



# OSPAR

COMMISSION

Background document on sanctions, penalties and fines issued by OSPAR and HELCOM Contracting Parties for waste disposal offences at sea



# OSPAR Regional Action Plan Marine Litter

Background document on Sanctions, penalties and fines  
issued by OSPAR and HELCOM Contracting Parties for waste  
disposal offences at sea

Actions 32, 33 and 38

## **OSPAR Convention**

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the “OSPAR Convention”) was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22 September 1992. The Convention entered into force on 25 March 1998. The Contracting Parties are Belgium, Denmark, the European Union, Finland, France, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## **Convention OSPAR**

La Convention pour la protection du milieu marin de l’Atlantique du Nord-Est, dite Convention OSPAR, a été ouverte à la signature à la réunion ministérielle des anciennes Commissions d’Oslo et de Paris, à Paris le 22 septembre 1992. La Convention est entrée en vigueur le 25 mars 1998. Les Parties contractantes sont l’Allemagne, la Belgique, le Danemark, l’Espagne, la Finlande, la France, l’Irlande, l’Islande, le Luxembourg, la Norvège, les Pays-Bas, le Portugal, le Royaume- Uni de Grande Bretagne et d’Irlande du Nord, la Suède, la Suisse et l’Union européenne

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## **Note**

This Background document was finalised in 2016 and reflects the situation at that time.

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# Glossary/Abbreviations

CP:	Contracting Party/Parties
EC:	European Commission
EMSA:	European Maritime Safety Agency
EIHA:	Environmental Impacts of Human Activities Committee (OSPAR)
ENPRO:	Network of Prosecutors on Environmental Crime in the Baltic Sea Region
EPA:	Environmental Protection Agency
GES:	Good Environmental Status
GT:	Gross Tonnes
HELCOM:	Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea
HoD:	Head(s) of Delegation(s)
ICG-ML:	Intersessional Correspondence Group on Marine Litter (OSPAR)
IMO:	International Maritime Organization
MARPOL 73/78:	International Convention for the Prevention of Pollution of Ships, 1973, as modified by the Protocol of 1978.
MARPOL ANNEX V:	Annex to the MARPOL Convention on regulations for the prevention of pollution by garbage from ships.
MEPC:	Marine Environmental Protection Committee
MoU:	Memorandum of Understanding
MS:	Member State
MSFD:	Marine Strategy Framework Directive
NSN:	North Sea Network of Investigators and Prosecutors
OSPAR:	Combination of Oslo and Paris Conventions
PRF:	Port Reception Facility ("any fixed, floating or mobile facility capable of receiving MARPOL residues/wastes from ships and fit for that purpose")
PSC:	Port State Control
RAP ML:	Regional Action Plan on Marine Litter
SGW:	Ship Generated Waste
UNCLOS:	United Nations Convention on the Law of the Sea

# Executive Summary

Annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL) aims to prevent pollution by garbage from ships and was last amended in 2011 and entered into force in 2013. According to the revised MARPOL Annex V regulations, it is principally prohibited to discharge at sea all kinds of garbage generated during the normal operation of the ship, with some exemptions, although the discharge of plastics into the sea was not permitted even before this revision. Annex V also establishes regulations regarding garbage treatment on board and keeping a garbage record book to document what happened to the garbage generated aboard (obligatory for ships exceeding 100 GT and/or certified to carry more than 15 passengers). OSPAR Contracting Parties are also Contracting Parties to MARPOL, and all have ratified MARPOL Annex V. Thus, a unified basis regarding the prevention of pollution by garbage from ships already exists. However, findings indicate that illegal discharge of onboard generated waste remains an issue.

OSPAR's Regional Action Plan for Marine Litter (RAP ML) has been agreed for the period 2014-2021. It contains 55 actions which aim to prevent and reduce inputs of marine litter in the North-East Atlantic from both land-based and sea-based sources.

Three of these actions address different aspects of the illegal discharge of onboard generated waste. Since these actions are closely interlinked it was decided that they should be treated together:

**Action 32** was to *"Identify best practice in relation to inspections for MARPOL Annex V ship generated waste, including better management of reporting data, taking into consideration the Paris MoU on port state control."*

**Action 33** sought to *"Seek dialogue with the Paris MoU to take the risk of illegal waste discharges into consideration for the prioritization of port state control inspections."*

**Action 38** focused on the task to *"Analyze penalties and fines issued by Contracting Parties for waste disposal offences at sea to highlight the differences, trends, problem areas and issues to relevant organizations, such as the North Sea Network of Investigators and Prosecutors."*

These actions contribute to Theme A of the RAP ML: Actions to combat sea-based sources under the sub-theme enforcement of international legislation/regulation regarding all sectors, and were led by Germany, with assistance from Seas at Risk, the North Sea Network of Prosecutors, the OSPAR and HELCOM Secretariats. The RAP ML for the Baltic Sea included comparable actions and so, with Germany as action lead in both Regions, there was cooperation in the delivery of related outputs.

This Background Document explores the processes and practices related to detecting and sanctioning MARPOL Annex V ship generated waste, including inspection and control regimes as well as the management and exchange of data/information on (potential) offenders. In addition, it concentrates on the analysis of penalties and fines issued by OSPAR and HELCOM Contracting Parties for waste disposal offences at sea to highlight the differences, trends, problem areas and issues to relevant organizations and authorities involved in the process. Information was collected by means of a questionnaire to Contracting Parties and accompanied by reviewing the existing legal framework as well as the relevant literature.

# Récapitulatif

L'Annexe V de la Convention internationale pour la prévention de la pollution marine par les navires (MARPOL) vise à prévenir la pollution par les ordures des navires. Elle a été modifiée en 2011 et est entrée en vigueur en 2013. Selon les règles révisées de l'Annexe V de la Convention MARPOL, il est principalement interdit de rejeter en mer tous les types d'ordures produites au cours de l'exploitation normale du navire, à quelques exceptions près, bien que le rejet de matières plastiques dans la mer n'ait pas été autorisé avant même cette révision. L'Annexe V établit également des règles concernant le traitement des déchets à bord et la tenue d'un registre des déchets pour documenter ce qu'il est advenu des déchets produits à bord (obligatoire pour les navires de plus de 100 GT et/ou certifiés pour transporter plus de 15 passagers). Les Parties contractantes d'OSPAR sont également des Parties contractantes de MARPOL, et toutes ont ratifié l'Annexe V de MARPOL. Ainsi, une base unifiée concernant la prévention de la pollution par les déchets des navires existe déjà. Cependant, les résultats indiquent que le rejet illégal de déchets générés à bord reste un problème.

Le Plan d'action régional d'OSPAR pour les déchets marins (RAP ML) couvre la période de 2014 à 2021. Il comporte 55 actions visant à prévenir et réduire les apports de déchets marins dans l'Atlantique du Nord-Est, qu'ils soient d'origine terrestre ou marine.

Trois de ces actions portent sur différents aspects du rejet illégal de déchets produits à bord. Comme ces actions sont étroitement liées, il a été décidé de les traiter ensemble :

**Action 32** : « Déterminer la meilleure pratique pour les inspections réalisées dans le cadre de l'annexe V de MARPOL sur les déchets d'exploitation des navires, notamment une meilleure gestion des données notifiées en prenant en compte le mémorandum d'entente de Paris<sup>1</sup> sur le contrôle par l'Etat du port. »

**Action 33** : « Tenter d'établir un dialogue avec le mémorandum d'entente de Paris afin de prendre en compte le risque de rejets illicites de déchets pour la priorisation des inspections de contrôle par l'Etat du port. »

**Action 38** : « Analyser les pénalités et les amendes imposées par les Parties contractantes en cas d'élimination des déchets en mer afin de mettre en évidence les différences, les tendances, les zones et questions présentant des problèmes pour les organisations pertinentes, telles que le réseau des procureurs et enquêteurs de la mer du Nord. »

Ces actions contribuent au Thème A du RAP ML : Actions de lutte contre les déchets marins d'origine marine dans le cadre du sous-thème « mise en œuvre/mise en vigueur efficaces de la législation/réglementation internationale » dans tous les secteurs. Les actions ont été menées par l'Allemagne, avec l'aide de Seas At Risk, du Réseau des Procureurs et enquêteurs de la mer du Nord, et des Secrétariats d'OSPAR et d'HELCOM. Le RAP ML pour la mer Baltique comprenait des actions comparables et donc, avec l'Allemagne comme chef de file des actions dans les deux régions, il y a eu une coopération dans la livraison des résultats connexes.

Le présent document de fond étudie les processus et pratiques liés à la détection et à la sanction des déchets générés par les navires de l'annexe V de MARPOL, y compris les régimes d'inspection et de contrôle, ainsi que la gestion et l'échange de données et d'informations sur les contrevenants (potentiels). En outre il est axé sur l'analyse des amendes et pénalités et amendes émises par les Parties contractantes OSPAR et HELCOM pour les infractions d'élimination des déchets en mer afin de mettre

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<sup>1</sup> Mémorandum d'entente de Paris sur le contrôle des navires par l'Etat du port

en évidence les différences, les tendances, les domaines problématiques et les questions aux organisations et autorités concernées impliquées dans le processus. Les informations ont été recueillies au moyen d'un questionnaire adressé aux parties contractantes et accompagné d'un examen du cadre juridique existant ainsi que de la littérature pertinente.

# 1 Introduction

## 1.1 Illegal discharges from ships and MARPOL Annex V

*“The disposal into the sea of all plastics, including but not limited to synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products which may contain toxic or heavy metal residues, is prohibited.”*

(Regulation 3 of the revised MARPOL Annex V)

The United Nations Convention on the Law of the Sea (UNCLOS) obliges its state parties to cooperate in order to establish international rules and standards to prevent, reduce and control pollution of the marine environment from vessels. These norms and standards are set by the MARPOL Agreement.

Annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL) aims to prevent the pollution by garbage from ships and was last amended in 2011<sup>2</sup>. The new stricter rules entered into force 2013 (already before the revision the discharge of plastics into the sea was not permitted). According to the revised MARPOL Annex V regulations, it is principally prohibited to discharge at sea all kinds of garbage generated during the normal operation of the ship, with limited exemptions for each kind of waste<sup>3</sup>.

In Northern Europe, the North Sea and the Baltic Sea are designated as Special Areas, in which even less exceptions to the general prohibition are allowed than in the rest of the oceans. However, these stricter rules are only applicable in case the riparian states of the Special Areas can provide suitable reception facilities for the incoming ship waste and have notified the International Maritime Organization (IMO) thereof. Before that is the case, the regular rules apply in the Special Areas. In order to give an incentive to use the reception facilities in all ports (port reception facilities/PRF), the IMO recommends that using them should not be prohibitively expensive.

Annex V also establishes regulations regarding garbage treatment on board and keeping a garbage record book to document what happened to the garbage generated aboard (obligatory for ships exceeding 100 GT and/or certified to carry more than 15 passengers).

OSPAR Contracting Parties are also Contracting Parties to MARPOL, and all have ratified MARPOL Annex V. Thus, a unified basis regarding the prevention of pollution by garbage from ships already exists. Pursuant to MARPOL Article 4, CPs are required to impose sanctions for violations also on ships not flying their own flag.

Sanctions may be very effective if the provisions for the protection of the marine environment and thus also for the reduction of pollution by garbage from ships are not being met. Since dumping of plastics into the oceans is a classic example of the tragedy of the commons, it is to assume that regulations are

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<sup>2</sup> Resolution MEPC.201(62):

<http://www.imo.org/en/OurWork/Environment/PollutionPrevention/Garbage/Documents/201%2862%29.pdf>.

<sup>3</sup> Only food wastes, carcasses of animals and cargo residues (not harmful to the marine environment) are, under certain conditions, allowed to be discharged into the sea.

not being met if the price for compliance is higher than possible sanctions or even the possibility of detection. Therefore, it is important that sanctions are effective, appropriate, reasonable and deterrent (Gelbhaar 1992). Considering the opportunity to imply sanctions, as established in MARPOL, it may be assumed that violations against the discharge requirements for garbage from ships are prosecuted and sanctioned in all OSPAR Contracting States. There may furthermore be other regional or national provisions that may be of importance with respect to the discharge of garbage from ships into the sea.

Up to now, overviews of the specific implementation and application of sanctions in OSPAR Contracting States do not exist. To close this knowledge gap, the German Environment Agency commissioned this study.

## 1.2 Background within OSPAR – the RAP Marine Litter

Action 32<sup>4</sup>, 33<sup>5</sup> and 38<sup>6</sup> of the OSPAR Regional Action Plan Marine Litter (RAP ML; see box below) from 2014 require the identification of best practice in relation to inspections for MARPOL Annex V ship generated waste, including better management of reporting data and the analysis of penalties and fines issued by CPs for waste disposal offences at sea to highlight the differences, trends, problem areas and issues to relevant organizations. To work on these issues co-operation with related institutions, namely the Paris Memorandum of Understanding on port state control (Paris MoU) and the North Sea Network of Investigators and Prosecutors (NSN) is foreseen. This dialogue should also encourage the Paris MoU to take the risk of illegal waste discharges into consideration for the prioritization of port state control inspections.

Germany as lead country commissioned this study to cope with actions 32, 33 and 38 of the OSPAR Regional Action Plan on Marine Litter.

### **Box 1: The OSPAR Regional Action Plan on Marine Litter - background to the plan (OSPAR 2014)**

The OSPAR RAP ML is based on the commitment of OSPAR's CPs, as articulated in the Bergen Statement of 2010: *"We note that quantities of litter in many areas of the North-East Atlantic are unacceptable, and therefore we will continue to develop reduction measures and targets, taking into consideration an ambitious target resulting in a reduction in 2020"*.

