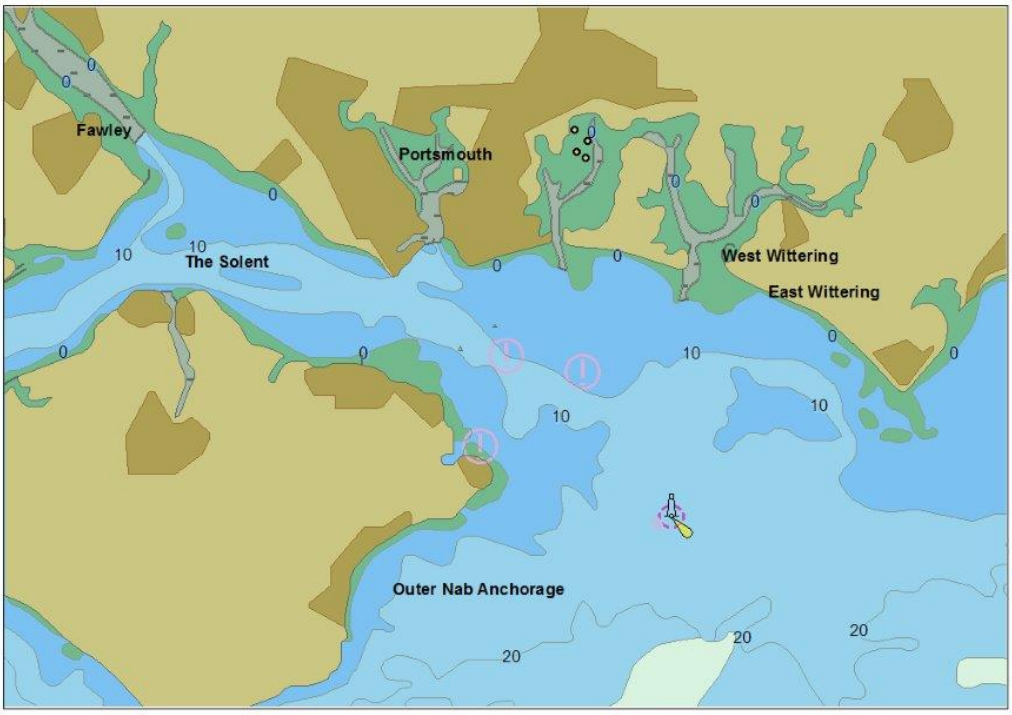
Introduction

As Member State enforcement authorities become more familiar with investigating and prosecuting illegal discharges of oil, and as the shipping industry becomes increasingly environmentally aware, attention is now turning to illegal discharges of liquid noxious substances. The European Union is one of the world's largest chemical producers, and seaborne transportation of other noxious liquid substances is also common. There have been a number of cases reported recently of discharges such as palm oil and polyisobutene (PIB). It was therefore considered important to address this issue during the workshop.

Session 2, an analysis of a MARPOL Annex II use case based on the 'Pretty Time', was coordinated by the UK participants. A short introductory presentation of 10 minutes provided the initial facts of the case. Participants then separated into four working groups to discuss whether and how they would initiate investigations in such a case. At regular intervals, additional key information on subsequent findings was given, in the order in which this actually occurred during the case in question. Participants discussed what impact this new information would have on their actions. The groups were also given an opportunity to discuss more generally their concerns regarding Annex II substances.

In plenary, each of the groups gave feedback on the main findings/points of interest. There was a short conclusion from the UK on how the case was finally resolved, and on the points which were of most interest when actually investigating the case.

Pretty Time case



During the night of 10-11 January 2011, yellow waxy balls of an unknown material washed ashore on the beaches of East and West Wittering, east of Portsmouth, UK. Samples were collected by the UK's Environment Agency. Examination of the waxy balls by the Environment Agency Laboratories revealed that it was Crude Palm Oil. The Counter Pollution section of the Maritime and Coastguard Agency (MCA) were informed, but no other sections were, as no information was available as to the possible source.

