COMPARATIVE REVIEW OF EXISTING REPORTING PROCEDURES AND FORMATS

Note by the Secretariat

SUMMARY

Executive Summary: This document provides a comparative review of existing reporting procedures and formats, at international and regional level.

Action to be taken: Paragraph 3

Related documents: REMPEC/WG.45/8, REMPEC/WG.45/16, REMPEC/WG.51/9, REMPEC/WG.51/9/1, REMPEC/WG.51/9/2, REMPEC/WG.51/9/3, and REMPEC/WG.51/9/4

Introduction

1 Recognising the importance of a common approach on data sharing towards a standardised format for monitoring and reporting on pollution from ships in the Mediterranean region, the Thirteenth Meeting of the Focal Points of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) (Floriana, Malta, 11-13 June 2019), requested the Secretariat to carry out, at international and regional levels, a comparative review of existing reporting procedures and formats to, as much as possible, avoid duplication and to ensure the format retained is in line with the one already developed.

2 The said comparative review prepared by the Secretariat, in consultation with the International Maritime Organization (IMO), the Mediterranean Action Plan of the United Nations Environment Programme (UNEP/MAP), and the European Commission is reproduced in the Appendix to the present document.

Actions requested by the Meeting:

3 The Meeting is invited to take note of the information provided in the present document.
Appendix

A comparative review of existing reporting procedures and formats
# Contents

1. Introduction ................................................................................................................................. 1

2. Oil and chemical accidental pollution .......................................................................................... 1
   2.1 Reporting at international level ............................................................................................... 1
   2.2 Reporting at regional level ........................................................................................................ 3
   2.3 Reporting at European level ...................................................................................................... 5

3. Illicit discharges ............................................................................................................................ 6
   3.1 Reporting at regional level ......................................................................................................... 6
   3.2 Reporting at European level ...................................................................................................... 6

4. Marine litter ................................................................................................................................... 8
   4.1 Reporting at international level ................................................................................................. 8
      4.1.1 Dumping of wastes and other matter at sea ......................................................................... 8
      4.1.2 Discharge of ship-generated wastes ................................................................................... 9
   4.2 Reporting at regional level ........................................................................................................ 11
      4.2.1 Dumping of wastes and other matter at sea ....................................................................... 11
   4.3 Reporting at European level ..................................................................................................... 14

5. Air pollution and energy efficiency ............................................................................................... 15
   5.1 Reporting at international level ................................................................................................. 15

6. Non-Indigenous Species invasion ................................................................................................. 18
   6.1 Reporting at international level ................................................................................................. 18

7. Comparative analysis of reporting obligations and recommendations ........................................ 20
   7.1 Oil and chemical accident pollution and illicit discharges ......................................................... 20
   7.2 Dumping, including marine litter .............................................................................................. 21
   7.3 Air pollution and energy efficiency ........................................................................................... 22
   7.4 Non-Indigenous Species invasion ............................................................................................. 22
1 Introduction

This report summarizes the reporting obligations relative to maritime transport and offshore activities from Mediterranean Countries in the frame of different governance systems: international conventions under the auspices of the International Maritime Organization (IMO); Protocols, Agreements and Regulations under the Barcelona Convention; European Union Directives relevant to the Mediterranean European Member States. The aim of the report is to highlight eventual overlapping or, on the contrary, possible gaps in the reporting systems that prevent efficiency and completeness of collection of the data relevant to monitoring the state of marine pollution from maritime traffic and offshore activities in the Mediterranean Sea.

2 Specific reporting obligations, targeting the definition of the Status of Mediterranean ecosystems, are those foreseen under the Integrated Monitoring and Assessment Programme (IMAP). In actual fact, the IMAP system includes Ecological Objectives and Common Indicators (or Candidate Indicators) relevant to monitoring (also) shipping and offshore activities and related pressures and impacts, namely:

- EO2 Non-Indigenous species - Common Indicator 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species, particularly invasive, non-indigenous species, notably in risk areas;
- EO3 Pollution - Common Indicator 19: Occurrence, origin – where possible, the extent of acute pollution events (e.g. slicks from oil, oil products and hazardous substances), and their impact on biota affected by this pollution;
- EO10 Marine litter - Common Indicator 22: Trends in the amount of litter washed ashore and/or deposited on coastlines; Common Indicator 23: Trends in the amount of litter in the water column including microplastics and on the seafloor; Candidate indicator 24: Trends in the amount of litter ingested by or entangling marine organisms, focusing on selected mammals, marine birds, and marine turtles;
- EO11: Energy including underwater noise: Candidate indicator 26: Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals; Candidate indicator 27: Levels of continuous low frequency sounds with the use of models as appropriate.

3 European Member States also have to comply with reporting obligations under the Marine Strategy Framework Directive (MSFD). In this case, too, some Descriptors are relevant to monitor (also) shipping and offshore activities related pressures and impacts:

- Descriptor 2. Non-indigenous species do not adversely alter the ecosystem
- Descriptor 8. Concentrations of contaminants give no effects
- Descriptor 10. Marine litter does not cause harm
- Descriptor 11. Introduction of energy (including underwater noise) does not adversely affect the ecosystem.

2 Oil and chemical accidental pollution

2.1 Reporting at international level

MARPOL is the main international convention covering prevention of pollution on the marine environment by ships from operational or accidental causes. IMO should be informed, without delay, in all cases of pollution incidents of potential interest to the public or where IMO assistance may be required. In addition, MARPOL requires contracting parties to submit the following annual reports relevant to oil and chemical accidental pollution:

- Summary report by the coastal State to the IMO of any incidental spillages of 50 tonnes of more caused by causalities to ships, including for each event, the information included in the below template (source: MEPC/Circ. 318; Annex – Part 1). On a voluntary basis, countries can report the same annual summary information as well as that of incidental spillages of less than 50 tonnes.


5 Two other IMO instruments supplement the reporting requirements of the MARPOL Convention with regard to oil and chemical pollution, namely the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC 90) and the Protocol on Preparedness, Response and Cooperation to pollution Incidents by Hazardous and Noxious Substances (OPRC-HNS Protocol). In terms of reporting, Member States are required to provide to the IMO, directly or through the relevant regional organization or arrangements on:
information on: responsible authorities and entities, pollution response equipment, expertise in disciplines related to pollution response and marine salvage, which may be made available to other States upon request, and the national contingency plan.

− copies of bilateral or multilateral agreements for oil pollution preparedness and response.

2.2 Reporting at regional level

6 Reporting obligations and requirements is requested by the Members of the Barcelona Convention on legal, regulatory and operational measures. (UNEP(DEPI)/MED IG.23/23, Decision IG.23/1).

7 Under the Prevention and Emergency Protocol, Contracting Parties thereto established a reporting procedure (Article 9) whereby the following information must be reported (according to the formats described below) by masters or other persons having charge of ships flying their flags and to the pilots of aircraft registered in their territories:

− all incidents which result or may result in a discharge of oil or hazardous and noxious substances; and
− the presence, characteristics and extent of spillages of oil or hazardous and noxious substances, including hazardous and noxious substances in packaged form, observed at sea which pose or are likely to pose a threat to the marine environment or to the coast or related interests of one or more of the Contracting Parties.