The OSPAR objective with regard to marine litter is laid down in the Strategy for the protection of the Marine Environment of the North-East Atlantic for the years 2010-2020: *"...to substantially reduce marine litter in the OSPAR maritime area to levels where properties and quantities do not cause harm to the marine environment"*.

The OSPAR objective and the RAP are also "manifestations" of the Rio+20 global commitment to *"take action to, by 2025, based on collected scientific data, achieve significant reductions in marine debris to prevent harm to the coastal and marine environment"* in "The Future We Want" and with the 2013 UNGA resolution A/RES/68/70 in which states noted concern on marine debris.

Furthermore, the OSPAR objective is in line with the definition of Descriptor 10 of the European Marine Strategy Framework Directive, where Good Environmental Status (GES) can be seen to be achieved, when *"Properties and quantities of marine litter do not cause harm to the coastal and marine"*

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<sup>4</sup> Action 32: "Identify best practice in relation to inspections for MARPOL Annex V ship generated waste, including better management of reporting data, taking into consideration the Paris MoU on port state control."

<sup>5</sup> Action 33: " Seek dialogue with the Paris MoU to take the risk of illegal waste discharges into consideration for the prioritisation of port state control inspections."

<sup>6</sup> Action 38: "Analyse penalties and fines issued by Contracting Parties for waste disposal offences at sea to highlight the differences, trends, problem areas and issues to relevant organisations, such as the North Sea Network of Investigators and Prosecutors."

*environment*". It will also support the achievement of an EU-wide "quantitative reduction headline target" for marine litter, as agreed in the 7th Environment Action Programme.

In 2013, the OSPAR CPs agreed to develop a RAP for Marine Litter by 2014. It emerged from a series of workshops, coordinated by Germany as lead country, involving relevant expertise from the public and private sectors, academics and non-governmental organizations and under a dedicated OSPAR intersessional correspondence group on marine litter (ICG-ML). Through this process OSPAR also actively contributed to the International Conference on Prevention and Management of Marine Litter in European Seas held in Berlin in April 2013.

The RAP ML has finally been adopted by OSPAR Contracting Parties as an OSPAR "Other Agreement". The RAP is designed as a flexible tool providing a set of actions to address marine litter. It contains three types of actions:

- a) Common OSPAR actions: actions requiring collective activity within the framework of the OSPAR Commission through, where applicable, OSPAR measures (i.e. Decisions or Recommendations) and/or other agreements such as guidelines and background documents;
- b) Actions to raise with other international organization and competent authorities;
- c) Actions that Contracting Parties should consider in their national programmes of measures, including those under the MSFD. The approach regarding these national actions is based around the core principle that the RAP allows Contracting Parties to identify which of the measures and actions listed they have already taken forward (e.g. as a result of existing or planned national or European legislation or other initiatives) and consider others needed to further combat marine litter.

It therefore provides guidance to Contracting Parties and a framework for regional cooperation.

Thematically, this Background Document links to the Background Document resulting from Action 34 to "Improve Implementation of ISO standard 21070 in relation to port reception facilities" (PRF), which examines best practice policies on how to encourage advanced shipboard waste management.

### 1.3 Focus of this Background Document

The present Background Document focuses on the processes and practices related to detecting and sanctioning MARPOL Annex V ship generated waste, including inspection and control regimes, the management and exchange of data/information on (potential) offenders. In addition, it concentrates on the analysis of penalties and fines issued by OSPAR and HELCOM (see below) CPs for waste disposal offences at sea to highlight the differences, trends, problem areas and issues to relevant organizations and authorities involved in the process.

Thus, this work will be a valuable input for the implementation of the actions 32, 33 and 38 of the OSPAR Regional Action Plan on Marine Litter.

Although principally a Background Document developed in the frame of OSPAR, it was decided to integrate HELCOM into the scope of the study as well, and to equally share results with the responsible HELCOM MARITIME WG, since HELCOM has similar activities foreseen in the HELCOM RAP ML (e.g. actions RS2 and NS2).

PRF are not in the focus of this study. However, as several related topics, such as the organization of inspections and the management of data/information, are strongly influenced by EU and national PRF policies, the links between principal focus of this study and PRF have been explored where necessary.

The following section 2 briefly describes the difficulties in detecting garbage-related offences at sea, the international legal framework for ship inspections and the sanctioning MARPOL Annex V violations, as

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far as relevant for this topic (i.e. the description of the PRF Directive focuses on the advance notification and inspection regime; other aspects are not considered). It is followed by a description of the information available with regard to the quantity of detected violation of MARPOL Annex V regulations, as well as their quality (i.e. the level and type of fines/penalties issued) (section 3). Section 4 then presents the institutional arrangements in OSPAR and HELCOM CPs with regard to inspections and controls, enforcement and cooperation between authorities, and with judiciary organizations. In section 5, the information presented in the previous sections is summarized and interpreted in terms of the main challenges surrounding non-compliance with MARPOL Annex V. Then, "best practice" examples are presented, showing possible improvements or even solutions to the presented main problems. Finally and based on these examples, possible OSPAR recommendations are developed, as well as a "way forward" to consider and discuss these recommendations, with the aim of presenting agreed recommendations at EIHA 2017.

## 2 Detection of MARPOL Annex V illegal Discharges and international legal Framework

Sanctioning violations of marine pollution rules requires - obviously - the detection of such violations. However, their detection - especially regarding solid waste - is a challenging and complex task, given that it is impossible to inspect all ships in port or observe all ships at sea (and thus to possibly catch offenders red handed). It is also very difficult to detect whether a ship has dumped plastic and other waste illegally.

### 2.1 Detection of illegal Discharges of MARPOL Annex V Waste

Whilst the international community has developed information and detection systems to attempt to monitor, identify and detect pollution by oil and liquid noxious substances<sup>7</sup> with some success (e.g. CleanSeaNet<sup>8</sup> satellites and surveillance flights; EMSA 2012), the (illegal) discharge of ship generated waste (sgw) is hard to detect.

Most sgw, for example, does not leave a "trail" behind a discharging ship (such as oil/oily substances might do). Furthermore, it might not even float, but sink rapidly. And, in contrast to oil and other liquid substances, garbage covers a much smaller area than floating liquid substances, and is such much more difficult (or even impossible) to detect by satellites or aerial surveillance.

Therefore, the primary approaches to detect illegal discharges of solid waste are indirect ones, focusing on:

- inspecting vessels in port<sup>9</sup> either to obtain evidence relating to illegal discharge of waste or the failure to comply with the provisions of the PRF Directive and MARPOL Annex V (e.g. advance notifications, garbage treatment on board/management plan and keeping a garbage record book; see below); and/or
- using waste delivery information or ship-based information to identify suspected offenders.

Other possible means to detect violations of MARPOL Annex V provisions include observations by crew members or passengers (in case waste is illegally discharged and the garbage record book and waste notification form are manipulated, it is almost impossible to detect - and prove - violation otherwise; EMSA (2012a) notes that a number of prosecutions for violations of MARPOL Annex V are regularly made on the basis of evidence provided by cruise ship passengers), or, when garbage is recovered from the sea or found after it was washed up on shore, the analysis of the content might bring evidence of the identity of the perpetrator, for example documents in the name of the company (Øhlenschläger et al. 2013; EMSA 2012).

Summarizing, the principal approaches to detecting illegal discharges or other violations of MARPOL Annex V regulations are:

- inspecting vessels under different control regimes (see below), either in harbors or (more rarely) en route;
- getting information/testimonies from crew members (whistleblowers) and/or passengers;

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<sup>7</sup> Floating liquid substances such as mineral oil, or particular types of noxious liquid substances, which cover large sea areas are visible to radar surveillance and the human eye.

<sup>8</sup> CleanSeaNet is the satellite-based oil spill monitoring and vessel detection system developed by EMSA.

<sup>9</sup> Theoretically, ships could also be inspected en route/on the sea; however, this happens very rarely.

- analyzing waste washed ashore or found floating and contributing it to a specific ship or company.

## 2.2 International legal Framework and Inspection Regimes

As described in section 2.1 above, the detection of violations of MARPOL Annex V is difficult. Possibilities are few, and focus very much on inspection of ships. Hence, this section describes the international legal framework under which such inspections take place, and the respective EU regulations. Also, the EU policy on Port Reception Facilities is presented, as the notification system and control regime under the PRF Directive also play a role in detecting MARPOL Annex V violations.

Although most sanctions are governed under national laws, the existing relevant international law is also described below.

MARPOL Annex V and UNCLOS are not described here in more detail than in the introduction, and passages are only mentioned where necessary. For a comprehensive description, see EMSA (2012) and Stöfen-O'Brien (2015). Important for understanding the following sections, however, is to know that according to MARPOL Annex V, every ship of 400 gross tons or more engaged in "international voyages" (i.e. to ports or offshore terminals under the jurisdiction of another party to the Convention) is required to carry a Garbage Record Book to record the details of waste disposal or discharge of any kind. Vessels from 100 gross tons shall have a garbage management plan (also on national voyages) which the crew shall follow.

In addition to the international legal framework described in this section, inspections of ships at sea and in port may also happen outside the PSC and PRF regimes, e.g. through custom officials and police/judiciary organizations. Such inspections are governed under the respective national legal frameworks, of which important elements in several OSPAR and HELCOM countries are described in section 4.

### 2.2.1 Inspection: Port State Controls - Paris MoU and EU Directive on Port State Control

Port State Control (PSC) is the inspection of ships flying under a foreign flag in national ports by PSC authorities ("PSC Officers/Inspectors") for the purpose of ensuring that the competency of the master and officers on board as well as the condition of the ship and its equipment comply with the requirements of international conventions - such as MARPOL - and that the vessel is manned and operated in compliance with these rules. When an inspection is carried out and deficiencies are detected which are clearly hazardous to safety, health or the marine environment, the responsible Maritime Authority (i.e. the PSC Officer/Inspector) will ensure that the hazard is removed before the ship is allowed to proceed to sea and for this purpose will take appropriate action, which may include detention. However, when exercising control under the PSC regimes, the authorities usually make all possible efforts to avoid unduly detaining or delaying a ship (EMSA 2012).

Port State Controls and the related inspection procedures are regulated internationally under several regional Memoranda of Understanding (MoUs), of which the Paris MoU is of relevance in the OSPAR and HELCOM regions, since all (coastal) EU Member States as well as Canada, Iceland, Norway and the Russian Federation are Contracting Parties to it. The EU Directive on Port State Control (Directive 2009/16/EC, amended through Directive 2013/38/EC) transposes the Paris MoU into European law.

As it is impossible to inspect all ships arriving at a specific port, the Paris MoU uses an inspection regime to evaluate a ship's risk profile<sup>10</sup>, and through this determines the frequency of inspections. The

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<sup>10</sup> The "New Inspection Regime" (NIR): each ship in the information system (Thetis) will be attributed a ship risk profile (SRP), in accordance with Annex 7 of the Paris MoU. This SRP will determine the ships priority for inspection, the interval between its inspections and the scope of the inspection. Ships are assigned high, standard or low risk. This is based on generic and historic parameters. Table 1 of annex 7 of the Memorandum shows the criteria within each parameter for each ship risk profile. A ship's

selection of which ships are to be investigated is organized via a central (electronic) database, known as "THETIS", which is consulted by the PSC authorities. To facilitate the planning of inspections, THETIS<sup>11</sup> is linked to SafeSeaNet, which provides information on ships in, or expected at, all ports of the Paris MoU CPs. THETIS indicates which ships have priority for inspection and allows the results of inspections to be recorded. Via THETIS these reports are made available to all PSC authorities in the EU and the Paris MoU<sup>12</sup> (Øhlenschläger et al. 2013; Paris MoU Website).

Additionally, the PSC Directive (2009/16/EC) specifically includes non-compliance with the advance reporting requirements under the PRF Directive (Article 6; see below for more detail) as a possible reason for vessel inspection<sup>13</sup>.

EMSA (2012) describes the process of inspections and possible detections of MARPOL violations: in the course of undertaking a routine inspection, a PSC inspector may detect a deficiency which indicates that there has been a MARPOL Annex V (or other) violation. The indication is likely to be either:

- documentary evidence, e.g. a deficiency in the ship records (garbage management plan or garbage record book), or
- real evidence, e.g. visible evidence that a violation may have occurred, such as the presence of illegal bypass equipment or tampering with pollution control equipment (unlikely in the case of Annex V waste).

If the deficiency is such that it would be a hazard to the marine environment, the PSC authorities will ensure that the hazard is removed before the ship is allowed to proceed to sea. In general however, the authorities are under an obligation to avoid unduly detaining or delaying the ship. A technical report will be produced as a result of the inspection. As the main purpose of the Paris MoU is to prevent the operation of sub-standard ships, the inspection report is not always adequate to deliver valid or sufficient evidence for criminal prosecution purposes; consequently, sanctions do not necessarily follow.

Depending on national rules/procedures and the type of deficiency detected, the PSC authorities may contact the maritime police or similar bodies with criminal investigation powers in the port and/or inform other authorities along the route of the vessel<sup>14</sup>. It is "good practice" in many Paris MoU CPs to do this whenever there is evidence that illegal discharges may have taken place, or other more serious offences were detected (e.g. the garbage record book is entirely missing etc.). In minor, administrative cases, other authorities are rarely involved, in line with the duty of the PSC officer to avoid unduly detaining or delaying the ship.

Also, in cases of hints that a specific vessel might have violated MARPOL regulations, an authority may introduce an "overriding factor" into THETIS, triggering an additional inspection. During this inspection, the authorities will endeavor to secure evidence relating to suspected violations of the requirements on operational matters of MARPOL. Obviously, when during a "regular" PSC inspection an alleged violation

risk profile is recalculated daily taking into account changes in the more dynamic parameters such as age, the 36 month history and company performance. Recalculation also occurs after every inspection and when the applicable performance tables are changed (Paris MoU Homepage: <https://www.parismou.org/inspections-risk/ship-risk-profile>).