On 11 January the Panamanian registered tanker vessel PRETTY TIME was subject to a routine Port State Control inspection at Fawley refinery, west of Portsmouth. However, the inspection was not completed, as the vessel was rejected by the refinery and left for anchorage in the Solent.

Subsequently the MCA received information of problems on board the PRETTY TIME. The vessel, still anchored in the Solent, was boarded and inspected by MCA Surveyors on 19 January 2011. The inspection showed there had been problems in the handling of a previous cargo of Palm Oil. The cargo logbook showed that after discharging a cargo of Palm Oil in Hamburg the ship had continuously discharged tank washings whilst at anchor for two days in the German sector of the North Sea. Small yellow waxy balls of material were seen scattered about the deck. Samples of the cargoes were taken and sent for testing by Environment Agency Laboratories. Copies of the ship's logs and documentation were also taken.

Further investigation of the available evidence suggested that there could be a case against the Pretty Time:

- A backtrack analysis showed that the Palm Oil that had washed up on the beaches of the Solent on the 10-11 January 2011 originated from the Outer Nab Anchorage.
- The PRETTY TIME logs showed the vessel was at the Outer Nab Anchorage at the estimated discharge time and that tank cleaning was in progress.
- The laboratory analysis indicated that the samples taken from the beaches and Pretty Time were the same.
- The manner and form in which the substance arrived in the beaches indicated that the tank cleaning residues had not been disposed of in the approved manner.
- There was initially one other possible suspect, which was quickly eliminated.

On 24 January, the MCA received information that the vessel, again anchored at the Outer Nab Anchorage, might sail soon for Norway.

On 25 January 2011, a summons was issued, via the Master, on the ship owners, a company based in Singapore. They were charged with MARPOL offences and were to appear in court on 28 February 2011. They appeared and pleaded not guilty. A trial was set for 5 December 2011.

The owners denied that the pollution originated from Pretty Time. They disputed the laboratory tests that had been done on the samples (for dioxins, hydrocarbons, fatty acids, triglycerides and carotenoids).

Following the trial, the judge found the Pretty Time guilty. The shipping company, Pretty Time Shipping, was ordered to pay a fine and costs totalling £95,000 (approximately €111,000 at 2011 rates).

Discussion in plenary

All groups had identified and discussed broadly the same actions to be taken when faced with pollution washing up on shore, and based on how the case then developed. The broad agreement on steps to be taken and the order in which different pieces of evidence should be secured shows that there is increasing harmonisation of approach to detection and investigation across Europe.

A number of general points regarding Liquid Noxious Substances were raised. In general it was felt that although most crew and ship owners and operators are very aware of MARPOL annex 1 regulations, and penalties which might be imposed when the regulations are violated, this is not the case with other annexes. This lack of awareness may be one of the reasons why violations occur, and more should be done to draw attention to the seriousness of the issue.

It was noted that MARPOL annex II pollution is often very difficult to detect, and in many cases is not visible on the sea surface. When an unknown substance washes up on shore, public health and safety concerns may lead to thorough investigation of the substance. However, when an unknown substance is seen floating on the sea surface far from the shoreline, the unknown nature of the substance might even be a deterrent to investigation; without any idea of what the substance might be, it could pose a risk for investigators and responders.

With regards to investigations of suspected violations, it was felt that it was useful to pursue criminal investigations and port State control investigations simultaneously. There should also be environmental inspectors on call 24/7, via a duty officer or central contact point. Another point

raised was that some systems have a choice of administrative or criminal sanctions for oil pollution cases, but only criminal sanctions for annex II substances, which may deter some administrations from taking on cases when the infringements are minor.