8 Moreover, in accordance with Article 10 (Operational Measures) of the said Protocol, any Contracting Party thereto faced with a pollution incident shall, amongst others:

− immediately inform all Contracting Parties thereto likely to be affected by the pollution incident of their assessments and of any action which it has taken or intends to take, and simultaneously provide the same information to REMPEC, which shall communicate it to all other Contracting Parties thereto; and
− continue to observe and monitor the situation for as long as possible and report thereon in accordance with Article 9.

9 In the framework of the Barcelona Convention, the standard pollution accidents reporting format (POLREP) is composed of three parts POLWARN, POLINF and POLFAC.

10 POLWARN gives the first information or warning of the pollution or the threat:

− Date and time
− Position
− Incident
− Outflow
− Acknowledge

11 POLINF provides a detailed supplementary report, as well as situation reports:

− Date and time
− Position and/or extent of pollution on/above/in the sea
− Characteristics of pollution
− Source and cause of pollution
− Wind direction and speed
− Current direction and speed and/or tide
− Sea state and visibility
− Drift of pollution
− Forecast of likely effect of pollution and zones affected
− Identity of observer/reporter identity of ships on the scene
− Actions taken
12 POLFAC is used to request assistance from other Contracting Parties, and for defining operational matters related to such assistance:

- Date and time
- Request for assistance
- Cost
- Pre-arrangements for the delivery of assistance
- Where assistance is to be rendered and the mode
- Name of other States requested
- Change of command
- Exchange of information
- Spare for any other relevant requirements or instructions.

13 The 2017 revised Barcelona Convention Reporting System (BCRS) allows Contracting Parties to report and directly upload data on acute pollution events onto the Mediterranean Integrated Geographical Information System on Marine Pollution Risk Assessment and Response (MEDGIS-MAR), to facilitate compliance with their biannual reporting obligation and to avoid duplication. MEDGIS-MAR Reporting format for accidental pollution includes the following fields:

- Date
- Accident location: latitude and longitude or closest shore location and country
- Accident type: blow-out, cargo transfer failure, contact, collision, engine or machine breakdown, fire/explosion, grounding, foundering, hull structural failure, installation structural failure, oil and gas leak, other
- Whether any product has been released or not. If yes, pollution range (0, <7 tonnes, 7<x<700, >700 tonnes) and the type of pollution (non-hazardous substance, non-volatile oil, other hazardous substance, volatile oil, unknown) must be reported
- Vessel IMO number, MMSI (Maritime Mobile Service Identity) or vessel name
- Vessel flag and other vessel information:
- Fix object name, ID number and category
- Oil handling facility name, ID number and category.

14 Obligations under the Barcelona Convention also foresee annual reporting. Decision IG 23.1, UNEP(DEP)/MED IG.23/23 provides the revised reporting format for the implementation of the Barcelona Convention its Protocols. In particular, section 3 (Prevention and Emergency Protocol) indicates the reporting obligations relative to the implementation of the Protocol concerning cooperation in preventing pollution from ships and in cases of emerging, combating pollution of the Mediterranean Sea. Reporting formats to be completed concern:

- Legal and regulatory measures
- Pollution preparedness and response: operative measures
- Pollution incidents, which format is reported below.
Section 6 (Offshore protocol) of the same Decision IG 23.1, UNEP(DEPI)/MED IG.23/23 indicates the reporting obligations relative to the implementation of the Protocol for the protection of the Mediterranean Sea resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil. Reporting formats to be completed concern:

- Legal and regulatory measures
- Permits and quantities
- Inventory of offshore installation
- Enforcement measures
- Reporting for accidents under the Offshore Protocol is not foreseen

### 2.3 Reporting at European level

The EU system for monitoring and reporting marine pollution is the Union Maritime Information and Exchange System (SafeSeaNet), which is part of the SafeSeaNet Ecosystem Graphical User Interface, providing access to EMSA’s maritime applications and data sets. Reporting to SafeSeaNet is based on the POLREP (POLWARN and POLINF), the legal basis is defined by Directive 2002/59/EC as amended. Those can be sent as alerts to other SafeSeaNet users and are automatically transmitted to the Emergency Communication and Information System for marine pollution incidents (CECIS Marine) which is the platform for requesting and offering international assistance (POLFAC). CECIS Marine is open to third countries sharing a regional sea basin with the Union¹ and can be used as a regional emergency communication platform. Access to SafeSeaNet for third countries is also available for exchanging POLREP information, within an associated geographical area restriction. Access to both SafeSeaNet and CECIS Marine may be granted to third countries upon an official request.

### 17 POLWARN:

- Date/time received
- Date/time
- Incident outflow
- Acknowledgement
- Geographical coordinates
- Geographical area
- Bearing distance

---

¹ Albania, Algeria, Bosnia Herzegovina, Egypt, Georgia, Israel, Lebanon, Libya, Monaco, Montenegro, Morocco, Palestine, Russian Federation, Syria, Tunisia, Turkey and Ukraine.
18 POLINF:
- Date/time received
- Date/time
- Pollution position
- Pollution chars
- Pollution source
- Wind (speed and direction)
- Tide (speed and direction)
- Sea State (wave height and visibility)
- Pollution drift (drift course and speed)
- Pollution effect forecast
- Observer Identity (name, home port, flag, call sign)
- Action taken
- Photographs
- Informed State or Organization (Name)
- (Report on Oiled Wildlife)*
- (Action taken on Oiled Wildlife)*
- (Forecast Oiling of Wildlife)*
- (Evidence Taken from Oiled Wildlife)*
- Other information
- Acknowledge

* new optional information to be included in the revised template by end of 2021

19 CleanSeaNet, the satellite-based oil spill monitoring and vessel detection service is also integrated in SafeSeaNet Ecosystem Graphical User (SEG) Interface and is an important element of the overall chain to detect and combat marine pollution. In case a possible oil spill is detected in the alert area of a Coastal State, a CleanSeaNet alert report is automatically sent in near real time (usually less than 20 minutes after the satellite pass). National authorities will then validate the information by using their own means for verification on site and/or inspecting the vessel identified as polluter and will afterwards report the result of the in-situ verification (known as feedback). Member States report feedback to CleanSeaNet detection via the SEG interface; for third countries the reporting procedure is performed by email. The provision of feedback by the users in fundamental for service validation by supporting a continuous service improvement approach.

3 Illicit discharges

3.1 Reporting at regional level

20 In the Mediterranean Sea, Parties of the Barcelona Convention can report illicit discharges from ships by uploading data on the Mediterranean Integrated Geographical Information System on Marine Pollution Risk Assessment and Response (MEDGIS-MAR) managed by REMPEC, providing following information:

- Date
- Location (latitude and longitude or alternative geographical information)
- Location of infringement (internal waters, territorial sea, contiguous zone, exclusive economic zone, high seas, continental shelf)
- Country where the infringement is located
- Country that detected the infringement
- Vessel IMO number, MMSI (Maritime Mobile Service Identity) or vessel name
- Vessel flag and other vessel information
- Discharge quantity

3.2 Reporting at European level

21 Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements and its amendment (Directive 2009/123/EC) introduces penalties that cover offences committed by natural and legal persons. The purpose of the Directive is to incorporate international
standards for ship-source pollution into European law and to ensure that persons responsible for discharges of polluting substances are subject to adequate penalties, including criminal penalties, in order to improve maritime safety and to enhance protection of the marine environment from pollution by ships. Under Art.12 of the Directive there is a reporting obligation for EU Member States to report every three years on the application of this Directive, which covers discharges of MARPOL Annexes I and II.

