IMO’s Action Plan on tackling the inadequacy of port reception facilities

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Ships’ Waste: Time for action!

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The International Convention for the Prevention of Pollution from Ships (MARPOL) imposes numerous operational and technical requirements on ships.

MARPOL also imposes one important obligation to the Government of each Party, which is to provide facilities for the reception of ship-generated residues and garbage that cannot be discharged into the sea. The reception facilities must be adequate to meet the needs of ships using the port, without causing undue delay to ships. The requirements for port reception facilities create an incentive for ships to comply with MARPOL and to minimize discharges to sea.

The relevant regulations on port reception facilities are:

• Annex I: regulation 38;
• Annex II: regulation 18;
• Annex IV: regulation 12;
• Annex V: regulation 7; and
• Annex VI: regulation 17.
The subject of port reception facilities appeared very early in the agenda of IMO’s Marine Environment Protection Committee (MEPC).

MEPC 2 (MEPC II), in November 1974, discussed submissions on port reception facilities by USA, Japan, ICS and OCIMF and encouraged further submissions to serve “as a basis for preparing guidelines to assist developing countries in taking the necessary steps to implement the 1973 Convention”
MEPC 3 (MEPC III), in July 1975, “noted that certain States had reported difficulties in accepting and implementing the 1973 Convention particularly with regard to the provision of the necessary reception facilities and monitoring equipment for the discharge of oil.”

MEPC 3 also established its first working group on reception facilities to study “the requirements and limitations imposed by the 1973 Convention with respect to the provision of reception facilities for wastes containing oil, noxious chemical substances, sewage and garbage from ships.”

MEPC 3 “took note of the report of the Working Group and agreed that it should be used as a basis for further work during the intersessional period.”
In the 35 years since MEPC 3, the subject of port reception facilities has been in the agenda of virtually all meetings of MEPC. In that time, various working and correspondence groups have been established and much progress has taken place in IMO, and more importantly in many ports around the world.

Nevertheless, it is often claimed that inadequacies of port reception facilities continue to exist and no doubt the problem will continue in the future. MEPC therefore maintains its watch and involvement on the subject.

Before discussing IMO’s recent initiative for the “Action Plan on tackling the inadequacy of port reception facilities” we will briefly look at IMO’s requirements for “adequacy of PRF” and at the web based system that was developed under IMO’s Global Integrated Shipping Information System (GISIS).
What is “adequacy of port reception facilities”?

MEPC 42 agreed that to achieve "adequate reception facilities" the port should have regard to the operational need of users and provide reception facilities for the type and quantities of waste from ships normally using the port without causing undue delay for the ships.

In March of 2000 resolution MEPC.83(44) concluded that adequate facilities can be defined as those which:

.1 mariners use;
.2 fully meet the needs of the ships regularly using them;
.3 do not provide mariners with a disincentive to use them; and
.4 contribute to the improvement of the marine environment.

Furthermore, resolution MEPC.83(44) stated that facilities provided by the port must:

.1 meet the needs of the ships normally using the port; and
.2 allow for the ultimate disposal of ships’ wastes to take place in an environmentally appropriate way.
The above summary leads me to conclude that:

.1 MARPOL does not set any prescriptive standards for port reception facilities, other than requiring that these are “adequate”;

.2 The term “adequate” is defined in a qualitative manner in an MEPC resolution, which is not a mandatory instrument;

.3 MARPOL does not set any certification requirements for port reception facilities; and

.4 MARPOL does not set any requirements for the environmentally sound management of any residues or garbage delivered to a port reception facility. Only resolution MEPC.83(44), which is not a mandatory instrument, requires that facilities should allow for the ultimate disposal of ships’ wastes to take place in an environmentally appropriate way.
See also for example the following statement in the Comprehensive Manual on Port Reception Facilities, IMO, 1999 Edition

“MARPOL provisions require the government of each party to ensure the provision of adequate port reception facilities without causing undue delay. A port reception facility is anything which can receive shipboard residues and mixtures containing oil, noxious liquids, or garbage. Type and size of the facility depend on the needs of the ships visiting a port. Where a simple garbage bin and a barrel for waste oil may suffice in a small port, another will need large storage tanks for the reception of residues and mixtures containing oil or noxious liquids.”
Some practical initiatives

With the aim of promoting the effective implementation of MARPOL, IMO, since 1983, had been collecting and disseminating information on the availability of reception facilities through the annual publication of MEPC.3/Circulars (for Oily wastes) and MEPC.4/Circulars (for Noxious Liquid Substances).

Dissemination through hard-copy circulars however was cumbersome and impractical to the end-users. Consequently, in June 2004, FSI 13 instructed the Secretariat to develop the Port Reception Facilities Database (PRFD) as a module of GISIS, designed so as to allow Member States to update online the Database via a log-in password, and also to allow the public to access all the information on a view-only basis.
Also, FSI 13 agreed that reported cases of alleged inadequacy of reception facilities and the follow-up response by the port States should be posted on the PRFD as publicly available information three months after receipt of the notification.