Presentation: the role of the UK's Department of Energy & Climate Change Offshore Environmental Inspectorate with regard to discharges from offshore oil and gas installations

A presentation was delivered by the UK on the work of the Offshore Environmental Inspectorate (OEI), part of the Department of Energy and Climate Change (DECC). The presentation covered the current United Kingdom Continental Shelf (UKCS) Offshore Oil and Gas Infrastructure; the Offshore Oil & Gas Regulatory Regime; permitted operational discharges; and the role of the OEI, including routine assessment, inspections, and reporting as well as incident response, investigations and enforcement in case of environmental incidents.

In the UKCS there are approximately 470 offshore oil and gas installations, of which about 200 hold permits for discharging oil and offshore chemicals. In addition, there are approximately 20-30 mobile drilling installations operational at any one time in the UKCS, which undertake approximately 60 drilling operations per year. There are currently 58 licensed operators in the UKCS, a number which has risen rapidly over the last 10-15 years.

There are a large number of environmental regulations applicable to offshore oil and gas operations. Of particular note for the OEI are the Offshore Petroleum Activities (Oil Pollution Prevention & Control) Regulations 2005 (OPPC), and the Offshore Chemical Regulations 2002 (OCR). It is an offence to discharge either oil or offshore chemicals to the sea, except as per the terms and conditions of an OPPC permit or ORC permit respectively. Any permit will state the manner in which oil or offshore chemicals can be discharged and in what quantities. All permitted discharges are reported and monitored through the Environmental and Emissions Monitoring System (EEMS), the environmental database of the UK oil and gas industry. Any release of oil or offshore chemicals to sea, regardless of quantity, is potentially an offence and must be reported to DECC.

The key functions of the OEI are:

- Assessment

This includes assessment of: oil discharge permit applications for the discharge of reservoir hydrocarbons to sea from drilling, production and decommissioning operations; Oil Pollution Emergency Plans for suitability, response, resources, etc and operators' environmental management system (EMS) status.

- Inspection

The OEI adopts a risk-based approach to offshore inspections in order to define priorities. Inspections undertaken include pre-spud (i.e. pre-drilling) and during drilling/production operations. The purpose of offshore inspections is to check compliance with regulations/permit conditions, to review operations, to ensure each operators EMS is robust and practised and to inspect the condition/management of specific areas with potential for environmental impact such as diesel bunkering stations, chemical storage facilities and training/competence systems.
All offshore operators in the UKCS are required by regulation to self-report any discharge outwith permit conditions or any release of oil or offshore chemicals. There may be occasions when a discharge of oil as a consequence of an activity regulated by a permit is made in such quantities or circumstances that it has the potential to affect the environment or other users of the sea, regardless of whether or not there has been a non-compliance with any permit condition. Under

these circumstances a Permitted Discharge Notification must be submitted. Aerial/satellite surveillance and whistleblowing are also means by which an environmental incident might be reported to the OEI. It was noted that the EMSA CleanSeaNet service is a valuable source of satellite images.

- Response

The OEI provide a 24/7 on-call response service. During environmental incidents, the OEI liaises with various involved parties (the Secretaries of State's Representative for Maritime Salvage and Intervention, the MCA, the operator, other regulatory bodies, press, etc.) as necessary.

- Investigation

Once an potential environmental incident has been identified a decision to investigate will be taken. To ensure consistency and proportionality this is decision is made in accordance with the published DECC OEI Enforcement Policy. Amongst other factors, the investigation will consider the size, scale and nature of a spill, the environmental impact, the location of incident, e.g. environmentally sensitive area, and the permit holders'/operators' past performance. Depending on the findings of the investigation, a number of enforcement options are available.

- Enforcement

All enforcement action is taken in line with the DECC OEI Enforcement Policy. This includes, in order of seriousness: a warning letter to the operator/permit holder, an enforcement notice detailing shortcomings to be remedied (operations continue), a prohibition notice detailing shortcomings to be remedied (operations suspended), prosecution, and finally revocation of permit.

Discussion in plenary

Various points were discussed in the plenary:

It was noted that due to shared infrastructure and co-mingled pipelines difficulties exist in the use of sea surface samples to identify the source of an oil release/discharge outwith permit conditions.