<sup>11</sup> THETIS also interfaces with a number of other maritime safety-related databases including those of the EU-recognised classification societies, Community and national information systems and other PSC regimes so as to exchange data and provide a full picture for the inspector. Inspection results are also available through a public website.

<sup>12</sup> More information: <http://www.emsa.europa.eu/psc-main/thetis.html>.

<sup>13</sup> In line with Article 5 of the PSC Directive (2009/16/EC). Annex I, chapter 2, Article 2b lists a number of reasons for inspections, one of them being ships that failed to comply with the advance notification requirement.

<sup>14</sup> For example with a so called "Waste Incident Report", which is fed into SafeSeaNet.

of the provisions on discharge of harmful substances or effluents by a ship arises, or if a request is received from another authority, the authority will proceed in the same way.

With regard to sanctions, it is important to note that PSC can collect evidence for the enforcement of MARPOL, but "sanctioning" is not their primary purpose - instead, PSC inspections are of an administrative and technical nature and are not always adequate to deliver valid or sufficient evidence for criminal prosecution purposes<sup>15</sup>.

#### **Box 2: PSC inspection vs. sanctions-oriented national inspections**

In some countries, maritime police and other authorities with powers to undertake inspections or proactive investigations also conduct periodic routine or "spot check" inspections (in harbors or at sea). This is an effective way to check for MARPOL violations, but outside the Paris MoU framework; such investigators must have appropriate powers or authority under national legislation to thoroughly search (or even board) the vessel (e.g. in some countries a search warrant may be required). However, such authorities are usually entitled to superficial inspections.

In contrast to PSC inspections, however, police/judicial inspections focus on "sanctioning" violations through administrative fines or criminal law procedures.

#### **2.2.2 Inspections and the PRF Directive**

The Port Reception Facilities (PRF) Directive (Directive 2000/59/EC) brings international requirements into EU law as regards PRF for ship-generated waste and cargo residues. It is an aspect of EU Member States fulfilling their obligations under MARPOL (see section 1 on Special Areas). Besides regulating the establishment and maintenance of PRF in harbors and ensuring ship owner's contributions to the costs of PRF, the Directive renders the delivery of all ship-generated waste mandatory, unless "*sufficient onboard dedicated storage capacity*" is available, or a vessel is exempted (Panteia/PWC 2015).

The PRF Directive also prescribes that all ports shall establish a notification procedure and use the "advance waste notification form" developed and annexed to the Directive (Annex II). Vessels need to report the volumes of waste they intend to deliver, the maximum dedicated storage available, the amount of waste that will be retained on board, the port where remaining waste will be delivered, and the estimated amount of waste to be generated between the two scheduled ports. The Directive clearly states that application of the waste notification form is mandatory. One rationale behind implementing a uniform advance waste notification system with uniform notification forms was to make it easier for authorities to monitor ships' waste delivery (Øhlenschläger et al. 2013; Panteia/PWC 2015) - an important aspect with regard to being able to detect MARPOL Annex V violations (see section 2.1).

Advance waste notifications are (since June 2015) reported electronically via the National Single Window<sup>16</sup> into SafeSeaNet (not Thetis), and are mainly received by the port authorities (but also private waste facility operators).

Additionally, the Directive contains provisions related to its implementation, monitoring and enforcement, including inspection of ships and penalties for infringements. To this extent, the PRF

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<sup>15</sup> For example, Art. 19(2) on "Rectification and Detention" of the PSC Directive emphasizes the focus on ensuring maritime safety (and not sanctioning): "In the case of deficiencies which are clearly hazardous to safety, health or the environment, the competent authority of the port State where the ship is being inspected shall ensure that the ship is detained or that the operation in the course of which the deficiencies are revealed is stopped. The detention order or stoppage of an operation shall not be lifted until the hazard is removed or until such authority establishes that the ship can, subject to any necessary conditions, proceed to sea or the operation be resumed without risk to the safety and health of passengers or crew, or risk to other ships, or without there being an unreasonable threat of harm to the marine environment."

<sup>16</sup> For more information on the NSW, see Port of Hamburg (2014) and [www.national-single-window.de](http://www.national-single-window.de).

Directive allows use of the inspection regime introduced under the EU Directive on Port State Control. With the possibility to use the enforcement option under the PSC regime, the PRF Directive also enables action against illegal discharges and non-compliance with MARPOL requirements.

The Directive defines a general obligation to carry out a sufficient number of inspections in coordination with the regulatory framework established by the PSC Directive. Article 11 (b) of the PRF Directive states that "*...such inspections may be undertaken within the framework of Directive 95/21/EC (the PSC Directive), when applicable; whatever the framework of the inspections, the 25 per cent inspection requirement set out in that Directive shall apply*". However, the legal framework on PSC requires more targeted inspections based on the level of risk (New Inspection Regime and ship risk profile: see above).

Penalties can be imposed for non-notification and non-delivery of waste. These are charged unless proof of delivery at that or another port can be demonstrated (for some ports, it has to be at that port). These can be administered alongside direct or indirect fee systems. The penalty can be fixed, be similar in magnitude and calculation to an indirect fee, or calculated in proportion to likely waste generation e.g. the estimated amount of waste based on journey time from last port (e.g. 50% of estimated cost for that amount of waste) (Panteia/PWC 2015; Eunomia 2015).

### **2.2.3 Inspection: Overlaps and Conflicts between PSC and PRF Inspections**

As seen above, the PRF Directive calls for 25% of the ship calls to be inspected for waste-related issues, possible also within the regulatory framework established by the PSC Directive (i.e. a PSC control can "count" as a PRF control). But, since PSC controls are based on the level of risk, and because PSC controls are more focused on safety/security issues and working conditions onboard ships than on the prevention of illegal waste discharges, the PSC inspections often don't have much relevance to the PRF Directive (Øhlenschläger et al. 2013).

Irrespective of the adoption of PSC controls, the PRF Directive requires MS to pay particular attention to ships that are not compliant with notification requirements, and ships for which the waste notification indicates that the ship may not comply with the PRF Directive (Art. 11(2a)). Article 12(1d) creates an obligation for MS to ensure that advance notification forms are appropriately examined. This would be important for effective enforcement, as estimates in the advance notifications are often incorrect, or differ from the content of any waste delivery receipts (Panteia/PWC 2015).

Still, a significant percentage of ships seems not to send advance waste notification forms at all - the main reason for this being the lack of enforcement of this requirement (hardly any enforcement sanctions or proceedings have been initiated by the relevant authorities questioned in the frame of the Panteia/PWC study).

EMSA (2010) indicates that where the PSC framework is used, inspection authorities do not necessarily use the contents of ships' advance notification, and mostly select vessels for inspection based on criteria under PSC, i.e. THETIS (see above) - this in spite of the fact that the PSC Directive specifically includes non-compliance with the advance reporting requirements under Art. 6 of the PRF Directive as a possible reason for vessel inspection<sup>17</sup>.

Panteia/PWC (2015) analyze that "*...another issue with the inspection regime relates to the relationship between Port authorities and PSC authorities. In 2012, EMSA concluded that there is insufficient communication between the responsible port authorities and the inspection authorities regarding the control of ships and their waste delivery. In part, this is due to the waste notification systems*

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<sup>17</sup> In line with Article 5 of the PSC Directive (2009/16/EC). Annex I, chapter 2, Article 2b lists a number of reasons ("Unexpected Factors") for inspections "regardless of the period since their last periodic inspection", one of them being ships that failed to comply with the advance notification requirement.

*implemented in some ports. The study also concluded that in some ports, the port authority only receives the waste notification form for purposes of organising waste collection. They therefore do not take special interest in control and enforcement and often there are no clear procedures established for forwarding or copying the waste notification form to the relevant inspection authority. In some situations this only happens after the ships have left the port".*

Moreover, port authorities often consider ships as their (commercial) clients, and leave inspections and enforcement to the relevant authorities (Panteia/PWC 2015), or do not even react when ships don't provide sufficient notification (EMSA 2012a).

#### **2.2.4 Sanctioning**

The basis for inspections and enforcement action taken by Port States and Coastal States against foreign-flagged vessels is provided by a combination of UNCLOS, which gives states jurisdiction over their Exclusive Economic Zone and continental shelf<sup>18</sup>, MARPOL and the agreements establishing Port State Control (the Paris MoU and, at the EU-level, the PSC Directive), which allow for inspections of foreign-flagged ships in ports.

The "enforcement part" in the text of MARPOL is provided for in Art. 4-6. Article 4 provides for the enforcement powers of Flag States. The Flag State should prosecute a violation (on a vessel of their own flag) wherever it occurred after being informed and if the evidence is sufficient. The same Article provides that a coastal State shall either prosecute offences occurred in its jurisdiction regardless the flag of the ship or report the offences to the Flag State for the purpose of initiating proceeding there. The coastal State may also request a PSC inspection to a Port State that the ship in question visits.

Articles 5 and 6 provide that a Port State may inspect the ships that arrive to its ports for the purpose of verifying whether the ship has discharged any harmful substances, on its own initiative or in case it has received a request from another State to perform such an inspection. As far as this control is performed under a PSC regime, the inspection is performed according to the rules of the respective PSC regime, i.e. the Paris MoU in the case of the OSPAR and HELCOM. In some circumstances the ship can be detained (EMSA 2012; Eunomia 2015; Øhlenschläger et al. 2013). Furthermore, the Port State may conduct further controls through the "duly authorized" authorities (e.g. through the Port Authority, or the judiciary authorities).

Regarding sanctioning pollution offenses, the MARPOL 73/78 forms the international framework, implemented at the European level by Directive 2005/35/EC on Ship-source Pollution (amended by Directive 2009/123/EC), regulating the introduction of penalties, including criminal penalties, for pollution offences - but for MARPOL Annex I and II pollution only (see box below). The PRF Directive (see above) pursues some of the aims of the MARPOL Convention with regard to Annex V.

#### **Box 3: The Ship-Source Pollution Directive (2005/35/EC, amended by Directive 2009/123/EC)**

Directive 2009/123/EC of the European Parliament and of the Council of 21 October 2009 (amending Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements) transposes into EU legislation the standards introduced by MARPOL 73/78 relating to the prohibition of polluting discharges into the sea, and specifies the sanctions to be imposed. The Directive requires MS to consider discharges of polluting substances from ships in all sea areas, including the high seas, as a criminal offence if they are committed with intent, recklessly or by serious negligence. Minor discharges are infringements, but shall not automatically be considered as criminal offences, except where their repetition leads to "deterioration in the quality of the water", including in the case of repeated discharges. The amended Directive 2009/123/EC also extends liability for discharges onto legal persons

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<sup>18</sup> More details in EMSA 2012.

(thus making a wider variety of subjects potentially liable for the pollution). Ship-source polluting discharges relate only to discharges of substances covered by Annexes I (oil) and II (noxious liquid substances in bulk) to MARPOL 73/78<sup>19</sup> (EC 2012; EMSA 2012).

In relation to its geographical scope, the Directive applies to pollution wherever it occurs: ports, internal waters, territorial sea, straits used for international navigation, exclusive economic zone, other special zones and high seas (Art. 3). It applies to "*...discharges of polluting substances from any ship, irrespective of its flag, with the exception of discharges coming from warships, naval auxiliary or other ships owned or operated by a State and used, for the time being, only on government non-commercial service*" (Art. 3.2). The Directive has therefore quite a wide scope – any discharge of Annex I and II polluting substances into the sea, committed with intent, recklessly or by serious negligence, from nearly any ship, is covered (EMSA 2012).

Beside the Directives on Ship-source Pollution and PRF, some other EU Directives are of supportive value for the enforcement of the prohibition of illegal discharges, e.g. Directive 2010/65/EU on reporting formalities for ships arriving in and/or departing from ports of the EU MS, Directive 2002/59/EC establishing a Community vessel traffic monitoring and information system (amended by Directive 2009/17/EC) and Directive 2009/16/EC (amended through Directive 2013/38/EC) on Port State Control (see section 2.2.1 above) (EMSA 2012).

The European legislation allows for ships to be held in port (PRF Directive/Article 11) or detained (PSC Directive/Article 19) where they are found not to comply.

Further legal action including fines and prosecutions can be pursued by any of the Flag State, Port State, or Coastal State (Economia 2015).

### 3 Sanctions imposed in OSPAR and HELCOM Contracting States

This section contains information on sanctions imposed in OSPAR and HELCOM Contracting States (e.g. number and type of registered violations, number of imposed sanctions, type and amount of such sanctions) due to MARPOL Annex V violations (illegal discharges and "administrative offences", such as not keeping the garbage record book properly). The section also contains information on international obligations to keep records of MARPOL offences, and the data gaps.

PRF Directive violations are also listed in case information was available.

The data was collected via desktop research and by contacting OSPAR and HELCOM secretariats, the NSN HoD and respective national contact points in the CPs via a dedicated questionnaire.

The questionnaire was sent in the frame of the present study to the OSPAR and HELCOM Contracting Parties via the respective Secretariats and the HoDs of the NSN in spring 2016 (questionnaire enclosed as Annex I). A main objective was to obtain further information on the quantity of illegal discharges as well as information on violations against administrative obligations (i.e. keeping a garbage record book and a garbage management plan etc.). From the 20 countries contacted, responses were received from 11 countries: Denmark, Estonia, Finland, Germany, Ireland, Latvia, Lithuania, Norway, The Netherlands, Sweden and the UK.

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<sup>19</sup> The Directive is nevertheless presented here, as other sections of this report will relate to it.

### 3.1 MARPOL Annex V Violations

#### Illegal Discharges

Data on illegal discharges is - mostly for the above mentioned difficulties in detecting them - very scarce and anecdotal.