Following a workshop on ship source pollution held in Lisbon in 2018, a Correspondence Group on Ship-Source Pollution (SSP) was established to develop a harmonised reporting template, that could be used to facilitate the reporting under Directive 2005/35/EC. The IMO MARPOL reporting obligations (as per MEPC/Circ. 318) have been taken into consideration, as well as the reporting formats in use under the Bonn Agreement, HELCOM and the North Sea Network of Investigators and Prosecutors (NSN). Hence, this format is aimed at avoiding multiple reporting and an extra administrative burden for the EU Member States. Following consultation of EU Member States, and of relevant stakeholders (including REMPEC as representative of the Barcelona Convention system) within the framework of the European Sustainable Shipping Forum (ESSF), the **SSP harmonised reporting format** was circulated to EU Member States in January 2021.

EU Member States have been invited to use this harmonized reporting template for reporting under Article 12 of Directive 2005/35/EC, but its’ use is not obligatory. The template consists of two main tables: one covering information on detected pollution events and one covering information on enforcement cases, as well as guidance on how to fill these in.

<table>
<thead>
<tr>
<th>Table 1 – Information on detected pollution events</th>
<th>Table 2 – Enforcement Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Column header</strong></td>
<td><strong>Column header</strong></td>
</tr>
<tr>
<td>Country</td>
<td>Case ID</td>
</tr>
<tr>
<td>Year</td>
<td>Polluter/Source</td>
</tr>
<tr>
<td>Pollution event ID</td>
<td>Ship Type</td>
</tr>
<tr>
<td>Date</td>
<td>Pollution Type</td>
</tr>
<tr>
<td>Time</td>
<td>Location of infringement</td>
</tr>
<tr>
<td>Day/Night</td>
<td>Date of infringement</td>
</tr>
<tr>
<td>Latitude [N/S]</td>
<td>Detected by</td>
</tr>
<tr>
<td>Longitude [W/E]</td>
<td>Pollution event ID</td>
</tr>
<tr>
<td>Pollution Category</td>
<td>Referred to - Flag State</td>
</tr>
<tr>
<td>Type of substance</td>
<td>Referred to - Date</td>
</tr>
<tr>
<td>Estimated volume or quantity</td>
<td>Action by Flag State</td>
</tr>
<tr>
<td>Length [km]</td>
<td>Type(s) of sanction finally imposed</td>
</tr>
<tr>
<td>Width [km]</td>
<td>Sanction imposed by</td>
</tr>
<tr>
<td>Area [km$^2$]</td>
<td>Fine and/or Penalty amount</td>
</tr>
<tr>
<td>Aerial surveillance detection</td>
<td>Contact point</td>
</tr>
<tr>
<td>Polluter/Source</td>
<td>Remarks</td>
</tr>
<tr>
<td>Ship Type</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>
4 Marine litter

24 UNCLOS has two main articles relating to marine litter: Article 210 on ‘Pollution by dumping’ and Article 211 on ‘Pollution from Vessels’. These separate provisions are reflected in two main strands of global legislation. The first controls dumping through the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (the London Convention) and its subsequent Protocol (the London Protocol) which entered into force in 1996. The second deals with the control of ‘ship-generated’ wastes, through the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78).

25 Dumping of wastes at sea can be a potential source of marine litter. The London Convention, and the subsequent London Protocol, are the main international agreements providing the global rules and standards concerning the dumping of wastes at sea. These are re-enforced at a regional level, through Regional Seas Conventions containing annexes or protocols specifically related to dumping.

26 The London Convention specifically banned the ocean disposal of persistent plastics and other persistent synthetic materials, along with a number of other types of wastes, such as crude oil, radioactive wastes, and biological or chemical warfare materials. The London Protocol is more restrictive and bans the disposal of all wastes into marine waters except for eight specific types of wastes listed in Annex 1, which may be considered for sea disposal following a stringent assessment and licensing process. Although not explicitly referred to in the legal text of the London Protocol, plastics are in effect prohibited due to the nature of the treaty (i.e., dumping is prohibited, except for the eight wastes).

27 MARPOL Annex V seeks to eliminate and reduce the amount of garbage being discharged into the sea from ships, and Regulation 8 imposes an obligation on the State Parties to ensure ports plan for and provide facilities for the reception of garbage. Garbage under MARPOL Annex V includes all plastics, along with other waste types like food or domestic and operational waste. Additionally, Annex V recognizes that some sea areas require higher degrees of protection and can be designated as Special Areas under MARPOL. The Mediterranean Sea is one of the eight Special Areas currently designated under Annex V. Under MARPOL these special areas are provided with a higher level of protection than other areas of the sea.

4.1 Reporting at international level

4.1.1 Dumping of wastes and other matter at sea

28 In accordance with article VI(4) of the London Convention and article 9.4 of the London Protocol, Contracting Parties are required to report on permits issued for dumping at sea (including NIL report when no permits are issued) to the Secretariat on an annual basis. The same applies for the information on amounts of wastes actually dumped and the sites where dumping has been carried out. In addition, the results of monitoring studies carried out for the purpose of the London Convention and Protocol should also be reported.

29 In 2002, the reporting format for the annual dumping reports by Contracting Parties was simplified and in an effort to further improve reporting under the London Convention and Protocol, the governing bodies adopted it in 2011; this resulted in a Revised Electronic Reporting Format. Subsequently, the governing bodies initiated the development of an online reporting system, under the IMO Global Integrated Shipping Information System, GISIS, which was launched in 2015 (LC-LP.1/Circ.74). Contracting Parties requested to use the online module as the preferred option for submitting their annual reports on dumping records. Both the electronic reporting format, provided through an Excel template, and the online reporting system request information as set out in the following six tables:

- Table 1 - Annual summary of dumping at sea permits and quantities - This table includes information on permits and quantities permitted or licensed for dumping at sea.
- Table 2 – Annual quantities of waste or other matter dumped at sea for each dumping site. This table provides a more detailed report on waste that has been dumped at each site.
- Table 3 – Coordinates for dumping site at sea. This table is used to record the coordinates of dumping sites.
Table 4 – Injection of CO2 at carbon dioxide stream storage sites. This table is used by Contracting Parties that issue permits for the sub-seabed storage of carbon dioxide streams.

Table 5 – CO2 storage site coordinates. As for table 4, only Contracting Parties issuing permits for the sub-seabed storage of carbon dioxide streams will use this table.

Table 6 - Monitoring the condition of the sea for the purposes of the London Convention or the London Protocol. This table is used to report monitoring activities.

30 Contracting Parties shall also regularly report about the measures undertaken to implement the provision of the protocol and their effectiveness.