In the UK the level of any criminal fines which might be imposed is at the discretion of the court. The court will usually base the level of fine on an assessment of environmental damage. In the case of a significant incident the level of fine is unlimited. In general, and given the more limited nature of incidents which have been pursued in court, to date the criminal fines have usually been in the region of £2-50,000 (c. €2,500-60,000).

The distinction was made between installations maintained on location, which come under the jurisdiction of DECC, and installations en-route to location, which are considered vessels and therefore fall under the jurisdiction of the MCA.

With regard to surveillance, it was observed that increased cooperation with coordinated surveillance flights (e.g. Tour de Horizon flights) could be useful for monitoring the area. As the locations of UKCS installations are dispersed widely, increased swath coverage from CleanSeaNet images would be useful for monitoring purposes.

Review of the draft document: *Addressing illegal ship-source pollution in the marine environment*

Frederic Hebert, a member of the working group for drafting the document 'Addressing illegal ship-source pollution in the marine environment', introduced the document to the Workshop participants.

During the morning, participants were divided into four Working Groups to give detailed feedback on the draft. The groups then presented their main ideas and comments in plenary, and discussed some of the more significant suggestions.

Participants had read the draft document in advance and had prepared a number of comments. These will not be presented in any detail here, as they are reflected in the final version of the document, *Addressing illegal ship-source pollution in the marine environment (version 1),* published on the EMSA website. While the discussions in each of the groups varied, the main areas covered were similar:

1. General approach
    - It was agreed that the document should be viewed as a living document, and should evolve over time in line with changes to legislation and organisations, and with the development of new tools and procedures.
    - The workshop participants rated the document highly, and feedback was positive.
    - It was recognised that the intention of the document had been to build upon existing documents, and it was felt that this approach had been respected and had resulted in a successful over all document.
    - There was consensus that existing material (e.g. detailed contact lists and updated reporting formats) should be maintained, as they are currently, at Regional level. The document should only link to these materials, as copying them would risk having different versions in circulation at the same time.
    - The scope of the document should be more explicit about what is not included as well as what is.
2. Structure
   The structure of the document was discussed, with the outcome that the document will now be presented in two parts. It was agreed that the order of some of the chapters should be changed.
3. Content
   There were numerous suggestions in relation to content, including some suggestions for additional content, sections to be expanded or reduced, updated references, and other alterations. These were in general entered directly into working versions of the manual or listed in group notes. These, along with any other input submitted by 21 June, will be reviewed by the Working Group, and changes will be made directly to the document.

During the plenary, a number of related issues were discussed. It was suggested that in future either an annex could be added, or a similar document produced, to address illegal discharges from offshore installations.

The issue of whether or not a database of cases from across Europe should be established was considered. It was concluded that, given the variety of different systems in place at national level and often sensitive nature of such information, it would be of limited use, and could potentially be difficult to populate. It was decided not to develop such a database. However, it was proposed that in the document, examples of concluded cases which demonstrate best practice in certain areas could be included. This could help illustrate how particular methods of cooperation or types of evidence can be successfully used.

It was suggested that developing and maintaining a list of useful contacts pertaining to sea areas where such contact lists do not already exist (Black Sea, Mediterranean Sea) could be beneficial. These lists would have to be maintained by the related Regional Agreements. It was decided to address this at the next Inter-Secretariat meeting.

Presentation: Sampling

The afternoon session on sampling was composed of various parts. Following a brief introduction to OSINet, there was a presentation on taking samples, followed by a presentation on sample analysis.

1. The Oil Spill Identification Network of Experts within the Bonn Agreement, OSINet

There was an initial presentation on OSINet, the Oil Spill Identification Network of Experts within the Bonn Agreement. This provided background information on the development of the OSINet network. The laboratories in the network were introduced, and information was provided regarding the annual ring test exercises and the Manuals which have been drafted by the group.