To get a general feeling of the dimension of all kinds of violations in the international shipping industry and for a later comparison with the available numbers, some general figures are helpful:

- AQUAPOL, the "*network for cross-border cooperation in the area of law-enforcement in the waterborne transport domain*", annually carries out a number of international control operations, joint by all members. During these operations, checks regarding illegal employment on board, exceeding navigation times, neglecting safety and security regulations, navigation under the influence of alcohol and/or drugs, insufficient qualification of crew members and breaking of environmental rules are conducted. Over the last few years the joint control operations showed that about 30% of the checked vessels were not in order. In these cases one or more violations of the rules were found during the checks (Homepage AQUAPOL).
- Similarly, EMSA (2012) states that there "*...is considerable evidence, both anecdotal and from sources such as governmental, IMO and PSC MoU reports that illegal pollution is a widespread problem*".

PSC inspections under the Paris MoU<sup>20</sup> found in 2014 a total of 596 MARPOL Annex V violations (mostly ships without garbage record books and/or garbage management plans, one incident of a food comminutor not working properly) down from 889 in 2013, but up from 303 in 2012 (Paris MoU 2014: 2014 Annual Report on Port State Control). The total number of inspections in 2014 was 18,430, resulting in 612 detentions (it is unclear, however, how many of these detentions were because of Annex V-related issues).

Contrary to these general findings, a study commissioned by the German Federal Environment Agency (2012), in which port authorities<sup>21</sup> were interviewed with regard to PRF and illegal discharges of garbage, reports that interviewees generally stated that "*there are no concrete hints or proofs of illegal discharges*".

The general problem of frequently not being able to track illegal discharge to a specific vessel was also affirmed by the Defence Command Denmark, in response to the questionnaire sent for the current study (see below): "*The major challenge when it comes to enforcement and prosecution of MARPOL Annex V violation is the difficulties related to collecting sufficient evidence for the illegal discharge – evidence that clearly connects a specific ship to a detected discharge beyond reasonable doubt. This rarely seems possible unless the discharge/violation is observed “red handed” by aircraft or passing vessels, documenting the incident by video or photos. The shortcomings seem not to be related to the legislation or implementation of MARPOL Annex V, but to the limitation of sufficient evidence. This underlines the need to strengthen the Port State Control regime and to look into possible ways of taking away any financial incitement to discharge litter or garbage into the sea. Also to consider exploring alternatives for repressive measures, such as (incentives for) self-regulation and other market mechanisms.*"

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<sup>20</sup> I.e. not only in EU ports, but also ports in Canada, Iceland, Norway and the Russian Federation.

<sup>21</sup> Port authorities of the following harbours: Brunsbüttel, Rendsburg, Sassnitz und Bremen, as well as Hamburg (the latter interviewed in a related study in 2011).

In the Baltic Sea, the HELCOM CPs are cooperating on aerial surveillance for detecting illegal discharges since the 1980ies, with a focus on mineral oil. Since 2014, also other substances are being monitored. In the "Annual report on discharges observed during aerial surveillance in the Baltic Sea" for 2014 (HELCOM 2015), which covers the years from 1988 to 2014, 9 confirmed spills of "other oil<sup>22</sup>, chemical, sewage or garbage" were detected by EMSA CleanSeaNet satellites. There is no more information available on garbage/solid waste, nor on data from fixed-wing aircraft surveillance available in the report.

#### MARPOL Annex V: discharges, Garbage Management Book and Garbage Management Plan

To allow assessments of the effectiveness of the implementation of MARPOL, the Convention (Art. 11) requires the CPs to communicate to the IMO certain types of information which includes "*an annual statistical report, in a form standardized by the Organization, of penalties actually imposed for infringement of the present Convention*". A format for the mandatory reporting system has also been defined<sup>23</sup>. However, the level of reporting is low (39 to 42 CP reports received from 2008 to 2013, out of around 150 CPs) (EMSA 2012).

The report for the year 2013 is available<sup>24</sup>, and contains the following information involving Paris MoU countries. The information is limited both in quantity (i.e. coverage), but also in quality, because it is not clear how many incidents were reported by the individual countries (only aggregate numbers are provided), and because there is no clear-cut distinction between violations against Annex V and other Annexes:

- Information on spillages: 477 spillages <50 tons in 15 countries (of which Poland, Romania, Russian Federation and Sweden are CPs to the Paris MoU; no country-specific disaggregation provided), mostly hydrocarbon oils.
- Information on alleged discharge violations: 53 alleged discharge violations reported in 9 countries (of which France, Germany, Greece, Italy, Malta, Netherlands, Spain and Sweden are CPs to the Paris MoU; no country-specific disaggregation provided). The "*types of substances discharged were various types of fuel oils and lubricant/hydraulic oils, including garbage, rapeseed oily water, mineral oil, biodiesel additives and tank washings*".
- Number of ships boarded: the total number of ships boarded in 2013 by PSC of the 39 CPs reporting was 50,843, while the total number of ships detained in port or denied entry was 488 (no country-specific information included). Results - discrepancies - are listed in the following table 1 (in total, in 8,5% of the cases discrepancies were found).

Table 1: **Number of ships boarded and type of discrepancy (2013)**

Number of ships boarded and type of discrepancy	Number of cases/ discrepancies
Number of ships boarded during reporting period	50,843
IOPP certification discrepancies	728
Oil record book discrepancies	2,192

<sup>22</sup> Other than "mineral oil".

<sup>23</sup> IMO MEPC/Circ.318 (26 July 1996).

<sup>24</sup> MEPC.1/Circ.852: Analysis and Evaluation of Mandatory Reports under MARPOL for 2013 (for 2014, reports from 39 CPs and one associate member were received).

- no oil record book or equivalency	125
- oil record book or equivalency discrepancy	2,067
MARPOL equipment discrepancies	1,397
Total number of discrepancies	4,317 (8,5%)

- As stated above, due to unclear reporting, the information is of limited use; e.g., it is not clear whether the "oil record book or equivalency" category also includes the garbage record book.
- The German maritime authority "Bundesamt für Seeschifffahrt und Hydrographie" (BSH) also has statistics on MARPOL violations (Annexes I to VI) in German coastal waters, which provide an idea of the ratio between controls and detected violations: in 2012, in 2,418 cases<sup>25</sup> (out of a minimum of 3,700 individual ships inspected), violations of MARPOL regulations were detected by the German "Wasserschutzpolizei" (coast guard), and sanctioned in 1,043 cases (mostly administrative fines of up to 35 Euro were imposed on ship masters and crews). In 2013, the numbers are: 1,813 cases<sup>21</sup> out of a minimum of 3,100 individual ships inspected, in 671 cases administrative fines of up to 35 Euro were imposed on ship masters and crews (BSH 2014). The majority of violations in both years concern Annex V.
- Penalties imposed by port states: the number and amounts of penalties imposed in 2013 by the 14 port states reporting (of which Germany, Latvia, Netherlands, Poland, Romania, the Russian Federation and Spain are CPs to the Paris MoU; no country-specific disaggregation provided), as listed in table 2 below. In Cyprus, Denmark, France and Italy, no penalties were imposed for a total of 284 cases (encompassing all four types of violation listed in table 2).

Table 2: Number of penalties imposed, maximum/minimum/average fine imposed by Party port State

Type of violation	Number of reported fines	Fines (Euro in 2013 value)		
		Maximum	Minimum	Average
Illegal discharge	189	771,208	204	11,192
Oil record book	244	12,000	38	488
IOPP certificate	2	1,526	1,240	1,382
Others	319	36,000	60	1,229

- Penalties imposed by flag states: the number and amounts of penalties imposed in 2013 by the 8 flag states reporting (of which Greece, Poland and the Russian Federation are CPs to the Paris MoU; no country-specific disaggregation provided), as listed in table 3 below. In Cyprus, Denmark and France, no penalties were imposed for a total of 430 cases (all four types of violation listed in table 3).

Table 3: Number of penalties imposed, maximum/minimum/average fine imposed by Party flag State

Type of violation	Number of	Fines (Euro in 2013 value)
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<sup>25</sup> Also several violations on a single ship possible (it is not possible to determine the number of ships on which violations were detected).

	reported fines	Maximum	Minimum	Average
Illegal discharge	241	18,000	48	3,136
Oil record book	572	1,908	12	317
IOPP certificate	9	2,520	180	793
Others	363	36,000	60	725

In the HELCOM area, a questionnaire was prepared and circulated in 2013 by Denmark and the HELCOM Secretariat to collect information on the national level of fines for infringements of the environmental legislation for ships and platforms (according to the decisions of HELCOM MARITIME 11/2012).

The information received covered all types of maritime environmental pollution. Most cases were concerned with illegal discharges of oil and wrong or missing entries in the oil record book. However, some countries (Germany, Latvia, Russian Federation) also reported on missing or wrong entries in the garbage record book and on "general" MARPOL Annex V violations/infringements; notable is the much higher average level of fines for wrong/missing entries in the oil record book than for the same shortcomings with regard to the garbage record book (e.g. average fines in Germany for oil record book shortcomings amount to 255/310/470 Euro in 2009-2011, whereas for the latter, the fines average 100/125/215 Euro).

The notion that violations against Annex I (and II) are detected and prosecuted much more often than garbage-related violations is supported by EMSA (2012a) which states that the large majority of sanctions "*...will be for oil discharges*".

The table below (table 4) presents both the results of the 2013 HELCOM questionnaire and the 2016 OSPAR/HELCOM/NSNquestionnaire (results from the 2013 HELCOM questionnaire are marked with \*).

Table 4: Reported marine waste-related legal cases and level of fines 2009-2016 in OSPAR and HELCOM CPs

Type of infringement	Country	Year(s)	Cases	No. of convictions vs. closed proceeding	Fine (EUR) (average of convictions)	HELCOM Rec. 19/14 (EUR)#
Garbage illegal discharge	Germany*	2011	1	1/1	100	173 (for illegal discharge of garbage; fine should increase with each ton of garbage discharged)
	Germany	2014-2016	7	Unclear	Unclear	
	Latvia	2014	1	1/1	200	
	Latvia	2016	1	1/1	500	
	The Netherlands	2013	1	1/1	6.000	
	The Netherlands	2014	3	Unclear	Unclear	
	The Netherlands	2015-2016	2	0/2	N.A.	
	UK	Since 2004	2	2/2	11.200	
Violations against administrative obligations (garbage record book/ garbage management plan entries; missing/ wrong/violation of regulations concerning placards)	Russian Fed.*	2009	20	0/20	N.A.	173 (for missing/faulty garbage record book)
	Russian Fed.*	2010	10	0/10	N.A.	
	Russian Fed.*	2011	26	0/26	N.A.	
	Germany*	2009	4	4/4	100	
	Germany*	2010	1	1/1	125	
	Germany*	2011	8	4/8	215	
	Germany	2012	97 (23x placards, 39x GRB, 35x GMP)	92/97	116	

	Germany	2013	1	1/1	100	
	Germany	2014	18 (3x placards, 10x GMP, 5x GRB)	9/18	138	
	Latvia*	2009	1	1/1	282	
	Latvia*	2011	1	1/1	423	
	Latvia	2012	1	1/1	100 LVL	
	Latvia	2014	1	1/1	300	
	Latvia	2015	2	2/2	600	
	Latvia	2016	3	3/3	350	
	Lithuania	2015	"a few"	Unclear	Unclear	
	Norway	2015	1	0/1	N.A.	
	The Netherlands	2015-2016	83 (13x GBR, 70x GMP)	Unclear	Unclear	
	Sweden	2015	3	0/3	N.A.	
	Denmark	2014	4 (2x GMP, 2x placards)	0/4	N.A.	
	Denmark	2015	4 (GMP)	0/4	N.A.	
Other infringements - violations against MARPOL Annex V	Germany	2009	24	24/24	100	N.A.
	Germany	2010	23	23/23	100	
	Germany	2011	14	10/14	100	
	Latvia	2014	2	2/2	425	

Background document on Sanctions, penalties and fines issued by OSPAR and HELCOM Contracting Parties for waste disposal offences at sea

	Latvia	2015	1	1/1	500	
	Norway	2015	1	0/1	N.A.	
	Denmark	2014	5 (garbage shipboard handling)	1/5	Detention (PSC consequence)	
	Denmark	2015	5 (garbage shipboard handling)	0/5	N.A.	

\*Results from the HELCOM MARITIME questionnaire sent in 2013 by Denmark (HELCOM 2014); all other entries from the questionnaire distributed in the frame of this study (spring 2016).

# Recommended minimum level according to HELCOM Recommendation 19/14.

Summarizing the figures in table 4, it can be stated that:

- While illegal discharges are not detected often in any of the OSPAR and HELCOM CPs (a maximum of 2-3 cases/year), it is remarkable that administrative offences (garbage record book/garbage management plan entries; missing/wrong/violation of regulations concerning placards) seem to be detected/recorded more often in Germany and the Netherlands than in all other countries. However, as neither the relation of such offences to overall shipping quantity, nor the quality of the statistics in comparison to the other countries can be safely evaluated, it is questionable whether these high levels of detections can be linked to procedural or institutional factors.
- The average fine recorded for illegal discharges range from very low (100 Euro, i.e. below the HELCOM 19/14 recommendations) to relatively higher fines in the thousands of Euro (in three cases since 2004). In no case was a "severe" penalty awarded (the highest fines from the UK average 11,200 Euro, which is low in comparison to some higher level fines for MARPOL violations; see tables 2 and 3 above).
- Regarding violations against administrative obligations (garbage record book/garbage management plan entries; missing/wrong/violation of regulations concerning placards), most fines (21 from 2009 to 2016) also stayed below the level of the HELCOM 19/14 recommendations (which is set at 173 Euro for violations against keeping/maintaining a GRB); only in 9 cases were the awarded fines higher. However, it is not possible to empirically interpret the figures, as the statistics also contain fines for missing GMP and placards, offences not covered by the HELCOM 19/14 recommendations.
- Fines for other infringements against MARPOL Annex V are at a similar level as administrative fines (ranging from 100 to 500 Euro); in one case (Denmark), a detention was ordered (in the frame of a PSC control).
- The figures stated regarding detected Annex V discharge violations (in case information was available, a maximum of 2-3 cases per year/country) affirm the general findings that it is difficult to detect respectively prove illegal discharges of garbage. The numbers are, hence, much lower than the ones concerning administrative violations (garbage record book/garbage management plan etc.), which are detected via inspections of ships in harbors or at sea.
- Most countries did not state the relation between actual convictions and closed proceedings.