Furthermore, it was agreed that contact details (and email addresses) of the national Authorities responsible for handling reports on alleged inadequacies should be made publicly available on the IMO PRFD.

At the same time provisions were to be made for the dissemination of information for Annex IV, Annex V and Annex VI port reception facilities.
The Database went live to the public on 1 March 2006, after a three-month trial period (see http://gisis.imo.org/public/). After this date all Member States enter data on reception facilities for their own ports directly into the web-based system.

The PRFD is now quite well populated and offers to its users the following main services:

• locate [all] facilities (and their particulars) in a given port;
• search for all available facilities (by waste category) in a port or a country;
• obtain contact information of the port State or flag State authorities responsible for handling reports on alleged inadequacies of PRF; and
• identify any reported alleged inadequacies for a given port or over a period of time.
Action plan to tackle the inadequacy of port reception facilities

MEPC 55 in October 2006 approved the Action Plan for tackling the alleged inadequacy of port reception facilities. The Plan was developed by IMO’s FSI Sub-Committee on the basis of input from the Industry “Port Reception Facilities Forum”. FSI 15 commenced work on the Action Plan in June 2007; correspondence groups continued work in three intersessional periods; and FSI 18 completed work in July 2010.

The Plan contained 13 work items grouped in the following six categories:

1. Reporting (1 work item);
2. Information on port reception facilities (3 work items);
3. Equipment technology (2 work items);
4. Types and amount of wastes (3 work items);
5. Regulatory matters (2 work items for FSI and 1 for MEPC); and
6. Technical cooperation and assistance (1 item).
Background information:
In some ports, for logistical reasons, the providers of waste reception facilities may require advance notification from the ship of its intention to use facilities. The development of a standard Advance Notification Form (ANF) would enhance the smooth implementation and uniform application of this requirement, thus minimizing the risk of a ship incurring delay.

Also, a standard Waste Delivery Notification (WDN) should be developed in order to provide uniformity of records throughout the world.
Category: 1   Reporting
Work item: 1.1   Development of a standard Advance Notification Form

Outcome:
FSI 16 completed the development of a standard Advance Notification Form and a standard Waste Delivery Notification form. Thereafter, MEPC 58 in October 2008 approved the Advanced Notification Form (ANF) and issued this as MEPC.1/Circ.644 and also approved the Waste Delivery Receipt (WDR) and issued this as MEPC.1/Circ.645.
Category: 2 Information on port reception facilities
Work item: 2.1 Monitoring/evaluation/adjustment of the PRFD

Background information:
In its initial phase of operation, the port reception facility database (PRFD) module of the IMO Global Integrated Shipping Information System (GISIS) should be monitored with the view: (1) to verify that it meets its objectives; and (2) to implement any necessary corrective action.

The Secretariat to provide a progress report on the population levels of the different categories of records contained in the PRFD.

The Secretariat to investigate any potential difficulties that may arise to the categorization of existing NLS reception facilities from the introduction of new categories of NLS with the entry of the revised MARPOL Annex II (1/1/2007).
Category:  2  Information on port reception facilities
Work item:  2.1  Monitoring/ evaluation/ adjustment of the PRFD

Outcome:
FSI 18 completed this work item: Improvements were made to the PRFD of GISIS; the categorization of NLS was amended following the introduction of new categories of NLS with the entry of the revised MARPOL Annex II from 1/1/2007; and the Secretariat compiled progress reports on the population levels of the different categories of records contained in the PRFD over a period of four years showing a healthy increase in all categories.

<table>
<thead>
<tr>
<th>Development of data population by category of PRF</th>
<th>22/05/2006</th>
<th>27/02/2007</th>
<th>14/02/2008</th>
<th>11/12/2008</th>
<th>01/03/2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex I Oily Bilge Water</td>
<td>1128</td>
<td>1163</td>
<td>1313</td>
<td>1377</td>
<td>2811</td>
</tr>
<tr>
<td>Annex I Oily Residues (Sludge)</td>
<td>885</td>
<td>928</td>
<td>1092</td>
<td>1181</td>
<td>2511</td>
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<tr>
<td>Annex I Oily Water Washings (Slops)</td>
<td>747</td>
<td>777</td>
<td>882</td>
<td>908</td>
<td>1545</td>
</tr>
<tr>
<td>Annex I Dirty Ballast Water</td>
<td>780</td>
<td>812</td>
<td>906</td>
<td>893</td>
<td>1514</td>
</tr>
<tr>
<td>Annex I Scale and Sludge</td>
<td>608</td>
<td>641</td>
<td>741</td>
<td>766</td>
<td>1122</td>
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<tr>
<td>Annex I Oily mixtures containing chemicals</td>
<td>589</td>
<td>620</td>
<td>721</td>
<td>746</td>
<td>993</td>
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<tr>
<td>Annex II</td>
<td>n.a.</td>
<td>783</td>
<td>862</td>
<td>876</td>
<td>1161</td>
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<td>Annex IV</td>
<td>102</td>
<td>130</td>
<td>297</td>
<td>372</td>
<td>623</td>
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<td>Annex V</td>
<td>140</td>
<td>184</td>
<td>372</td>
<td>488</td>
<td>3824</td>
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<tr>
<td>Annex VI Ozone depleting substances</td>
<td>10</td>
<td>11</td>
<td>22</td>
<td>32</td>
<td>68</td>
</tr>
<tr>
<td>Annex VI Exhaust Gas cleaning substances</td>
<td>22</td>
<td>22</td>
<td>33</td>
<td>48</td>
<td>83</td>
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<tr>
<td>Flag State contact points</td>
<td>6</td>
<td>10</td>
<td>16</td>
<td>22</td>
<td>33</td>
</tr>
<tr>
<td>Port State contact points</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>16</td>
<td>26</td>
</tr>
</tbody>
</table>
Background information:
The “Guidelines for ensuring the adequacy of port waste reception facilities” (resolution MEPC.83(44)) encourage port States to make use of a standard assessment format to conduct regular assessments of reception facilities in their ports and advise IMO of the outcome of such assessments, including any inadequacies of port reception facilities, as well as any technical co-operation assistance that may be needed to address those inadequacies.