2. How to take samples at sea and on board

The presentation first gave an overview of techniques for taking samples at sea. The equipment needed for taking samples from thick slicks (polyethylene cornet and holder) is different to that needed for taking samples from thin slicks (Teflon pads). Information was then given on sampling procedures on board vesssels: what equipment to use, where to take samples, how to take them. Whether at sea or on board, it was noted that to avoid contamination: glass materials should be used; contact with plastic should be avoided; gloves should be clean; the Teflon should be inserted in the cap or in aluminium paper. Ideally, the samples should be primarily oil, not mixed with water. To transport samples, small quantities should be transported at a temperature of 4^{o}C, and in the dark. Samples should be sealed, and chain of custody should be ensured. Samples should be stored at a low temperature in a locked storage space.

3. From sample to conclusion

Three main reasons were given for taking samples in the context of spill investigation:

- To identify the nature of the product
- To combat illegal discharges by tracing a spill to a polluter as part of a criminal investigation.
- To collect evidence to support a claim from an insurance company
- To assist in providing information during particular special cases, for example to determine whether a spill originates from a ship or a pipeline (as in the case of the salvage of the shipwreck Vinca Gorthon) or whether oil is from an historical spill (the oil from Erika and Prestige can still be found washed up on beaches, ten years later).

Analysis should be undertaken by an accredited laboratory, in line with procedures conforming to CEN/TR 15522-2:2012. A different laboratory can be used in contra-expertise to confirm the results, if they use the same laboratory samples as the first lab. A qualified chemist, appointed or approved by the defendant or by the insurance company, may witness the critical parts of the analysis, including opening of the sealed sample container, sample preparation, data acquisition, processing of the data, approval of final report and conclusions.

The oil spill analysis will yield a variety of information, amongst which may be included: oil type, origin of oil (in case of crude oil), uniqueness, similarity of samples when samples have been taken at sea and on board (match, probable match, inconclusive, non-match), and information on the weathering of samples.

Oil spill identification to determine the similarity of two samples (at sea or on shore, and on board) consists of two levels. First level analysis involves the initial screening of all samples in a specific

case. This provides a general pattern or 'fingerprint', and can be used to sift out clearly non-matching samples. Second level analysis involves the detailed fingerprinting of the remaining samples. Up to 70 compounds representing different compound groups can be calculated. This provides the ratios of different compounds in the samples. Once the weathering effect has been taken into account, the ratios will either confirm or deny a match.

Roundtable discussion

The roundtable discussion began with the observation that although taking samples can be a very effective tool for addressing spills in ports and other confined spaces; in the high seas, samples can be much more difficult to collect. In addition, it was noted that it is difficult in practice to get a probable match; an 'inconclusive' or 'possible' match is more likely, and this can cast doubt on the case of the prosecution.

In relation to spills from platforms, there is the additional question of confidence when a sample is collected and transported by the same company that operates the platform. It was emphasized that sampling should not become a mandatory piece of evidence, as in many cases is simply not available, and even when taking samples is possible it is not always advisable (e.g. if other evidence is sufficient).

Given the information presented on transporting samples (ideally at 4^{o}C, and in the dark), a question was posed about how quickly samples degrade. In response it was stated that there was no exact response to the question, as it is dependent on many factors. However, it was stated that when oil and water are transported together, the sample will degrade much more rapidly than when oil is transported alone.

Despite the exhortation not to bring the sample in contact with plastics, it was confirmed that the sampling gloves provided in sampling kits can be used without detriment to the samples.

A discussion on costs revealed that costs of taking samples are borne by different administrations in different countries. In many cases, though not all, the costs of sampling are recovered in addition to the penalty awarded to the culprit if a conviction is secured.

Training in taking samples is usually done locally. There is currently no standard training programme delivered equally in countries across Europe.

HELCOM has recently produced a manual 'Oil sampling for the purpose of source identification'.