Conclusions are drawn from these figures in section 5, after reviewing the structures for controls and inspections in several OSPAR and HELCOM CPs (section 4).

### 3.2 Violations PRF Directive

As the PRF Directive is not in the immediate focus of this report, no information on violations against the PRF Directive/sanctions were elicited via the questionnaires. However, the 2015 Panteia/PWC ex-post evaluation of the PRF Directive found that "...only a minimal number of sanctions have been given to port users<sup>26</sup>". This finding is supported by Eunomia (2015) and EMSA (2012a).

Also, harbour inspectorates/port authorities in general seem not to keep or not to make available the data on the number of vessels that have not complied with requirements under the PRF Directive. Thus, no data is available to substantiate the proportionality of PRF inspections (Panteia/PWC 2015).

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<sup>26</sup> Finding from the Panteia/PWC stakeholder consultation: only four ports reported to have initiated sanction proceedings in the framework of the PRF Directive since 2008.

## 4 Organization of controlling and prosecuting Authorities in OSPAR and HELCOM Contracting Parties

This section presents the organization of national institutions responsible for the control/inspection, detection and prosecution of violations against provisions for the prevention of pollution by garbage from ships in OSPAR and HELCOM Contracting States. The section is based on the responses received to the questionnaire sent to OSPAR and HELCOM CPs in spring 2016 (see Annex I), and focuses on three topics identified to be of the greatest relevance for drawing conclusions on good practice examples and recommendations:

- Controls and inspections;
- Cooperation with judiciary authorities;
- Consequences and sanctions.

The answers received regarding how controls and inspections are handled in the OSPAR and HELCOM CPS, as well as the cooperation between and with judiciary authorities, are also presented in an overview table in Annex II.

Detailed information on the organization of judiciary authorities and the legal processes to prosecuting environmental crime in general (in the HELCOM CPs) can be found in ENPRO's "Manual on prosecuting Environmental Crime in the Baltic Sea Region" (ENPRO 2013<sup>27</sup>).

### 4.1 General Observations

The organization of institutions responsible for the control/inspection, detection and prosecution of violations of MARPOL Annex V in OSPAR and HELCOM CPs vary greatly. National laws, regulations and inter-agency agreements regulate the control and inspections regimes, procedure of collection of evidence, the evidence required, the cooperation with judiciary authorities, the courts proper for such cases, as well as the amount of fines imposed or length of the eventual imprisonment. While these institutions vary even among EU MS, non-EU MS can have even more diverse legislation as they are not bound by the requirements of the EU law. Even if all of them, as parties to MARPOL, should have some system of penalizing illegal discharges, in some countries those sanctions may only be administrative (EMSA 2012).

The following more detailed national information is not complete, as it is based on the responses to the questionnaire, which are not always comprehensive. OSPAR and HELCOM CPs are invited to complete/add to the respective sections with regard to procedures in their own country.

### 4.2 Controls and Inspection

Controls and inspections of ships are mostly conducted at ports (to a majority in the frame of the respective PSC agreement, i.e. the Paris MoU in OSPAR and HELCOM, to a lesser degree under the PRF Directive in EU MS). These controls and inspections are conducted by designated authorities, according to national rules and regulations. Additional controls, also outside harbours (i.e. in coastal waters or even the high seas), are conducted by police/coast guard authorities.

Several literature sources and studies (e.g. EMSA 2012a, Panteia/PWC 2015) identify the (insufficient) communication of crucial information between different controlling authorities regarding the detection of MARPOL Annex V offenders as an important factor hindering effective prosecution/sanctioning.

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<sup>27</sup> The Manual also contains a small section on the prosecution of maritime pollution crimes.

Hence, an important question to answer was whether the same or different authorities are responsible for PSC, PRF and other controls in OSPAR and HELCOM CPs:

- Of the 11 responses received, in 5 countries (DK, EE, IE, LT, SE) PSC and PRF controls are "in one hand", i.e. the same authority is responsible (in Estonia and Lithuania, a second authority is also involved in PRF controls: this was counted as being "in one hand").
- In four countries (FI, DE, LV, NL) different authorities are responsible for PSC and PRF controls<sup>28</sup>.
- Most PSC controls are conducted by a form of maritime authority, often with powers delegated from a national authority by national law.
- Port authorities are responsible for PRF controls in three countries (DE, EE, NL).
- Several other authorities are involved in different CPs in controlling ships, mostly coast guard/police/customs authorities, but in one case (LT), a regional environment agency/department is involved as well.
- In the UK, the PSC authority is exclusively responsible also for inspecting the garbage record book and garbage management plan of a vessel.
- In some CPs, the PSC officer is also authorized to issue fines (information not entirely clear, but probably in EE and NO).

There is almost no information available regarding the number of controls/inspections conducted by police/coast guard/custom authorities, except from Germany: in 2012, the German "Wasserschutzpolizei" (coast guard) conducted a minimum of 3,700 individual inspections, in 2013 3,100. These figures seem highly significant when compared to the number of PSC controls: in the overall Paris MoU area, the total number of inspections in 2014 was 18,430, in Germany alone 1,266. However, controls of ships by police authorities are normally restricted in scope and range. I.e., usually, a reasonable suspicion needs to be existent, or a search warrant is necessary to board or thoroughly search a vessel.

A special role is played by the authority responsible for monitoring whether a ship delivers waste at port, i.e. enforcing Art. 11 of the PRF Directive which describes targeted inspections and making sure that a ship does not leave port until it has delivered its waste. As EMSA (2012) found out, this responsibility lies with different actors in different MS - in some, the port authority and in others, a separate maritime enforcement agency is responsible; in other MS, governmental environmental agencies may be responsible<sup>29</sup>.

### 4.3 Cooperation between inspection and with judiciary authorities

The information received on the cooperation between inspection and with judiciary authorities is not comprehensive and anecdotal, reflecting the nationally differing legal and administrative systems. In general, the cooperation of inspection and judiciary authorities depends on the legal competency of the PSC in the respective countries. In Germany, for example, the PSC may provide data collected during inspection to the maritime police, but is not obliged to do so.

Some differences and common elements can be identified, however:

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<sup>28</sup> Two OSPAR CPs (Norway and UK) provided unclear responses.

<sup>29</sup> Data from EMSA (2010) "Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC)". The PWC stakeholder consultation found that in 13 Member States a national/regional maritime transport authority was responsible, in 5 Member States an Environmental Authority, and in 5 other Member States the port authority's Harbour Master Office.

- In three CPs (EE, NL, NO), the authority which is responsible for the inspections according to PSC and PRF also applies fines and sanctions (in the case of Norway, it is not clear which authority is responsible for PRF controls; the Norwegian Maritime Authority performs PSC inspections and applies fines, which are usually not issued in the PSC framework).
- In other CPs, the transfer of information relevant for prosecution or for other authorities' work is semi-voluntary, i.e. based on a case-by-case decision (FI), or obligatory in severe/criminal cases (SE, DE, UK, LT).
- Police authorities are competent for issuing fines on the spot in DE and NL.
- As can be expected, several CPs also state that sanctions are decided through a court trial and hence have to be duly processed according to national legal codes (DE, SE, UK). If and when cases will be transferred to a public prosecutor, however, seems often to rely on the inspector's evaluation.

#### 4.4 Consequences and Sanctions

For a general introduction of how violations of MARPOL obligations can be handled in the EU, a short review of Directive 2005/35/EC seems helpful. Within the scope of that Directive, which targets only MARPOL Annex I and II discharges, all discharges in violation of MARPOL committed with intent, recklessly, or with serious negligence shall be regarded as criminal offences (with the exception of minor cases where the act committed doesn't cause deterioration in the quality of water). The practice in Europe varies: some EU MS treat even minor discharges as criminal offences, whilst others can levy administrative fines in lieu of criminal prosecution. Interpreting which should be considered a minor case and what constitutes a deterioration of the quality of water is a matter of national competency. Administrative sanctions can have a strong deterrent effect and be an appropriate solution when the circumstances of the case would make the outcome of criminal prosecution uncertain.

Handling MARPOL/pollution cases, there are two main legal approaches to prosecution and sanctioning, of which EMSA (2012) provides an overview: *"In some legal systems, discharging polluting substances in violation of MARPOL is an absolute and strict liability offence. In absolute and strict liability offences, there is no need to prove "mens rea" or intention; evidence that the offence has been committed is sufficient. In other systems, and as embodied in Directive 2005/35/EC, the discharge is considered to be an infringement if the act was intentional, reckless or due to serious negligence...[i.e.] it may be necessary to prove that the act of discharging polluting substances (the "actus reus") was accompanied by some form of prior knowledge of the possible consequences ("mens rea"), i.e. that polluting substances were discharged due to intent, recklessness or serious negligence"*.

As it is difficult to obtain strong evidence to bring ship's crews or masters suspected of illegal discharges to court, some countries (for example Denmark) impose "administrative fines" instead, which just require strong suspicion that a legal entity (a person or registered company) has committed an offence (IEEP 2013).

The information solicited via the questionnaires regarding sanctioning and (level of) fines is presented in table 4 (section 3 above). Additional information has been obtained regarding how the level of fines for MARPOL Annex V violations is determined in the OSPAR and HELCOM CPs:

- In several CPs (FI, DE, EE, IE, NL), the level of fines for MARPOL Annex V (and other Annexes) violations is fixed to a certain degree (mostly, ranges are presented). In Finland, the level of fines is included in the Criminal Code, in DE in an appended catalogue of fines; in EE and IE, the level of fines is included in the respective Maritime Safety Law.

- The catalogues of fines/laws are available for EE, DE and IE. The catalogue of fines for the NL is currently under revision.
- DK and SE do not have "fixed" fines, and for Norway, the situation is unclear: fines higher than 7,000 Euro are mentioned, but it is unclear for what kind of offences these are applied.

The (foreseen) level of fines varies across the CPs:

- In Latvia, although there is no catalogue of fines available, the fines actually applied are quite high on average, in the range of the discussed revision of HELCOM recommendation 19/14.
- In Germany, the maximum levels of the foreseen fines are vaguely in the range of the "old" (i.e. present) HELCOM 19/14 recommendations; the fines actually applied, however, tend to be in the lower ranges of possible fines.
- In IE, the possible level of fines for "summary convictions" (i.e. administrative offences) range up to 1,000 GBP; for convictions up to 10,000 GBP.
- In all other CPs, the level of fines - at least for administrative offences - seems to be rather low: up to 1,200 Euro (natural persons)/32,000 Euro (legal persons) for all MARPOL pollution offences and notification failures in EE, and very low fines even for pollution offences (garbage) in Lithuania: fines of 57-144 Euro are generally applied.

Additional anecdotal evidence of how sanctioning is handled in various HELCOM and OSPAR CPs can be found in the literature:

- In the UK, in cases where clear evidence of illegal disposal of litter is available, the alleged offenders can be prosecuted under the Merchant Shipping (Prevention of Pollution by Garbage) Regulations 1988, which schedules fines of up to 25,000 GBP (since 1998) for conviction in a Magistrate's Court, and unlimited fines on conviction before the Crown Court. The regulations apply within all UK controlled waters out to 200 nautical miles (OSPAR 2009).
- In Finland, in cases of illegal oil pollution incidents at sea, two different investigations are always carried out if there is suspected vessel. A vessel's owner or skipper can be fined with an "oil pollution fee" in such cases, and investigating authorities only have to prove that there was a connection between the suspected vessel and the discharge and to verify that the discharge was oil (HELCOM 2014). The fines, however, seems to be rather low (the amount is mostly based on earnings and typically amounts to a couple of hundred Euro).

## 5 Conclusions and Proposals/Recommendations

This section contains a summary of the key points identified in the sections above, forming a kind of problem analysis. Based on this, best practice examples to tackle some of these key points are described, indicating also possible recommendations for concrete action to improve on the detection and penalizing of MARPOL Annex V offences. Finally, a proposal for facilitating the process within OSPAR and the implementation of the relevant actions of the ML RAP is presented.

### 5.1 Summary of key points

The information presented in the sections above - stemming from both literature sources as well as authorities and experts from OSPAR and HELCOM CPs - demonstrates the difficulties faced by national authorities in their task of detecting and penalizing violations against MARPOL Annex V, especially regarding illegal discharges of garbage.

In the following, the topics identified as being of critical importance in the process of detection - prosecution - sanctioning of MARPOL Annex V offences are described, and the most important shortcomings highlighted.

#### Detection of illegal discharges and securing evidence thereof

Sanctioning illegal discharges of garbage requires - obviously - the detection of such discharges, which is very difficult, as litter does not leave a "trail" behind a discharging ship (such as oil/oily substances might do). Furthermore, it might not even float, but sink rapidly. And, in contrast to oil and other liquid substances, garbage covers a much smaller area than floating liquid substances, and is such much more difficult (or even impossible) to detect by satellites or aerial surveillance.