31 Finally, Contracting Parties agreed to co-operate in the reporting of vessels and aircraft observed dumping in contravention of the Convention. If an observer witnesses a dumping incident in any ocean waters that appears to be in violation of the Convention or the Protocol, he or she is asked to: (i) Immediately notify the proper authorities so that they can determine an appropriate action; (ii) complete a Dumping Incident Information Form and Supplementary Information Form as completely as possible.

4.1.2 Discharge of ship-generated wastes

32 The use and provision of port reception facilities (PRFs) is fundamental to the overall success of MARPOL in its objective of reducing and ultimately eliminating intentional pollution of the marine environment by ships. MEPC.1/Circ.834/Rev.1 provides a consolidated guidance for PRF providers and users, being a practical users’ guide for ships’ crew who seek to deliver MARPOL wastes/residues ashore and for port reception facility providers who seek to follow standardized forms: provide timely, efficient port reception services to ships. The term MARPOL wastes/residues is used throughout the guidance to refer collectively to all waste streams that are generated on board ships during normal operations and during cargo operations and are governed by MARPOL, with particular reference to Annexes I to VI. Annex V focuses on garbage from ships, including plastics, food wastes, domestic wastes, cooking oil, incinerator ashes, operational wastes, animal carcasses, fishing gear, E-waste, cargo residues not harmful to the marine environment (non-HME) and cargo residues harmful to the marine environment (HME). Recommendations include reporting procedures and the use of the:

- Format for reporting alleged inadequacy of port reception facilities (Appendix 1). The master of a ship having encountered difficulties in discharging waste to reception facilities shall use this format to report to the Administration of the flag State and, if possible, to the competent Authorities in the port State.
- Format of the advance notification for waste delivery to port reception facilities (Appendix 2). The master of a ship should forward, in advance, various information on waste delivery to the designed authority.
- Format for the waste delivery receipt (Appendix 3). The designated representative of the reception facility provider must provide this form to the master of a ship that has just delivered wastes/residues.

33 Appendix 4 to MEPC.1/Circ.834/Rev.1 contains the following overview of the waste reception facility reporting requirements for both port States and flag States.
<table>
<thead>
<tr>
<th>Reporting on the availability of reception facilities</th>
<th>Reporting requirements</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The port State is required to communicate to the Organization a list of reception facilities in its ports including their location, capacity, available facilities and other characteristics.</td>
<td>Article 11(1)(d) of MARPOL</td>
</tr>
<tr>
<td></td>
<td>The port State is required to upload information on new reception facilities on the Port Reception Facilities Database (GISIS) and to maintain and update the required information continuously.</td>
<td>Port Reception Facilities Database (PRFD) as a module of the Global Integrated Shipping Information System (GISIS), Global Integrated Shipping Information System (GISIS) (resolution A.1029(26))</td>
</tr>
<tr>
<td>Reporting on alleged inadequacies of reception facilities</td>
<td>The port State should ensure the provision of proper arrangements to consider and respond appropriately and effectively to reports of inadequacies, informing IMO and the reporting flag State of the outcome of their investigation.</td>
<td>Resolution MEPC.83(44), annex, paragraph 10.3; MEPC.1/Circ.834/Rev.1, paragraph 41</td>
</tr>
<tr>
<td>Reporting on the assessment of the port reception facilities</td>
<td>The port State is encouraged to make use of the assessment form appended to the Guidelines for ensuring the adequacy of port waste reception facilities, to conduct regular assessments of waste/residue reception facilities in its ports and advise IMO of the outcome of such assessments, including any inadequacies of port reception facilities, as well as any technical cooperation assistance that may be needed to address those inadequacies.</td>
<td>Guidelines for ensuring the adequacy of port waste reception facilities (resolution MEPC.83(44))</td>
</tr>
<tr>
<td>Consulting with IMO on regional arrangements for port reception facilities</td>
<td>Small island developing States participating in a regional arrangement shall consult with IMO for circulation to the MARPOL Parties: (1) how the Regional Reception Facilities Plan takes into account the Guidelines (resolution MEPC.221(63)); (2) particulars of the identified Regional Ships Waste Reception Centres; and (3) particulars of those ports with only limited facilities.</td>
<td>Regulations 38.4 and 38.6 of Annex I; Reg. 18.3 of Annex II; Reg. 12.2 of Annex IV; Reg. 8.3 of Annex V; Reg. 17.2 of Annex VI; 2012 Guidelines for the Development of a Regional Reception Facilities Plan (resolution MEPC.221(63))</td>
</tr>
</tbody>
</table>
In order to assist Contracting Parties in the PRF reporting, IMO developed the Port Reception Facilities Database (PRFD) within its GISIS. The database contains information on the available PRFs for the delivery of ship-generated waste, as provided by the competent authorities of the State Parties and allows for direct reporting of alleged inadequacies of PRFs by flag States. Based on the information provided, the IMO Secretariat produces an annual report of alleged inadequacies submitted to the III Sub-Committee.

Finally, the resolution MEPC.295(71) requires a fishing vessel operator to report accidental loss or discharge of fishing gear, which pose a significant threat to the marine environment and navigation. Reports must be made to the flag State, and where appropriate, the coastal State in whose jurisdiction the loss of the fishing gear occurred. To this regard, the resolution MEPC.310(73) “Action Plan to address marine plastic litter from ships” considered among its priority actions the extension of reporting duties. In particular, it calls for the inclusion of reporting data on discharge or accidental loss of fishing gear by the flag State to IMO via GISIS or other means, if appropriate.

### 4.2 Reporting at regional level

#### 4.2.1 Dumping of wastes and other matter at sea

A regional approach to the regulation of dumping is promoted through the London Convention (Article 9) and Protocol (Article 12). One of the advantages of a regional approach is that it can promote the development of a more restrictive dumping regime than expressly provided for by the global treaties. As provided for by Article 3 of the London Protocol, Contracting Parties can apply more stringent measures with respect to the prevention, reduction, and where practicable, elimination of pollution collectively on a regional basis.

Section 2 of the Decision IG 23.1, UNEP(DEPI)/MED IG.23/23 indicates the reporting obligations relative to the implementation of the Protocol for the prevention and elimination of pollution.

<table>
<thead>
<tr>
<th>Reporting requirements</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>The flag State is requested to distribute the Format for reporting alleged inadequacies of port reception facilities, as set out in appendix 1 of MEPC.1/Circ.834/Rev.1, to ships and urge Masters to use this format to report alleged inadequacies of port reception facilities to the Administration of the flag State and, if possible, to the authorities of the port State.</td>
<td>MEPC.1/Circ.834/Rev.1, paragraph 39</td>
</tr>
<tr>
<td>The flag State is required to notify IMO, for transmission to the Parties concerned, of any case where facilities are alleged to be inadequate.</td>
<td>Reg. 38.8 of Annex I; Reg. 18.5 of Annex II; Reg. 12.2 of Annex IV; Reg. 8.3 of Annex V; Reg. 17.3 of Annex VI; resolution MEPC.83(44), annex, paragraph 8.3; MEPC.1/Circ.834/Rev.1, paragraph 39</td>
</tr>
<tr>
<td>The flag State shall notify the port State of the occurrence of the alleged inadequacy of port reception facilities.</td>
<td>MEPC.1/Circ.834/Rev.1, paragraph 39; resolution MEPC.83(44), annex, paragraph 8.3</td>
</tr>
<tr>
<td>Notification shall be made as soon as possible following completion of the alleged inadequacies reporting form (MEPC.1/Circ.834/Rev.1, appendix 1) and should include a copy of the master’s report, together with any supporting documentation.</td>
<td>Resolution MEPC.83(44), annex, paragraph 8.3.1; MEPC.1/Circ.834/Rev.1, paragraph 40</td>
</tr>
</tbody>
</table>
of the Mediterranean Sea by dumping from ships and aircrafts and incineration at sea (Dumping Protocol). Reporting formats to be completed concern:

- Legal and regulatory measures
- Dumping at sea permits and quantities (see below table 2a to report about the biennial summary on dumping at sea permits and quantities)
- Quantities of wastes and other matter for each dumping site and coordinated for dumpsites (see below reporting tables 3 and 4)
- Monitoring (see below reporting table 5)
- Placement

Reporting tables are harmonized to follow the Revised Electronic Reporting Format of the London Convention and its Protocol on Dumping (LC 33/15 Annex 5).