Presentation: MARPOL Annex V

The final presentation of the workshop was on MARPOL annex V: Garbage, which entered into force at the end of 1988. Ratification of annex V by States is voluntary. The annex has been revised extensively; the revised annex entered into force on 1 January 2013. Guidelines were published by MEPC.219(63) for the implementation of the revised annex V in 2012.

There are a number of problems related to disposal of garbage. Biological degradation can take anything from weeks to centuries, depending on the product in question. It seriously affects marine wildlife and birdlife, and can be unsightly and dangerous when it washes up on shore.

Garbage includes many categories of waste generated during the normal operation of a ship, such as food waste, cargo residues, cleaning agents and additives, animal carcasses, and all other garbage including plastics, synthetic ropes, fishing gear, plastic garbage bags, incinerator ashes, clinkers, cooking oil, floating dunnage, lining and packing materials, paper, rags, glass, metal, bottles, crockery and similar refuse. The revised annex V prohibits the discharge of all garbage into the sea, unless exceptions have been made.

In relation to cargo residues in the form of solid bulk cargo residues, the revised annex states that discharge of cargo residues is only permitted "…while the ship is en route and as far as practicable from the nearest land, but in any case not less than 12 nautical miles from the nearest land for cargo residues that cannot be recovered using commonly available methods for unloading. These cargo residues shall not contain any substances classified as harmful to the marine environment." In Special Areas, cargo residues can only be discharged if both the port of departure and the port of arrival are within the Special Area, and no adequate port reception facilities are available.

Some of the Regulations of annex V are operational, addressing the vessel crew, while some are related to equipment, and address shipyards and ship owners and operators. The Garbage Record Book was presented, as well as an overview of the new requirement to have in place a garbage management plan, and to have placards displayed on board.

In relation to police investigations regarding MARPOL annex V substances, it was noted that an investigation at the next port of call should be carried out when a) a vessel is seen to leave port with garbage on deck and b) when garbage is seen on the deck of ship during aerial surveillance. The Pollution Prevention Report used by the Maritime Police of the Netherlands was introduced, and a description was given of how it has been used in garbage investigations.

Review and closing address

The Head of Department C: Operations, Mr Leendert Bal, gave a closing address. He thanked the participants for their active contributions during the Workshop, and emphasized the important achievement of bringing the document: *Addressing illegal ship-source pollution in the marine environment*, to such an advanced stage.

Summarising some of the outcomes of the Workshop, Mr Bal emphasized that effectively combatting illegal discharges relies on cooperation between all stakeholders. There are many organisations involved at all stages of the enforcement chain, and active coordination between them is key to addressing pollution regulation violations in an holistic manner. After the initial detection, much effort is needed in order to bring a case forward. It is not always obvious who should be contacted following an initial detection and how information should then be passed on. By meeting together at this Workshop, and by contributing to the document on *Addressing illegal ship-source pollution in the marine environment*, participants are engaging with the issue of how to overcome these obstacles.

Although the scope of the document is limited to illegal ship-source pollution, the issue of offshore oil installations should also be addressed, and EMSA will look into how to provide support in this area.

Responsibility for many aspects of the law enforcement chain - from the levels of fine to be imposed, to the role of sampling as evidence - lie solely in the domain of Member States. Yet these national decisions may also have an impact across Europe, for example by influencing where substandard vessels might decide to pollute.

EMSA, particularly through the CleanSeaNet service, is supporting the deterrence of pollution in European waters. However, it is difficult to show the contribution of this service without proper feedback from Member States on whether they find the service useful and whether CleanSeaNet images are being used by the authorities in the law enforcement chain for addressing illegal pollution. EMSA also has a role in supporting Member States through enabling Member States to exchange best practice, as bringing people around the table for this Workshop has done.