Hence, without first-hand evidence (testimonies) of the discharge through witnesses, it is also difficult to assign a certain piece/amount of waste to a specific ship, rendering a criminal prosecution impossible in most cases. Additionally, a ship owner has - in the unlikely case that his/her illegal behavior has been detected - the possibility to declare a discharge to have happened accidentally. In such cases, investigations will not be completely stopped, but chances are high that sanctions will be lighter.

#### Controls, inspection and data exchange

As the immediate and direct detection of illegal discharges of garbage is rare, the detection of other offences relating to MARPOL Annex V is important. Such minor administrative offences might hint at not treating onboard garbage properly, and can be detected by inspections/controls. It should be recalled for better understanding this section that:

- The PSC inspections have the major objective of securing a naval vessel's safety, which covers a wide range of topics; PSC officers are encouraged to make all possible efforts to avoid unduly detaining or delaying a ship. "Sanctioning" is not the focus of PSC officers.
- PRF inspections (which happen to a significant degree under the PSC umbrella) have the main objective of guaranteeing compliance with the PRF Directive (i.e. that waste was delivered and ports notified).
- Inspections/controls by other authorities (e.g. police/judiciary or port authorities) are regulated by national law and may require substantial reason or even warrants for thoroughly searching a vessel. To superficial inspections, however, such authorities are usually entitled.

Not all ships calling at port can be inspected. Hence, a system of choosing which vessels to inspect is in place in the Paris MoU ("risk-based"<sup>30</sup>). The selection of which ships are to be investigated is organized via the central computer database THETIS, which is consulted by the PSC authorities. In parallel, the PRF Directive requires vessels to report the volumes of waste they intend to deliver, the maximum dedicated storage available, the amount of waste that will be retained on board, the port where remaining waste will be delivered, and the estimated amount of waste to be generated between the two scheduled ports in a document called the "advance waste notification form". Advance waste notification forms are (since June 2015) reported electronically via the National Single Window and distributed to the authorities entitled to receive them (i.e. the PRF authorities). The content of advance waste notification forms is not necessarily accessible, however.

In EU MS, the non-compliance with the advance reporting requirements under the PRF Directive is listed as a possible reason for vessel inspection under the PSC Directive. The PSC Directive (Art. 25) also obliges the MS to ensure that port authorities and other bodies provide the PSC with such information, i.e. on non-compliance with the advance notification requirements.

In this complex process of advance notifications, determination of risk-factors and inspections of vessels due to various overlapping frameworks, several weaknesses can be identified (EMSA 2012, Panteia/PWC 2015):

- As the main purpose of the PSC controls is to prevent the operation of sub-standard ships, the inspection report is not always adequate to deliver valid or sufficient evidence for criminal prosecution purposes; consequently, sanctions do not necessarily follow.
- Also, PSC inspectors have limited time to carry out inspections which cover a wide range of aspects. Verifications related to pollution prevention are often limited to a formal examination of the ship's records.
- Less than 40% of the ships notify their waste delivery in advance, as this requirement is hardly enforced and any resulting penalties are perceived as a minor cost. Also, received waste notification forms are rarely appropriately examined, as required in Art. 12(1d) of the PRF Directive.
- Where PRF related inspections are conducted in the framework of PSC, the inspections do not always take a vessel's compliance with waste delivery requirements into account, and ships are generally not selected on the basis of the contents of their notification form (most PSC authorities cannot even access the content of the waste notification forms). When these forms are taken into account, the information on waste delivery is not always useful, as it is based on estimations, and information on delivered waste is not included. It is likely that the estimates in the advance notifications are often incorrect, and without waste delivery receipts, the basis on which a verification of the advance notification could happen is missing (this point is also emphasized by EMSA 2010). Such waste delivery receipts are not required by the PRF Directive, but are recommended in a standing, non-mandatory IMO Guidance (IMO MEPC 2008).

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<sup>30</sup> The "New Inspection Regime" (NIR): each ship in the information system (Thetis) will be attributed a ship risk profile (SRP), in accordance with Annex 7 of the Paris MoU. This SRP will determine the ships priority for inspection, the interval between its inspections and the scope of the inspection. Ships are assigned high, standard or low risk. This is based on generic and historic parameters. Table 1 of annex 7 of the Memorandum shows the criteria within each parameter for each ship risk profile. A ship's risk profile is recalculated daily taking into account changes in the more dynamic parameters such as age, the 36 month history and company performance. Recalculation also occurs after every inspection and when the applicable performance tables are changed (Paris MoU Homepage).

- Also, the incineration of waste onboard creates uncertainty with regard to the interpretation of waste notifications.

It seems that the advance waste notifications do not play such an important role in providing hints to possible illegal discharges of garbage and in determining which ships to inspect as they could. This fact might be due to the following reasons (EMSA 2012; EMSA 2012a; Panteia/PWC 2015; BSH 2016):

- The forms are reported via the NSW and received by the port authorities (sometimes in copy to the waste operator); other authorities (such as police/judiciary or PSC officers) do not have immediate access to them (although the PSC Directive (Art. 25) obliges the MS to ensure that port authorities and other bodies provide the PSC with such information, i.e. on non-compliance with the advance notification requirements).
- As many port authorities seem to regard vessels as "clients", they seem not to be overly interested in creating any difficulties for them with regard to their ship's waste delivery. No clear statistics are available on this topic, but it is indicated by EMSA (2012a) that often the port authority (or the port management company in the case of privately operated ports), does not communicate systemically with the PSC agencies (EMSA concluded in 2012 that "*there is insufficient communication between the responsible port authorities and the inspection authorities regarding the control of ships and their waste delivery...[and that]...in some ports, the port authority only receives the waste notification form for purposes of organizing waste collection. They therefore do not take special interest in control and enforcement and often there are no clear procedures established for forwarding or copying the waste notification form to the relevant inspection authority. In some situations this only happens after the ships have left the port*").
- Also, in many ports a parallel information channel between the shipping agent and the waste operator (at the port) exists, communicating waste-related information directly between them.

### Cooperation and enforcement

Closely related to the interaction between the various authorities performing controls and inspections under different legal frameworks and their exchange of data, are shortcomings with regard to data exchange and cooperation between control and with judicial authorities. Concrete information on such shortcomings in OSPAR and HELCOM CPs was not provided via the questionnaire replies, although literature sources suggest that problems may exist (e.g. EMSA 2012a, Panteia/PWC 2015).

An important question was whether the same or different authorities are responsible for PSC, PRF and other controls in OSPAR and HELCOM CPs, with the result that in several CPs (5 out of 11 responses) such inspections are in the hands of one single authority. Unfortunately, the data does not allow any conclusions suggesting that such a form of organization is more effective in detecting/sanctioning violations; on the contrary, in Germany and the Netherlands, where most cases are detected (or at least recorded), such controls are in separate hands.

However, it seems that in CPs where the Port Authority is (at least partly) responsible for PRF controls, the number of cases detected is significantly higher than in other CPs (this is especially the case for Germany and the Netherlands). This notion is reinforced by EMSA (2012), concluding that "*...it seems (although not documented) that having the Port Authority in charge of all waste notification and dissemination of information to relevant stakeholders and waste operators ensures that the Port Authority has very good knowledge of the total waste to be delivered in the port...[and that]...most ports confirm that when the monitoring and control by the PSC is reinforced the waste delivery behavior of the ships changes towards a more environmentally friendly and sound behavior.*"

At the same time, it is remarkable that in the CPs where the PSC is solely responsible for garbage-related controls (i.e. where the PSC authority also conducts the PRF controls), the ratio of convictions vs. detected cases is generally very low, or information is lacking (EE, IE: no information; LT: a few cases, no or unclear number of convictions; DK and SE: several cases, no convictions).

It could also not be verified by the responses received that it is "easier" to apply sanctions in cases where the controlling authority also issues fines (EE, NL, probably NO). Outside PSC or PRF controls, "on the spot" controls by maritime police/coast guard seem to be an effective instrument in detecting and penalizing garbage-related offences (DE and NL), although the fines applied are generally very low (in Germany, 35 Euro on average).

It was further not possible to obtain concrete information on how the cooperation between PSC/PRF and judiciary authorities works in detail. The data received suggests that such cooperation is more of a voluntary nature in most CPs, that it takes place in cases of serious offences, and that it can be regarded as a kind of "good practice". This does not, however, suggest that such cooperation cannot be successful or effective.

Last but not least, a major problem with regard to enforcement is the difficulty in obtaining strong evidence to bring ships suspected of illegal discharges to court.

#### Level of fines

To be effective in not only penalizing, but also preventing illegal behaviour, fines should have the following qualities/characteristics: They should have a deterrent effect, and should outweigh any possible economic benefit of violating regulations; repeat offenders should get a higher fine and fines imposed on a legal person should be substantially higher than for natural persons (HELCOM 2015a, OSPAR 2009).

The fines imposed in OSPAR and HELCOM CPs for illegal discharges of garbage and for administrative offences are generally rather low, as the responses to the questionnaires show. Using the HELCOM 19/14 recommendations for a system of harmonized fines as an orientation, it can be seen that in many cases, the level of fines stays well below the recommendations.

#### Information gaps

As demonstrated through the literature review as well as the responses to the questionnaire, comprehensive information on detected violations, further proceedings and possible convictions are rare in many countries, globally (see IMO 2015) as well as in the OSPAR and HELCOM CPs. This may be due to the fact that performed controls/inspections and detected violations are not recorded at all or only in paper form (requiring a great deal of work to provide publicly). In other countries, the statistics may be recorded together with other MARPOL or UNCLOS violations according to national or even regional approaches, and thus not easily be separated from the other data.

This lack of information is existent although aggregate information collected at European or international level could contribute to identify those flag States that repeatedly disregarded their obligations to enforce international legislation, identify patterns of violations across Europe, or provide comparative data for standardizing enforcement across Europe, for example in levels of fines. According to EMSA (2012), compiling information on real cases is important in order to:

- uncover different types of practices related to illegal discharge of polluting substances;
- indicate why convictions sometimes fail (e.g. a regular lack of particular types of evidence) and to improve links and procedures of the enforcement chain;
- build a body of knowledge which can be used for intelligence-led enforcement through developing vessel and fleet history and to comply with article 11 of MARPOL.

## 5.2 Best Practice and possible OSPAR Recommendations

The "best practice" examples described in this section are in use in specific countries and can serve as guidance to develop recommendations and to encourage discussions in interested OSPAR CPs about efficient and (at best) coordinated approaches to tackle the complex nexus of detecting-inspecting-sanctioning violations of MARPOL Annex V obligations.

It needs to be noted here that the "best practice" examples and possible way ahead also encompass issues related to the PRF Directive, which is not the main focus of this document. However, as the sanctioning of MARPOL Annex V violations is closely related to controls/inspections, and hence to the PRF Directive, some topics related to that Directive are nevertheless covered here (mainly derived from literature sources).

### Detection of illegal discharges and securing evidence thereof

To tackle the challenges surrounding the detection of illegal discharges and securing evidence to bring ships/ship's crews suspected of illegal discharges to court, the following approaches have been identified as possible "best practice":

- Denmark imposes "administrative fines", which just require strong suspicion that a legal entity (a person or registered company) has committed an offence, to circumvent the difficulties in obtaining strong evidence to bring ships suspected of illegal discharges to court (IEEP 2013, Eunomia 2015).
- In the United States, the Environment Protection Agency (EPA) has identified several possible options for enforcement and compliance with anti-pollution legislation, including rewarding passengers/crew members (whistleblowers) monetarily who aid in detecting illegal activities. Whistleblowing is common in the USA, where it accounts for 50% of new MARPOL cases. This is largely due to the rewards awarded to whistleblowers, which can be up to half the penalty imposed for the violation (Copeland 2010).
- Another initiative originating from the EPA is charging a passenger fee to put a marine engineer onboard cruise ships to observe ship waste treatment practices (as a voluntary agreement with the cruise ship companies).
- Belgian authorities use drones to detect violations of the Sulphur Directive.
- The Netherlands (Coast Guard) uses planes and vessels, also for inspection purposes. If it is detected that there are visible cargo residues or garbage on deck of ships or if there is a suspicion that these wastes could be illegally disposed, the enforcement officer prepares a "pollution prevention report", which will be sent to the next port of call of that ship with the request to check whether the cargo residues/garbage are still on-board and to request also to report this back.

Possible OSPAR recommendations could therefore be:

- Strengthening the use of "administrative fees" (as in Denmark) to make it easier to issue fines in cases where evidence is not sufficient to open a criminal case/prosecution.
- The possibilities to impose fines or fees could be built into guidance issued to inspection authorities, if not the case.
- Existing guidance documents on investigations, such as the "Investigative Manual for illegal oil discharges from vessels" or the NSN's "North Sea Manual on Maritime Oil Pollution Offences" could be expanded to include Annex V offences (EMSA 2012).

- Declaring pollution offenses as "absolute and strict liability offences", in which there is no need to prove intention; evidence that the offence has been committed is sufficient (EMSA 2012); this would eliminate the possibility to avoid/lower sanctions by declaring "accidental discharges" (e.g. in case ship owners know that their behavior has been detected).
- Offering financial incentives to "whistleblowers" (e.g. amount of the award to be a part of the fine issued in the end).
- Considering voluntary agreements with shipping companies, incorporating effective measures (such as having a marine engineer on board, or installing cameras at the stern of vessels to monitor discarded garbage and other discharges). Companies agreeing on such measures could be granted certain privileges, as in other Green Certificate systems.
- Using drones also for detection of discharges of garbage.
- Introducing procedures similar to the Dutch Coast Guard, i.e. to file a "pollution prevention report" in case of suspicion/suspicious garbage, which will be sent to the next port of call of that ship with the request to check whether the cargo residues/garbage are still on-board.