<table>
<thead>
<tr>
<th>Table 2a Biennial Summary of Dumping at Sea Permits and Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 1979 Protocol Article 5 or 1995 Protocol Article 5</td>
</tr>
<tr>
<td>2.2 1979 Permit or 1995 Permit</td>
</tr>
<tr>
<td>2.3 Waste Category</td>
</tr>
<tr>
<td>2.4 Total Number of New Permits Issued</td>
</tr>
<tr>
<td>2.5 Total Quantity of Waste Category Permitted for Dumping at Sea</td>
</tr>
<tr>
<td>2.6.1 Total Quantity of Waste Dumped</td>
</tr>
<tr>
<td>2.6.2 Waste Reporting Unit</td>
</tr>
<tr>
<td>2.7 Dumping at Sea Operations Referred by Other Means</td>
</tr>
<tr>
<td>2.8 Notes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference to dumps permitted in permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979 Protocol Article 5. Annex B</td>
</tr>
<tr>
<td>1975 Protocol Article 8</td>
</tr>
<tr>
<td>1975 Protocol Article 9</td>
</tr>
<tr>
<td>1995 Protocol Article 4.2.1</td>
</tr>
<tr>
<td>1995 Protocol Article 4.2.2</td>
</tr>
<tr>
<td>1995 Protocol Article 4.3</td>
</tr>
<tr>
<td>1995 Protocol Article 4.4</td>
</tr>
<tr>
<td>1995 Protocol Article 4.5</td>
</tr>
<tr>
<td>1995 Protocol Article 4.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Permit</td>
</tr>
<tr>
<td>General Permit</td>
</tr>
<tr>
<td>Permit</td>
</tr>
<tr>
<td>Permit</td>
</tr>
<tr>
<td>Permit</td>
</tr>
<tr>
<td>Permit</td>
</tr>
<tr>
<td>Permit</td>
</tr>
<tr>
<td>Permit</td>
</tr>
<tr>
<td>Permit</td>
</tr>
<tr>
<td>Permit</td>
</tr>
<tr>
<td>Permit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting units used by the permitting authority for waste dumped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depends on waste dumped</td>
</tr>
<tr>
<td>Depends on waste dumped</td>
</tr>
<tr>
<td>Depends on waste dumped</td>
</tr>
<tr>
<td>Depends on waste dumped</td>
</tr>
<tr>
<td>Depends on waste dumped</td>
</tr>
<tr>
<td>Depends on waste dumped</td>
</tr>
<tr>
<td>Depends on waste dumped</td>
</tr>
<tr>
<td>Depends on waste dumped</td>
</tr>
<tr>
<td>Depends on waste dumped</td>
</tr>
<tr>
<td>Depends on waste dumped</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>(see below reporting table 5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>(see below reporting table 5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Place of dumping</th>
</tr>
</thead>
<tbody>
<tr>
<td>(see below reporting table 5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting tables are harmonized to follow the Revised Electronic Reporting Format of the London Convention and its Protocol on Dumping (LC 33/15 Annex 5).</th>
</tr>
</thead>
</table>
### Table 3. Biennial Summary of Quantities of Wastes or Other Matter at Sea for Each Dump Site

<table>
<thead>
<tr>
<th>3.1 Dump Site Code</th>
<th>3.2 Map of Dumping Site</th>
<th>3.3 Method of Dumping at Sea</th>
<th>3.4 Type of Waste Dumped at the Sea</th>
<th>3.5 Total Quantity of a Waste Actually Dumped at the Site</th>
<th>3.6.1 Waste Reporting Units</th>
<th>3.6 Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-letter prefix for country code and the Contracting Party’s own alphanumeric dump site code</td>
<td>Confirm that a small scale map showing the dump site location has been “Provided” or “Not Provided” to UNEP/VIA Secretariat.</td>
<td>Dumping at sea operations conducted via: ship, vessel, barge, aircraft, or other [explain]</td>
<td>[Select from the list of waste categories provided in Table 2a]</td>
<td>Total dumped at a specific site</td>
<td>[Depends on waste dumped]</td>
<td>Brief notes on any entry in Table 3</td>
</tr>
</tbody>
</table>

### Table 4. Coordinates for Dump Sites

<table>
<thead>
<tr>
<th>4.1 Dump Site Code</th>
<th>4.2 Coordinates Datum for Coordinates</th>
<th>4.3 Shape of Dumping Site</th>
<th>4.4 Ratio of Cycle</th>
<th>4.5.1 Longitude/Latitude B - Latitude</th>
<th>4.5.2 Coordinate A - Latitude</th>
<th>4.8.1 Coordinate D - Longitude</th>
<th>4.8.2 Coordinate C - Longitude</th>
<th>4.8.3 Coordinate E - Longitude</th>
<th>4.8 Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-letter prefix for country code and the Contracting Party’s own alphanumeric dump site code (as defined above)</td>
<td>Geographic Datum describes the size and shape of the earth and the origin and orientation of the coordinate system used to map the earth.</td>
<td>Select from: point, line, circle, or polygon (minimum four coordinates to be included in the online version).</td>
<td>Bar/Cal value [2 significant figures]</td>
<td>North/South decimal degrees (4 significant figures), or North/South degrees, minutes, seconds</td>
<td>East/West decimal degrees (4 significant figures), or East/West degrees, minutes, seconds</td>
<td>North/South decimal degrees (4 significant figures), or North/South degrees, minutes, seconds</td>
<td>East/West decimal degrees (4 significant figures), or East/West degrees, minutes, seconds</td>
<td>North/South decimal degrees (4 significant figures), or North/South degrees, minutes, seconds</td>
<td>Brief notes on any entry in Table 6</td>
</tr>
</tbody>
</table>
4.3 Reporting at European level

39 Directive (EU) 2019/883 of the European Parliament on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC, has entered into force on 28 June 2019. It introduces additional environmental legislation for all ships irrespective of their flag, calling at, or operating within a port of a Member State (with a few exceptions) and to all ports of the Member States normally visited by those ships. The aim is to further reduce discharges of waste from ships into the marine environment, while facilitating maritime transport operations by reducing the administrative burden.