Annex 1: Workshop Agenda

Day 1, 4 June 2013		
08.30-09.00	*Coffee and registration*	
09.00-09.10	Welcome and introduction	EMSA – Markku Mylly, Executive Director
09.10-9.50	Report on EMSA actions Using EU information systems to exchange information on illegal discharges	EMSA
1. Use cases: National and international cooperation		
09.50-11.20	Working Groups on Use cases of interest: forms of cooperation Hafez case – Group A Carthage case – Group B Tor Belgia case – Group C Geirangerfjorden case – Group D	 Nicos Attas (CY) Christian Cosse (FR) Jörgen Lindberg (SE) Kristine Breistrand (NO)
11.20-11.40	*Coffee break*	
11.40-12.30	Plenary	
12.30-14.00	*Lunch offered by EMSA*	
2. Use cases: MARPOL Annex II		
14.00-15.30	Use case of interest: MARPOL Annex II (Noxious Liquid Substances) Pretty Time case (All groups)	 Andrew Philips (UK)
15.30-16.00	*Coffee break*	
16.00-16.40	Plenary	
3. Challenges		
16.40-17.20	Discharges from platforms	Nick Woollacott (UK)
Day 2, 5 June 2013		
08.30-09.00	*Coffee available*	
4. Addressing illegal ship-source pollution in the marine environment		
09.00-11.00	Addressing illegal ship-source pollution in the marine environment – review of the draft document (All groups)	Frederic Hebert (REMPEC)
11.00-11.30	*Coffee break*	
11.30-12.30	Plenary	
12.30-14.00	*Lunch break*	
5. Challenges		
14.00-15.30	Sampling Techniques (presentations) Roundtable discussion	Julien Guyomarch and Kees Kooistra (OSINET)
15.30-16.00	*Coffee break*	
16.00-16.30	MARPOL Annex V (Garbage)	Hans Schouten (NL)
16.30-17.00	Review and Closing Address	EMSA – Leendert Bal Head of Operations

Annex 2: Workshop Participant List

Tine Claus	Maritime and River Police	BELGIUM
Steven Vandenborre	Federal Marine Environment Unit	BELGIUM
Jean-Pierre Vogt	Management Unit of the Mathematical Models of the North Sea (MUMM)	BELGIUM
Valeria Abaza	Commission on the Protection of the Black Sea Against Pollution	BLACK SEA COMMISSION
Veneta Georgieva	Executive Agency "Maritime Administration"	BULGARIA
Kostadinka Markova	Executive Agency "Maritime Administration"	BULGARIA
Estislav Ploshtakov	Executive Agency "Maritime Administration"	BULGARIA
Nicos Attas	Department of Merchant Shipping	CYPRUS
Martin John	Danish Maritime Authority	DENMARK
Lars Christensen	Admiral Danish Fleet	DENMARK
Bent Jørgensen	Royal Danish Airforce	DENMARK
Dario Cau	EMSA	EMSA
Catrin Egerton	EMSA	EMSA
Marc Journel	EMSA	EMSA
Olaf Trieschmann	EMSA	EMSA
Walter Nordhausen	EMSA	EMSA
Malgorzata Nesterowicz	EMSA	EMSA
Aarnout Salwegter	EMSA	EMSA
Ewald Brandt	ENPRO/Public Prosecutors Office Hamburg	ENPRO/GERMANY
Agnes Pilv	Ministry of the Environment	ESTONIA
Silva Prihodko	Environmental Inspectorate	ESTONIA
René Allik	Ministry of the Interior	ESTONIA
Mart Kabin	Police and Border Guard Board	ESTONIA
Tom Lundell	The Finnish Border Guard	FINLAND
Matti Latvalahti	Finnish Transport Safety Agency	FINLAND
Leila Suvantola	Public Prosecutors Office of Eastern Finland	FINLAND
Heli Haapasaari	Finnish Environment Institute (SYKE)/HELCOM	FINLAND/HELCOM
Nicolas Maire	Maritime Administration	FRANCE
Christian Cosse	French Customs	FRANCE
Sabine Reuland	Bundesamt fuer Seeschifffahrt und Hydrographie (BSH)	GERMANY
Kent Edlund	HELCOM/Swedish Coast Guard	HELCOM/SWEDEN
Snorre Greil	Icelandic Coast Guard	ICELAND
Svanfridur Karlsdottir	Environment Agency	ICELAND
Liliana Juc	INTERPOL	INTERPOL
Harvey Menezes	Dept. of Transport, Tourism and Sport – Marine Survey Office	IRELAND
Neil Forde	Marine Survey Office (National Administration)	IRELAND
Simona Gentile	Italian Coast Guard	ITALY
Sergio Mingrone	Italian Coast Guard	ITALY
Igor Kuzmenko	Lithuanian Navy	LITHUANIA
Gediminas Vasiliauskas	Ministry of Environment of the Republic of Lithuania, Klaipeda Regional Environmental Protection Department	LITHUANIA
Giedrius Mačernis	Ministry of Environment of the Republic of Lithuania, Klaipeda Regional Environmental Protection Department	LITHUANIA
Robert Vassallo	Authority for Transport in Malta	MALTA
Jeroen Ligtenberg	Rijkswaterstaat	NETHERLANDS