### Controls, inspection and data exchange

To tackle the multiple challenges surrounding controls and inspection of vessels, and an effective exchange of data and information, the following approaches have been identified as possible "best practice":

- In the EU, a system has been established to record and make easier available the information relevant for compliance with the PRF Directive, mainly the advance waste notifications ("THETIS-PRF", a component of THETIS-EU, similar to THETIS-S for recording inspection results according to the Sulphur Directive). Running since April/May 2016, the PRF authorities, and in case of a double role also the PSC authorities, gain access to the advance waste notifications (respectively, presently they get informed automatically about the lack thereof). Whether the information on waste notifications will be linked to THETIS for PSC authorities (especially, when not responsible for the PRF controls) is under discussion. But relating to the PSC Directive (Art. 25), the MS are obliged to ensure that port authorities and other bodies provide the PSC with such information, i.e. on non-compliance with the advance notification requirements, which would be helpful.
- The ports of Rotterdam and Amsterdam have implemented an electronic system where all information regarding ship waste handling is entered. This makes it easier for the PSC authorities to log on to the system, have access to the relevant information, and monitor it for any discrepancies. Such discrepancies could relate to length of voyage and content of waste notification for example, or quantity of the waste in the notification form and that on the waste delivery receipt (i.e. what was actually delivered). In an agreement between the Dutch inspectorate and the port authorities, it is agreed how information about the controls is shared with the PSC authority. Daily information is shared regarding incidents plus a monthly and yearly report is shared with information about the (results of the) enforcement. In addition, every two months a meeting is summoned where agreements about the whereabouts of enforcement are agreed on.
- The Netherlands also exchange information on ships leaving a port without discharging their solid bulk cargo residues, leading to the conclusion that many bulkships illegally discharge their

residues. This exchange of information is currently done via E-Mail, plus is planned to be expanded to other countries.

- Finland uses a common network called PortNet for cooperation between the Transport Safety Agency (which is the PSC authority), Coast Guard, Customs, police and Transport Agency, and which is described as a useful tool to monitor vessels actions.
- In Estonia, all information regarding the quantities of garbage delivered to port, left onboard the ship etc. is submitted to the Estonian Maritime Document Exchange system (which authorities have access is unclear).
- Some other ports (examples include Limassol, Bremerhaven, Malta and Immingham) inform relevant inspection authorities in case of major discrepancies regarding length of voyage and the content of the waste notification (EMSA 2012).

Possible OSPAR recommendations could therefore be:

- In EU MS, support THETIS-PRF and make sure that information regarding advance waste notifications inform the PSC authority (at best automatically), in line with the PSC Directive (the non-compliance with the advance reporting requirements under the PRF Directive is listed as a possible reason for vessel inspection under the PSC Directive). The literature also suggests that when the monitoring and control by the PSC is reinforced the waste delivery behavior of the ships changes towards a more environmentally friendly and sound behavior (EMSA 2012).
- Following the examples of the Netherlands, to establish systematic communication channels between the inspection and the port authorities, including clear procedures for information flow regarding ship waste delivery to ensure that the inspection authority is able to inspect ships before departure if necessary (also listed in Øhlenschläger et al. 2013).
- Strengthening the role and responsibilities of the port authorities in the waste notification process, as seems to be the case in some ports in Europe, e.g. guarantee that all waste notifications are sent to port authorities with copies to relevant stakeholders such as waste operator(s), terminal operators and inspection authorities (also listed in Øhlenschläger et al. 2013).
- Make the issuing of waste delivery receipt mandatory, as suggested by IMO guidelines (IMO MEPC 2008), to allow for a base upon which to inspect and interpret the waste notifications and garbage record book (suggested also in Eunomia 2015, EC 2015).
- Restricting the incineration of waste onboard, to allow more effective control of waste notifications and the garbage record book.

Furthermore, general recommendations related to the PRF Directive are issued by Øhlenschläger et al. (2013):

- *In order to better focus and increase the number of inspections according to Article 11 of the PRF Directive and the legal provisions of PSC Directive, clearly defined selection criteria to inspect ships should be developed specifically related to sgw (potentially using the frequency of waste discharge as a factor).*
- *The PRF Directive should be amended to better define the relationship between the inspections undertaken within the framework of the PSC Directive, and how the 25 per cent inspection requirement - or the new approach to inspect the ships according to the degree of risk set out in that Directive and its amendments - shall apply.*

- *To provide more detailed information to the PSC authorities to carry out inspections on sgw. Such guidelines should cover selection criteria for inspection of ships (e.g. white list, black list); definition of "sufficient dedicated storage capacity for all ship-generated waste" according to Article 7 of the PRF Directive; inspection procedures of certificates, record books on board, and other documents, inspection procedures of the ship; enforcement tools and means to oblige the ship to deliver waste in port; and enforcement tools and means to detain the ship in port.*

Finally, several organizations (IMO MEPC in the 2012 "Guidelines for the implementation of MARPOL Annex V" and the European Commission in their 2015 "Background Document on "Cost Recovery Systems set up under Article 8 of Directive 2000/59/EC on port reception facilities") recommend to "go beyond" sanctioning. It is argued that as direct enforcement of Annex V regulations, particularly at sea, is difficult to accomplish, financial incitement to discharge litter or garbage into the sea should be removed and at best replaced by creating positive incentives and initiatives to facilitate more effective compliance. An example for the removal of disincentives is the creation of adequate port reception facilities and the application of a "no special fee" system, as practices in the Baltic Sea. As proof for the effectiveness of such systems, the EC (2015) states that *"the reported number of illegal discharges into the Baltic Sea decreased significantly according to the DK Environment Protection Agency after implementation of the 100% indirect fee for Baltic Sea ports"*.

#### Cooperation and enforcement

To tackle the challenges surrounding the cooperation between control and judiciary authorities and effective enforcement of MARPOL (and derived national) regulations, the following approaches have been identified as possible "best practice":

- Generally, it seems that having the port authority taking a strong part in PRF-related issues (instead of organizing waste disposal via separate communication channels with waste operators/individual cargo terminals, for example) increases the effectiveness of controls, as well as compliance.
- In Lower Saxony, Germany, the port authorities or respective private operator is legally obliged to inform the respective port authority in the next port of call of a vessel that did not dispose garbage (Stöfen 2011).
- THETIS-PRF (see above), if running properly, can be regarded as a "future best practice" example.
- Regarding enforcement, Denmark imposes "administrative fines", which just require strong suspicion that a legal entity (a person or registered company) has committed an offence, to circumvent the difficulties in obtaining strong evidence to bring ships suspected of illegal discharges to court (IEEP 2013, Eunomia 2015).

Possible OSPAR recommendations could therefore be:

- Strengthening the use of "administrative fees" (as in Denmark) to make it easier to issue fines in cases where evidence is not sufficient to open a criminal case/prosecution.
- Strengthening the role and responsibilities of the port authorities in the PRF-related issues, as seems to be the case in some ports in Europe, e.g. guarantee that all waste notifications are sent to port authorities with copies to relevant stakeholders such as waste operator(s), terminal operators and inspection authorities (also listed in Øhlenschläger et al. 2013).

Background document on Sanctions, penalties and fines issued by OSPAR and HELCOM Contracting Parties for waste disposal offences at sea

Other recommendations regarding cooperation and enforcement are issued by the European Commission and EMSA:

- The European Commission (2012) generally recommends to increase co-operation between the national enforcement authorities, including national coastguard services, creating ways to exchange information and data, and lists conclusions and recommendations thereof in the Commission's feasibility study regarding European coastguard functions. A possibility would be to strengthen the AQUAPOL network (see also ICF 2014).
- EMSA (2012) recommends that a national procedure is established to support efficient cooperation and exchange of knowledge between administrative and judicial authorities, particularly between Port State Control inspectors and counterparts from authorities with powers of criminal investigation.
- EMSA (2012) also considers using the network of MoU on PSC for the exchange of judicial inquiries and information, and adding arrangements within the MoU-framework on the institution of proceedings as regards discharge violations (this would require an adequate legal basis to be established).

The latter point could help improving the transfer of information regarding MARPOL Annex V violations detected during a PSC inspection to the respective prosecuting agency.

#### Level of fines

The following examples could be viewed as "best practice" examples regarding adequate fines, i.e. fines that have a deterrent effect and outweigh any potential economic benefits "earned" by the violation:

- Besides an adequate (deterrent) level of fines, repeat offenders should be imposed a higher fine, and fines imposed on a legal person should be substantially higher than those imposed on a natural person (HELCOM 2015a). Such a "system of fines" is at best harmonized in a regional context, to avoid loopholes for potential offenders. Such a "harmonized system of fines" is pursued by HELCOM, through HELCOM Recommendation 19/14 (currently in revision).
- In the US, fines for environmental and health issues can generally reach very high and hence deterrent levels. As an example: in 1993 the cruise ship Regal Princess was fined \$500,000 for dumping 20 bags of garbage in to the sea (OSPAR 2009).

Possible OSPAR actions and recommendations could therefore be:

- To issue recommendations on a harmonized system of fines similar to HELCOM Recommendation 19/14, including recommendations on the application of these fines: higher fines for repeat offenders, higher fines for legal than for natural persons, no difference in fine level between foreign and own flags/nationalities, consider violations of the garbage record book as "continuous violations" (imposing higher fines) etc.
- Beside harmonization efforts, implement adequate (higher) level of fines, especially in areas where compliance is notoriously low (e.g. advance waste notifications; see Panteia/PWC 2015).
- The aim of Directive 2009/123/EC is to strengthen the criminal law framework provided under Directive 2005/35/EC on ship source pollution and on the introduction of penalties for infringements by obliging Member States to introduce "effective, proportionate and dissuasive sanctions" for specific criminal offences related to ship-source pollution. The Directive, however, applies only to MARPOL Annexes I and II, and could be expanded to include Annex V offences as well.

### Information Gaps

There are significant gaps on statistical information regarding MARPOL Annex V offences and applied sanctions in OSPAR and HELCOM CPs. Exemptions are Germany and the Netherlands, which provided (relatively) detailed information. Hence, these countries and their approaches to recording statistics on MARPOL Annex V offences could be regarded as "best practice" examples.

A possible OSPAR recommendation could therefore be to harmonize and strengthen the recording of such information, possibly informed by the examples of Germany and the Netherlands, also with a view of fulfilling the obligation of MARPOL Art. 11.

### Other possible recommendations

A possibility to influence compliance and incentivize correct behavior would be to cooperate with "Protection and Indemnity Clubs", which are mutual insurance associations which cover liabilities including the ones arising from pollution (P&I Clubs may cover fines arising from accidental pollution, but will not cover costs arising from deliberate or operational discharges). Linking P&I Club's fees to voluntary initiatives by shipping companies could serve as an incentive for compliance with anti-pollution legislation (both MARPOL as well as PRF-related regulations).

## 5.3 Possible way ahead within OSPAR

The overall aim of the study is to provide background information on possible OSPAR measures to more effectively detect and sanction MARPOL Annex V violations. The document should support the discussions leading up to EIHA 2017, in order to decide which of the recommendations could be adopted as OSPAR measures/recommendations, and in which form.

The following way ahead is proposed towards EIHA 2017:

- The present draft study will be presented at the ICG ML RAP meeting 28-29 June 2016, with a two weeks period for providing comments and add data following thereafter. The "way ahead" presented here will also be discussed at the ICG ML RAP meeting.
- InterSus - Sustainability Services (the consultants commissioned with the preparation of this study) will then integrate the comments and provide a final version of the document by the end of July 2016.
- To strongly involve the CPs in the process towards EIHA 2017 and to elicit expert's opinions, it is suggested to hold a dedicated workshop in Autumn 2016, to discuss the "possible recommendations" presented in this document and the way towards "shared recommendations". It is proposed to invite the OSPAR CPs/the national RAP ML coordinators, EMSA, the NSN as well as relevant experts e.g. from NGOs and academia to the workshop, along the respective HELCOM counterparts (the CPs/representatives from HELCOM MARITIME and ENPRO), as the process and recommendations might be of interest to HELCOM as well.

## 6 References

AQUAPOL. Homepage (<https://www.aquapol-police.com/>). Assessed February 2016.

Bundesamt für Seeschifffahrt und Hydrographie (BSH) (2014). Jahresstatistik 2012 und Jahresstatistik 2013.

Copeland, C. (2010). Cruise Ship Pollution: Background, Laws and Regulations, and Key Issues. CRS Report for the US Congress.

EMSA (2006). Technical report evaluating the variety of cost recovery systems adopted in accordance with article 8 of Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues.

EMSA (2010). Horizontal Assessment Report on the PRF Directive.

EMSA (2012). Addressing Illegal Discharges in the Marine Environment.

EMSA (ed.) (2012a). EMSA Study on the Delivery of Ship-generated Waste and Cargo Residues to Port Reception Facilities in EU Ports - Final Report by Ramboll.

ENPRO (2013). Manual on prosecuting Environmental Crime in the Baltic Sea Region.

Eunomia (2015). Study to support the development of measures to combat a range of marine litter sources - WP1: Sea-based Sources of Marine Litter. Report commissioned by the European Commission.

European Commission (EC) (2012). Commission Staff Working Document: Overview of EU policies, legislation and initiatives related to marine litter. SWD(2012) 365 final.

European Commission (EC) (2015). Background Document on "Cost Recovery Systems set up under Article 8 of Directive 2000/59/EC on port reception facilities - consolidated findings from the different Commission/EMSA reports on CRS". 3rd Meeting of the ESSF-PRF Subgroup.

Gelbhaar, S. (1992). Monetäre Sanktionen als Instrumente staatlichen Handelns: Ökonomik der Geldstrafen und ihre Funktion im umweltpolitisch motivierten Staatshaushalt. Duncker und Humblot, Berlin.