40 The reporting format of advanced waste notification and waste receipts has been aligned with that of MEPC.1/Circ.834/Rev.1. The reporting is done electronically through the National Single Windows established under Directive 2010/65/EU and exchanged via SafeSeaNet established under Directive 2002/59/EC. In addition, the PRF authority at port level should send an Incident Report type Waste to SafeSeaNet, in case the ship has not complied with the Directive’s obligations, as this may create a potential risk of illegal discharges at sea. The Incident Report should be distributed by SafeSeaNet to all Member States along the planned route of the vessel and the notifying authority may request an inspection/verification at the destination port (if port of a Member States).

41 The advanced waste notification and waste receipts have however the addition of a further waste type element designated as ‘Passively Fished Waste (PFW)’, under Annex V, defined as waste collected in nets during fishing operations. The Directive introduces obligations to Member States to ensure that monitoring data on the volume and quantity of PFW will be collected, and to report such monitoring data to the Commission. The Commission should, on the basis of those monitoring data, be able to publish a report by 31 December 2022 and every two years thereafter. A common methodology for reporting passively fished waste is currently under development and will be laid down in an Implementing Act still to be adopted. It should be underlined that, so far, no existing EU Reporting Obligations required the reporting of waste fishing gear or passively fished waste delivered to ports. The Fisheries Control Regulation (1224/2009, which is currently under revision) requires the reporting of lost gear in an e-logbooks for vessels, but only of the vessel’s own gear loss and the reporting requirement does not extend to other passively fished waste.

42 Moreover, in order to effectively address the problem of marine litter, the Directive foresees economic incentives to provide for a maximum incentive for the delivery of MARPOL Annex V waste other than cargo residues: no direct fee shall be charged for such waste and passively fished waste shall be covered by this regime too, including the right of delivery; Also fee reductions for ships that...
produce reduced quantities of waste, and manages its waste in a sustainable and environmentally sound manner are foreseen.

Finally, the directive enforcement is improved by setting a minimum target percentage on the number of vessels to be inspected by each Member State and defining a uniform Union Risk Based Targeting Mechanism to support the selection of ships for inspection, as well as introducing mandatory reporting of inspections by Member States authorities into THETIS EU (EMSA Inspection database).

EMSA has published a PRF Inspection Guidance document, that is currently in the process of being updated, to align with the new PRF directive.

5 Air pollution and energy efficiency

5.1 Reporting at international level

MARPOL Annex VI provides the following reporting obligations (with additional guidance provided in the 2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI (resolution MEPC.320(74)):

- Regulation 11 (Detection of violations and enforcement) contains a general obligation for port States to report any violation to MARPOL Annex VI to the flag State Administration, including evidence of the violation. In return, the Administration shall inform the port State that reported the alleged violation, as well as the Organization, of the action taken (regulation 11.2 to 11.4). The 2019 Guidelines specify that “when a Party finds a non-compliance of a ship or a fuel oil supplier, the information of the non-compliance should be reported to the MARPOL Annex VI GISIS module” (paragraph 4.4.1). In addition, regulation 11.5 also provides that a port State Party to MARPOL Annex VI requested to inspect a ship for potential violation shall report such investigation to the Party requesting it and to the Administration;

- Regulation 18 (Fuel oil quality) contains several reporting obligations for Parties to MARPOL Annex VI and ships:
  - In application of regulation 18.1 of MARPOL Annex VI, each Party shall inform the Organization of the availability of compliant fuel oils in its ports and terminals, through MARPOL Annex VI GISIS module (paragraph 5.1.9 of the 2019 Guidelines), with the information set out in MEPC.1/Circ.880;
  - In application of regulation 18.2.3 of MARPOL Annex VI, and as specified in paragraph 4.2.4.5 of the above-mentioned 2019 Guidelines, if a non-compliance with sulphur regulations is established by a port State after a fuel oil sample analysis, the port State “should report the information of the ship using or carrying for use non-compliant fuel oil to the Administration of the ship and inform the Party or non-Party under whose jurisdiction a bunker delivery note was issued of cases of delivery of non-compliant fuel oil” and “report the information to the MARPOL Annex VI GISIS module”;
  - In application of regulation 18.2.4, a ship shall notify its Administration and the competent authority of the relevant port of destination when it cannot purchase compliant fuel oil, using the Fuel Oil Non-Availability Report (FONAR), as specified in the 2019 Guidelines (paragraph 5 and appendix 1). In return, the Party has to notify IMO of the non-availability of compliant fuel oil (regulation 18.2.5), using MARPOL Annex VI GISIS module (paragraph 5.1.8 of the 2019 Guidelines);
In application of regulation 18.9, Parties to MARPOL Annex VI must inform the Administration of any ship receiving non-compliant fuel oil and IMO for transmission to Parties and Member States of all cases where fuel oil suppliers have failed to meet the requirements (see also paragraph 4.3.2 of the 2019 Guidelines);

In application of regulation 18.10, in connection with PSC (Port State Control) inspections, the Parties “further undertake to inform the Party or non-Party under whose jurisdiction a bunker delivery note was issued of cases of delivery of non-compliant fuel oil, giving all relevant information”.

Regulation 22A of MARPOL Annex VI mandates all ships of 5,000 gross tonnage and above to collect and report to their Administration specific data (in particular fuel oil consumption, distance travelled, hours underway and deadweight) as specified in appendix IX of the Annex VI, before 1 April of each year for the data of the previous calendar year. The data should be collected and reported electronically following Part II of the 2016 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP) (resolution MEPC.282(70)).
Once the data is verified by the Administration according to the 2017 Guidelines for Administration Verification of Ship Fuel Oil Consumption Data (resolution MEPC.292(71)), they are submitted to the IMO before 1 July of every year, in application of the 2017 Guidelines for the Development and Management of the IMO Ship Fuel Oil Consumption Database (resolution MEPC.293(71)).

Moreover, draft amendments approved at MEPC 74 (MEPC.74/18/Add.1, Annex 13) and expected to be adopted at MEPC 75 for an entry into force on 1 September 2021 include a new obligation for the flag States to report to the Organization the required and attained Energy Efficiency Design Index (EEDI) via electronic communication and taking into account the 2018 Guidelines on the method of calculation of the EEDI for new ships (resolution MEPC.308(73)). Until 1 September 2021, reporting of attained EEDI values to the IMO EEDI database is voluntary and shall be performed according to the following format (MEPC.71/17/Add.1; Annex 14).

5.2 Developments at regional level

To tackle the hazardous effects of pollutants emitted from ships, in particular the Sulphur oxides (SO\textsubscript{x}) on human health and the environment in the Mediterranean Sea, various actors in the region, including REMPEC, are active in the implementation of the Roadmap for the possible designation of Med SO\textsubscript{x} ECA.
5.3 Reporting at European level

49 Directive (EU) 2016/802 represents the legislation addressing sulphur oxides emissions from shipping in the European Union, regulating the sulphur content of certain liquid fuels. The provisions of the Directive apply to all ships of all flags, including domestic shipping and those whose journey began outside the EU. It sets sulphur content limits of the marine fuels that can be used by ships in territorial seas, exclusive economic zones and pollution control zones of the EU Member States, including SO\textsubscript{X} Emission Control Areas (SECA).