Johannes Maria Schouten	Netherlands Maritime Police Agency	NETHERLANDS
Lill Veronika Benjaminsen	Norwegian Coastal Administration	NORWAY
Per Kristian Haaland	Rogaland police district/public prosecutor	NORWAY
Kristine Breistrand	The Norwegian Maritime Authority	NORWAY
Ann Jakobsen	North Sea Network of Investigators and Prosecutors/Admiral Danish Fleet	NSN/DENMARK
Julien Guyomarch	OSINET/CEDRE	OSINET/CEDRE
Cornelis Kooistra	OSINET/Rijkswaterstaat	OSINET/NETHERLANDS
Piotr Nowosielski	Maritime Office in Szczecin	POLAND
Joanna Ignasiak	Ministry of Transport, Construction and Maritime Economy	POLAND
Jaroslaw Bomba	Maritime Office in Gdynia	POLAND
Joana Jerónimo	Portuguese Maritime Authority Directorate General - Sea Pollution Response Directorate	PORTUGAL
João Ferreira Carvalho	Portuguese Maritime Authority Directorate General - Sea Pollution Response Directorate	PORTUGAL
Bárbara Dias	Directorate-General for Maritime Policy	PORTUGAL
Gonçalo Viegas	Lisbon Agreement/Directorate-General for Maritime Policy	PORTUGAL
Frédéric Hébért	REMPEC	REMPEC
Dan Ichim	Romanian Naval Authority	ROMANIA
Adrian Stancu	Romanian Naval Authority	ROMANIA
Dumitru Bucuresteanu	Romanian Naval Authority	ROMANIA
Lea Grubišič	Slovenian Maritime Administration	SLOVENIA
Jože Klemenčič	Slovenian Maritime Administration	SLOVENIA
Primož Bajec	Slovenian Maritime Administration	SLOVENIA
Berta Blanco	SASEMAR	SPAIN
Gerardo J. Vallejo	Dirección General de la Marina Mercante (Ministerio de Fomento)	SPAIN
María Goretti De La Fuente Sánchez	Dirección General de la Marina Mercante	SPAIN
Nina Andersson	Swedish Coast Guard	SWEDEN
Petra Strömberg	Swedish Coast Guard	SWEDEN
Magnus Clase	Swedish Prosecution, Environmental Crimes	SWEDEN
Jörgen Lindberg	Swedish Prosecution, Environmental Crimes	SWEDEN
Nicholas Woollacott	Department of Energy & Climate Change	UNITED KINGDOM
Kevin Elliott	Maritime and Coastguard Agency	UNITED KINGDOM
Andrew Healy	Maritime and Coastguard Agency	UNITED KINGDOM
Andrew Phillips	Maritime and Coastguard Agency	UNITED KINGDOM
James Spooner	Department for Transport	UNITED KINGDOM