HELCOM (2014). Results of questionnaire for sanctions on violation of ship-related legislation to update HELCOM Recommendation 19/14. Maritime Group. Riga, Latvia, 4-6 November 2014.

HELCOM (2015). Annual report on discharges observed during aerial surveillance in the Baltic Sea 2014. Document prepared for the 15th meeting of the HELCOM Maritime Group in Klaipeda (November 2015).

ICF International (2014). Study on the feasibility of improved co-operation between bodies carrying out European Coast Guard functions. Final Report.

IMO MEPC (2008). Standard format for the waste delivery receipt following a ship's use of port reception facilities; MEPC1/Circ.645.

IMO MEPC (2015). Summary Reports and Analysis of mandatory Reports under MARPOL (MEPC/Circ.318).

Kershaw, P.J., Alcaro, L., Garnacho, E., Doyle, T., Maes, T. and Painting, S., (2013). Review of existing policies that may be applied to mitigate the impact of marine litter. Deliverable report D1.3. MARLISCO project. MARine Litter in Europe Seas: Social Awareness and CO-Responsibility. EC FP7 Coordinated and support action, SIS-MML-289042.

National Single Window (NSW). Homepage ([www.national-single-window.de](http://www.national-single-window.de)). Assessed May/June 2016.

Newman, S., Watkins, E. and Farmer, A. (2013). How to improve EU legislation to tackle marine litter. Institute for European Environmental Policy, London.

No author (2012). Beitrag der maritimen Wirtschaft zur Reduktion schädlicher Einleitungen. Report commissioned by the German Federal Environment Agency.

Øhlenschläger, J.P., Newman, S. and Farmer, A. (2013). Reducing ship generated marine litter - Recommendations to improve the EU Port Reception Facilities Directive. Institute for European Environmental Policy, London.

OSPAR (2009). Marine litter in the North-East Atlantic Region: Assessment and priorities for response. London, United Kingdom.

OSPAR (2014). Regional Action Plan for Prevention and Management of Marine Litter in the North-East Atlantic. Available at: <http://www.ospar.org/work-areas/eiha/marine-litter/regional-action-plan>.

Panteia/PWC (2015). Ex-Post evaluation of Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues. Report commissioned by the European Commission.

Paris MoU (2014). 2014 Annual Report on Port State Control.

Port of Hamburg (2014). Information on the national notification obligations in transposition of EU Directive 2010/65/EU on reporting formalities.

Stöfen, A. (2011). Abfallbewirtschaftung in deutschen Häfen. Umsetzung der Richtlinie 2000/59/EG über Hafenauffangeinrichtungen für Schiffsabfälle und Ladungsrückstände in Deutschland. NABU Deutschland.

Stöfen-O'Brien, A. (2015). The International and European Legal Regime Regulating Marine Litter in the EU. Nomos.

WWF Poland (2011). Ecological effects of ghost net retrieval in the Baltic Sea. Pilot project: collecting ghost nets. WWF Polska.

## Annex I: Questionnaire issued to OSPAR and HELCOM CPs in spring 2016

1. Is there (statistical) information on the quantity of MARPOL Annex V waste discharged illegally in harbours/12 mile zone/EEZ ?

*[Please fill in, also most recent information available on the amount of waste illegally discharged or the number of violations, or similar information]*

2. Do you have any (statistical) information on violations against the obligation to keep a MARPOL Annex V Garbage Record Book or using a Garbage Management Plan?

*[Please fill in]*

3. Do you have any (statistical) information on the quantity and quality (level of fines, prison sentences) of sanctions applied with regard to violations of regulation related to MARPOL Annex V (illegal discharges, garbage record book, garbage management plan)?

*[Please fill in]*

4. Could you provide well-working examples (best practice) from your country (or area of knowledge) regarding MARPOL Annex V related to:

a) Data Management and Exchange:

*[Please fill in]*

b) Enforcement at Sea:

*[Please fill in]*

c) Ship and Harbour Inspections:

*[Please fill in]*

5. How does the inspection and sanction regime regarding MARPOL Annex V/ ship generated waste work in your country?

a) Controls/detection of violations [e.g. who is responsible for PSC controls, who is responsible for PRF Directive controls, what are the responsibilities, limitations and rights of police/judiciary organizations]?

b) Consequences [who decides about consequences in the form of fees/sanctions or others, who forwards the matter to a judiciary authority]?

c) Cooperation [how is the cooperation between the different control and inspection regimes organized, how is it guaranteed/encouraged that PSC or PRF Directive inspectors forward detected violations to police/judiciary organizations]?

6. Nature of and (national) legal basis for consequences of MARPOL Annex V infringements (how are fees structured, how high are these etc.).

*[Please fill in]*

7. What kind of methods or technologies do you use for detecting illegal discharges of MARPOL Annex V waste into the sea?

*[Please fill in]*

8. Are there “institutional success factors”, i.e. institutions, structures or rules in your country or that you know of that make MARPOL Annex V related control, enforcement and prosecution especially successful?

*[Please fill in]*

9. Additionally, we are thankful for your own opinion on the legal possibilities to impose sanctions under MARPOL Annex V (in your country or in general), and your thoughts and ideas on shortcomings and/or additional success factors.

*[Please fill in]*

## Annex II: Overview tables of answers received regarding controls and inspections and cooperation between authorities

### Responsible authorities for controls and inspections in the OSPAR and HELCOM CPs

Country	Responsible authority concerning PSC	Responsible authority concerning PRF controls	Other authorities also responsible for controls and inspections
<b>Denmark</b>	Danish Maritime Authority	PRF controls are carried out by the Danish Maritime Authority on behalf of the Danish Environmental Protection Agency	No dedicated surveillance operational in order to locate and respond to marine litter. Maritime Pollution control aircraft is dedicated to oil pollution, but are by standing operational instruction to report significant observations of marine litter to the Maritime Assistance Service (MAS) located at Joint Operational Centre. MAS hands it over to the appropriate agency within the Ministry of the Environment.
<b>Finland</b>	Finish Transport Safety Agency	Regional Centers for Economic Development, Transport and the Environment	Finish Coast Guard, customs, police
<b>Estonia</b>	Maritime Administration	Maritime Administration	
<b>Germany</b>	Ship Safety Division of the BG Verkehr	Port authorities	German Coast Guard, waterways police
<b>Ireland</b>	Marine Survey Office (Department of Transport, Tourism and Sport)	Marine Survey Office (Department of Transport, Tourism and Sport)	
<b>Latvia</b>	Latvian Maritime Administration	State Environmental Service	
<b>Lithuania</b>	Lithuanian Maritime Safety	Lithuanian Maritime Safety Administration; Regional Environmental Protection	Klaipeda Regional Environmental Protection

Country	Responsible authority concerning PSC	Responsible authority concerning PRF controls	Other authorities also responsible for controls and inspections
	Administration	Department	Department
<b>Norway</b>	Norwegian Maritime Organization		
<b>The Netherlands</b>	Dutch Shipping Inspectorate	Dutch Shipping Inspectorate; port authorities of Rotterdam and Amsterdam - own legal mandates for important parts of the PRF-controls in their areas.	Maritime police is also competent to prosecute illegal discharges
<b>Sweden</b>	Swedish Transport Agency	Swedish Transport Agency	
<b>UK</b>	UK Maritime and Coastguard Agency (MCA) surveyors. Police and judiciary authorities have no input.		

#### Cooperation between different inspection/control and judiciary authorities in the OSPAR and HELCOM CPs

Country	Organisation of cooperation and responsibilities of the authorities
<b>Denmark</b>	No dedicated surveillance operational in order to locate and respond to marine litter. Maritime Pollution control aircraft is dedicated to oil pollution, but are by standing operational instruction to report significant observations of marine litter to the Maritime Assistance Service (MAS) located at Joint Operational Centre. MAS hands it over to the appropriate agency within the Ministry of the Environment. It is the same process for observations by other ships or aircrafts from the Danish Navy and Air Force.
<b>Finland</b>	The Finish Transport Safety Agency decides further action with other authorities. The cooperation between PSC and the landside authority is carried out on a case by case basis and handled by official channels. The cooperation at the "inspector level" is rare, there is a cooperation forum with regular meetings on policy issues.
<b>Estonia</b>	Maritime Administration is the only responsible authority – PSC, PRF and extra-judicial body.
<b>Germany</b>	Although there is no official regulation that the BG Verkehr has to inform the waterways police, and both are just obliged to support each other, there is a good cooperation in practice. The waterways police and German Coast Guard report detected violations to Federal

	Maritime and Hydrographic Agency (BSH), which is the public prosecutor.
<b>Ireland</b>	
<b>Latvia</b>	<p>PSC inspectors and PRF inspectors are planning their inspections individually and mostly carry them out not at the same time. There is mutual agreement between PRF and PSC inspectors on forwarding information on violations detected during ship inspections to the other/responsible authority. As inspectors are the ones who penalize violators, there is no need to forward detected violations to police or other jurisdiction organization.</p> <p>The State Environmental Service (PRF) can make decisions about fines (based on Latvian Violations Code). In major cases if detainment/arrestment is necessary: Port State Inspector/ harbor master has to be called.</p>
<b>Lithuania</b>	<p>Lithuanian Maritime Safety Administration (or others) transmits information to Regional Environmental Protection Department.</p> <p>Regional Environmental Protection Department decides to apply sanctions or transfer the file to the authorized court.</p>
<b>Norway</b>	NMA issues deficiencies and fines
<b>The Netherlands</b>	<p>There is an agreement which is signed by the Dutch shipping inspectorate, the ports of Amsterdam and Rotterdam – and that is renewed every second year. In a meeting happening every two months, cases are being discussed and communicated with the inspectors. There are also agreements between the maritime police and the shipping Inspectorate/PSC that the police can request technical support in the case of illegal discharges. When it comes to charges, inspectors make their own decisions (based on legislation and commitments btw. Dutch Shipping Inspectorate and ports of Rotterdam and Amsterdam).</p> <p>Also the maritime police is competent to prosecute for illegal discharges and can impose fines.</p>
<b>Sweden</b>	Swedish Transport Agency is obliged to forward any violations that may constitute a crime to the prosecutor. The prosecutor then decides whether to prosecute. The fines are proposed by the prosecutor and decided by the courts in each case.
<b>UK</b>	If a violation is significant and the PSC inspector believes that the matter is of a level that it cannot be dealt with by PSC sanctions alone, then it is referred to the MCA Enforcement Unit, who will conduct a criminal investigation and if appropriate will prosecute the appropriate offender in the criminal court. The court (lower or upper court) decides the appropriate penalty, based on sentencing guidelines.

### Sanction/fee system for infringements in the OSPAR and HELCOM CPs

Country	Legal Framework	Levels of sanctions and fines - how are
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		these determined
Denmark	<p>Departmental order no. 66 of 21/01/2013, chapter 8, regarding the discharge of garbage from ships and platforms.</p> <p>Departmental order no. 415 of 10/05/2012, chapter 9, regarding reception facilities for garbage from ships, ships' handing over of garbage, and ports' garbage plans, in accordance with the Danish act on protection of the marine environment no. 1616 of 10<sup>th</sup> December 2015 (there are no official translations of these departmental orders).</p>	There are no fixed fines for breach of the respective provisions.
Finland	Act on Environmental Protection in Maritime Transport: <a href="http://www.finlex.fi/fi/laki/kaannokset/2009/en20091672.pdf">http://www.finlex.fi/fi/laki/kaannokset/2009/en20091672.pdf</a>	
Estonia	Fines are regulated in the Maritime Safety Act and Port Act.	See Answer (§ 90 Maritime Safety Act// § 51 Port Act - <30 x1.200 /32.0000)
Germany	<p>Criminal offences: criminal code</p> <p>Infringement/administrative offence: Maritime Environmental Behaviour Regulations (can only be prosecuted when committed in waters under German jurisdiction)</p>	Catalogue available (in German).
Ireland	The relevant legislation for fines and sanctions are contained in the Sea Pollution Act, 1991 – Sections 29,30,32 and 42: ( <a href="http://www.irishstatutebook.ie/eli/1991/act/27/enacted/en/html?q=Sea+Pollution&amp;years=1991">http://www.irishstatutebook.ie/eli/1991/act/27/enacted/en/html?q=Sea+Pollution&amp;years=1991</a> )	
Latvia	Latvian Administrative Violations Code, Sections 58, 61 and 75	Concerning the matter of offense the fines vary considerably (70 – 2.900 €). Detailed table provided.
Lithuania	Code of Administrative Offences	Usually 57 – 144 € (for illegal discharge of garbage)
Norway		Violation fines: < 7.000 €
The Netherlands	Legal base for maritime police: Law on Economic Offences (fines)/Law on Prevention of Pollution by Ships (no ENG translation available). Working on a new system of sanctions (incl. fines and sentences).	Warnings and sometimes deficiencies (reg. in THETIS)

Background document on Sanctions, penalties and fines issued by OSPAR and HELCOM Contracting Parties for waste disposal offences at sea

Sweden	Transport Agency's Regulations (TSFS 2010:96) (Chapter 10) - requirements in MARPOL Annex V pertaining to ships.	<p>1 § – violation of any requirements regarding discharges under the law - punishable by fines or imprisonment up to two years.</p> <p>4 § 1 – neglecting to deliver waste to PRF – punishable by fine or imprisonment up to six months.</p> <p>5 § 5 – neglecting to inform the port in advance of waste – punishable by fine.</p> <p>Intent or criminal negligence is required for convictions.</p>
UK	PSC Sanctions and Sentencing guidelines for courts. Sanctions beyond PSC sanctions are all criminal matters.	



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**Our vision is a clean, healthy and biologically diverse North-East Atlantic Ocean, which is productive, used sustainably and resilient to climate change and ocean acidification.**

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