50 Sulphur inspections are foreseen to control the operation of a ship while in sea areas and ports of the geographical jurisdiction of a Member State. Additional enforcement actions may be required, in accordance with international maritime law in relation to the operation in those areas or beyond. There are certain obligations placed on the Member States in the Directive, in relation to the inspection of ships, specifically:

- Member States shall take all necessary measures to ensure that marine fuels with sulphur content (by mass) exceeding the maximum sulphur requirements of the Directive are not used.
- Member States shall take all necessary measures to check by sampling that the sulphur content of marine fuels being used by vessels while in relevant sea areas and ports does not exceed the maximum sulphur requirements set by the same Directive.

51 Sulphur Inspections are voluntarily reported by EU Member States in THETIS-EU, the Union information system supporting the enforcement under the Directive. Along with the outcome of the inspection, other ship specific information is inserted in THETIS-EU, which could be of relevance for future inspections (e.g. ship’s emission abatement methods, main and auxiliary engines rated power, fuel tanks information, etc.).

52 Regarding CO\textsubscript{2} emissions, the EU monitoring, reporting and verification (MRV) of carbon dioxide emissions from maritime transport, provided by Regulation (EU) 2015/757 of the European Parliament and the Council, mandates all ships of more than 5,000 GT calling any EU ports (i.e. either arriving at an EU port, departing from an EU port, or operating within the EU) to report annually to the EC through the THETIS MRV managed by EMSA. The reporting includes, inter alia, fuel oil consumption, CO\textsubscript{2} emissions (total and differentiated depending on the type of voyage), distance travelled, time spent at sea, cargo carried, etc.

6 Non-Indigenous Species invasion

6.1 Reporting at international level

53 There are two main vectors for the transfer of invasive aquatic species through shipping: ballast water and hull fouling (biofouling). For biofouling, the IMO currently only has voluntary guidelines in place, whereas for ballast water the Ballast Water Management (BWM) Convention is in force. There are several mandatory reporting requirements under the BWM Convention and Parties are required to provide information to IMO on a number of items as outlined below. The required information is provided to the IMO through GISIS, except for the last item described below, which must be done through submission of information documents to the Marine Environment Protection Committee (MEPC):

- **Exemptions granted to ships under regulation A-4.** Parties, in waters under their jurisdiction, may grant exemptions to any requirements to apply regulations B-3 or C-1, under certain conditions and taking into account the Guidelines (G7) (resolution MEPC.289(71)). Such exemptions are only effective after communication to the Organization (IMO) and shall be recorded in the ship’s record book of ballast water. In accordance with regulation A-4.1, the conditions for exemptions include geographical and temporal limitations and these shall be specified in the information provided (e.g. voyage or voyages between specified ports or locations or operations exclusively between specified ports or locations; effective period which can be no more than five years subject to intermediate review; etc.). Each Party to the Convention must also establish a point or points of contact for receipt of applications and relevant contact details should be submitted to the Organization.

- **Ballast water exchange areas designated under regulation B-4.2.** Ships conducting ballast water exchange should do so in accordance with the provisions of regulation B-4.1 relating to
water depth and distance from land. However, where this is not possible (which is the case in the Mediterranean Sea) the port State may designate areas, in consultation with adjacent or other States, as appropriate, where a ship may conduct ballast water exchange, taking into account the Guidelines (G14) (resolution MEPC.151(55)). A Party or Parties intending to designate areas for ballast water exchange under regulation B-4.2 must communicate this intention to the Organization prior to the implementation of the designated exchange area for ballast water. Such communication must include:

- the precise geographical coordinates, depth limit and/or distance from the nearest land that defines the designated ballast water exchange area;
- other information that may be relevant to facilitate ships’ identification of the designated ballast water exchange area, for example navigation aids; and
- details of the characteristics of the designated ballast water exchange area that may be relevant to assist ships to plan their voyage, including: use of area by other traffic, current and tidal flow, wind and swell conditions, seasonal events (cyclones, typhoons, ice, etc.).

**Additional measures under regulation C-1.** If necessary to prevent, reduce, or eliminate the transfer of invasive aquatic species through ships’ ballast water and sediments, Parties may, consistent with international law, require ships to meet specified standards or requirements beyond those of the Convention, taking into account the Guidelines (G13) (resolution MEPC.161(56)). Parties shall communicate their intention to establish additional measure(s) to the Organization at least 6 months prior to the projected date of implementation of the measure(s), except in emergency or epidemic situations. In these latter cases, the additional measures should be communicated to the Organization as soon as possible (to the extent required by customary international law as reflected in UNCLOS, as appropriate, Parties may also have to obtain the approval of the Organization). Such communication shall include:

- the precise co-ordinates where additional measure(s) is/are applicable;
- the need and reasoning for the application of the additional measure(s), including, whenever possible, benefits;
- a description of the additional measure(s); and
- any arrangements that may be provided to facilitate ships’ compliance with the additional measure(s).

**Warnings concerning ballast water uptake** in certain areas and related flag State measures under regulation C-2. Parties shall endeavour to notify mariners and the Organization of areas under their jurisdiction where ships should not uptake ballast water due to known conditions (e.g. areas known to contain outbreaks, infestations or populations (e.g. toxic algal blooms) which are likely to be of relevance to ballast water uptake or discharge; near sewage outfalls; or where tidal flushing is poor or specific times during which a tidal stream is known to be more turbid). The notice to the Organization and any potentially affected coastal States shall include the precise coordinates of the area or areas and, where possible, the location of any alternative area or areas for the uptake of ballast water. The notice shall include advice to ships requiring to uptake ballast water in the area, describing arrangements made for alternative supplies. The Party shall also notify mariners, the Organization and any potentially affected coastal States when a given warning is no longer applicable.

**Availability of reception facilities for ballast water and sediments and alleged inadequacies** related to sediment reception facilities in accordance with articles 5 and 14. In accordance with article 5(1) of the BWM Convention, Parties undertake to ensure that, in designated ports and terminals where cleaning or repair of ballast tanks occurs, adequate facilities are provided for the reception of sediments, taking into account the Guidelines (G1) (resolution MEPC.152(55)). In accordance with article 14(1) (b), Parties shall report to the Organization the availability and location of any reception facilities for the environmentally safe disposal of ballast water and sediments. In addition, in accordance with article 5(2), Parties shall notify the Organization of all cases where any facilities provided as above are alleged to be inadequate.

**Responsibilities and conditions of the authority delegated to nominated surveyors** or recognized organizations in accordance with regulation E-
1.5, the Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations for conducting surveys under the BWM Convention

- Information on ballast water management systems approved under regulation D-3. In accordance with paragraph 7.2 of the annex to the Code for Approval of Ballast Water Management Systems (BWMS Code, resolution MEPC.300(72)). Contracting Parties, when approving a ballast water management system used to comply with regulation D-2, shall submit to the Organization the type approval report. The required information is listed under the aforementioned paragraph of the BWMS Code and is not repeated here due to its extent; a summary of the required information (as outlined in resolution MEPC.228(65)) includes:

- Approval date
- Name of the Administration
- Name of the ballast water management system (BWMS)
- A copy of the Type Approval Certificate and any appendices which includes details on all imposed limiting conditions on the operation of the BWMS
- An annex to the Type Approval Certificate which contains the test results of each land-based and shipboard test run
- The protocol according to which testing was undertaken
- A description of the Active Substance(s)
- The identification of the specific MEPC report and paragraph number granting final approval.

6.2 Developments at regional level

54 As indicated in the Regional strategy addressing ship’s ballast water management and invasive species (Decision IG.20/11), in the Mediterranean, the set-up of a Ballast water reporting system, and related reporting forms were foreseen. An appropriate mechanism for exchanging information was defined as a web-based system collecting the contribution of Contracting Parties to the Barcelona Convention.

6.3 Developments at European level

55 At present there is no direct EU Law on Ballast Water, however Regulation (EU) No 1143/2014 on the prevention and management of the introduction and spread of invasive alien species recognises the BWM Convention as one of the possible management measures for invasive species of concern. The level of Invasive Alien Species and their environmental impact is also one of the many descriptors for assessing Good Environmental Status under the Marine Strategy Framework Directive.

7 Comparative analysis of reporting obligations and recommendations

56 The comparison of mapped reporting obligations enables the drawing of some recommendations with the aim of improving coherence and reducing redundancy among the different procedures, as well as filling some of the existing gaps.

7.1 Oil and chemical accident pollution and illicit discharges

57 Both IMO (under MARPOL) and the Barcelona Convention (under the Prevention and Emergency Protocol) require their Contracting Parties to report any ship incidents, which may result in a discharge of oil or hazardous and noxious substances. Reporting is due for each incident and in the form of an annual summary. Information required by the two reporting systems consistently overlaps. Reporting is due also on response capacity. A detailed evaluation about how this coherence can be further improved shall be promoted, to support a full integration of the two systems in a way that Contracting Parties to the Barcelona Convention are required to report only once for the two systems. The same applies to reporting obligations due at the European level, also open to third countries sharing a regional sea basin with the Union. The EU and BC POLREP formats already greatly overlap; their full alignment would contribute to simplifying reporting procedures.
MARPOL requires its Contracting Parties to report any incidental spillages discharging at least 50 tonnes of oil or HNS, foreseeing reporting of incidents involving smaller amounts of substances as voluntary. A similar threshold is considered for the definition of the Common Indicator 19 of IMAP, requiring monitoring of the number of pollution events of 50 m$^3$ or more per year in the marine waters of each Contracting Party to the Barcelona Convention. The definition of a threshold for spilled volume is certainly useful from an operational perspective. However, the detailed evaluation of significant pollution events requires the assessment of other aspects (e.g. typology of pollutant, environmental characteristics of the site including presence of sensitive habitats/species, meteorological conditions) and therefore the adoption of a multifunctional approach. The on-going process of definition of such multifunctional approach, also in collaboration with other Regional Sea Programmes, must be continued.

Minimum information is available on the impact of pollution events caused by shipping on biota and habitat. In general, monitoring and reporting obligations focus on ship compliance and responses, rather than on impacts evaluation. Accurate monitoring of post-spill impacts cannot be carried out for all spill events, due to costs and operational limitation. A minimum value for the spatial extent and volume of spills could be defined to address monitoring and assessment of the impacts on biota and habitats.

Minimum data is available regarding illicit discharges from ships. As these are illegal operations by nature (when not within the limits set by MARPOL), it is extremely difficult to get information on occurrences and the extent of these spills. The on-going work aiming to foster Contracting Parties to the Barcelona Convention in putting in place monitoring systems of illicit discharges should be strengthened, enabling the gathering of data needed for reporting. In addition, controls of the oil register of ships by port authorities could help in reducing illicit discharges and would encourage the use of reception facilities.

The Compliance Committee, under the Barcelona Convention and its Protocols recommended through its Decision IG.24/1 to put in place a user friendly and simple online system for reporting. This should be interfaced with MEDGIS-MAR, enabling the direct integration of data on accidental pollution (and on illicit discharges, when available) in this GIS system.

A feasibility analysis of improved integration between CECIS Marine Pollution and MEDGIS-MAR is recommended, e.g. to enable synchronisation of the equipment databases.

### 7.2 Dumping, including marine litter

Although dumping does not fall within the mandate of REMPEC, the below recommendation resulting from this analysis is presented for further consideration, as appropriate, through the Programme for the Assessment and Control of Marine Pollution in the Mediterranean (MED POL).

Reporting formats for permitted dumping at sea under the Dumping Protocol to the Barcelona Convention are harmonised with the Revised Electronic Reporting Format of the IMO London Convention and its Protocol on Dumping. However, the IMO has started a process, which is expected to lead to an online reporting system, under the Global Integrated Shipping Information System (GISIS). It is fundamental that harmonisation of the regional and international reporting procedures will also be ensured in the future.

Data on illegal dumping is scarce and challenging to obtain. Contracting Parties to the international and regional conventions shall continue to collaborate to improve monitoring and reporting of vessels, aircrafts and offshore infrastructures observing any dumping in contravention of the Conventions.

IMO resolution MEPC.295(71) requires fishing vessel operators to report accidental loss or discharge of fishing gears. These gears pose a great threat to the marine environment; this is a particularly acute problem in some areas of the Mediterranean Sea. There is clearly a need to enforce the implementation of this reporting procedure, also through the use of the Global Integrated Shipping Information System (GISIS).
7.3 Air pollution and energy efficiency

MARPOL Annex VI provides a wide range of reporting obligations aiming to monitor the consistent implementation of the global limit of 0.50% S (sulphur) m/m. Moreover, new obligations are required, firstly on a voluntary basis, concerning the Energy Efficiency Design Index (EEDI). In the Mediterranean, the Contracting Parties to the Barcelona Convention are currently implementing the Road Map for a Proposal for the Possible Designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides (Med SO\textsubscript{X} ECA) Pursuant to MARPOL Annex VI, within the Framework of the Barcelona Convention (Decision IG.24/8), which would have a more stringent sulphur limit (0.10% S m/m). It is recommended, that the IMO reporting procedures are smoothly transferred and tailored to the Mediterranean context, to surely ensure coherence and avoid redundancy, but also to simplify the reporting procedures on this sensitive issue as much as possible.

In the EU, the Directive (EU) 2016/802, regulates sulphur contents of marine fuels coherently with MARPOL. Sulphur inspections are reported in THETIS-EU, a specifically dedicated information system.

7.4 Non-Indigenous Species invasion

The international Ballast Water Management Convention provides several mandatory reporting requirements on a number of specific issues, including, areas for ballast water exchange, additional measures taken to reduce or prevent the transfer of invasive species, warnings concerning ballast water uptake in certain areas, availability of reception facilities for ballast water and sediments, and information on ballast water management systems. This comprehensive reporting system enables the gathering of important information responses put in place by Contracting Parties to the Ballast Water Management Convention to cope with NIS introduction due to ballast water. There is a need to operationalise the transfer of gathered information to a web-based system enabling its management and use on a Mediterranean scale.

For biofouling, IMO currently only has voluntary guidelines in place. A simplified reporting system could be developed and tested to start understanding the response capacity of countries also in this specific issue.