GISIS PRFD should be provided with a facility to allow the administrators of the system in each Member State to upload assessments for their ports into the system.
Outcome:
FSI 16 agreed to introduce additional functionality on the PRFD to enable port States to upload files containing assessments of waste reception facilities when performed as recommended by resolution MEPC.83(44).

The functionality was implemented, and can be seen in annex 2 to document FSI 17/5.
Background information:
The “Guidelines for ensuring the adequacy of port waste reception facilities” also recommended the development and implementation of a port waste management plan, which should provide, *inter alia*, information to users of the location, cost and procedures for using the facilities.

Conveying information to ships on the relevant provisions of this plan, through the PRFD, would enhance its effectiveness and improve the adequacy of waste reception services and communication and co-operation between the facility users and the providers. FSI should consider first what is the relevant information that needs to be extracted from waste management plans and uploaded in the PRFD.
Category: 2 Information on port reception facilities
Work item: 2.3 Enhancement of the availability of relevant information to users of port waste management plans

Outcome:
FSI 17 agreed that there are several reasons why uploading port waste management plans to the PRFD would not be practical (usage of different languages for different ports; large documents; large number of ports and thus the risk of degrading the performance of GISIS).

Instead, FSI agreed that the PRFD should allow the capturing of details of the Port Authority or Harbour Master, including address, telephone, email and web address of the port authority and, if available, the web address of the Port Waste Management Plan.

The functionality was implemented, and can be seen in annex 2 to document FSI 17/5.
Category:  3   Equipment/technology
Work item:  3.1  Identify technical problems encountered between ship and shore-based transfer of waste

Background information:
The identification of any technical problems encountered during the ship-to-shore transfer of wastes (e.g. non-standard hoses, manifolds) and the consideration of any possible solutions would enhance the provision of adequate waste reception services.
Category: 3  Equipment/technology
Work item: 3.1  Identify technical problems encountered between ship and shore-based transfer of waste

Outcome:
Following repeated contacts with the industry, FSI could not identify any technical problems which inhibit the ship-to-shore transfer of wastes.
Background information:
It has been reported that the requirements for garbage segregation and waste receptacles identification may vary from port to port at national and international level.

The establishment of a standardized methodology on this issue on board and at shore would ensure harmonization of the various requirements and facilitate the smooth delivery of garbage to the reception facilities.

The draft new ISO standard (ISO/CD 21070) addresses the requirements of this work item. However, the draft ISO document appears to exceed the requirements of MARPOL Annex V. The Secretariat has communicated its concerns to ISO and is awaiting a response.
Outcome:
Work on the draft ISO standard (ISO/CD 21070) addressed the requirements of work item 3.2 and consequently members of the correspondence group contributed to the work of ISO by reviewing and commenting on the draft standard.

ISO further proposed to develop a standard for reception bins and containers to be used at ports for receiving garbage segregated on-board according to ISO 21070 and members of the FSI correspondence group were invited to participate in the work of ISO.

The group suggested to ISO/TC8/SC2 that it might be desirable for ISO to contribute a new standard for the design, construction, equipping, management and operation of PRFs. As a result, ISO is developing a new standard for PRFs, which is in Work Group Draft at the present time (ISO/WG 16304).
Background information:

New ship design and construction as well as new waste management technologies and equipment installed on board have an effect on the type and amount of ship-generated waste.

A review of the type and amount of wastes generated on board would allow better calculation of the ship’s needs for delivery of wastes ashore.
Outcome:
Data was gathered from studies and reports by some port operators and by some public and private entities. The data covered types and amounts of waste generated on board ships and types and amounts of wastes that are typically delivered to PRFs.

ISO agreed that ISO/TC8/SC2 could make use of this information in developing ISO 21070, ships' waste handling standard and also the proposed interim ISO standard on PRF waste handling.
Background information:
Following the completion of above work item 4.1, a review of the type and capacities of port reception facilities should follow with the aim of adjusting the capacities and the technical capabilities of port reception facilities to the ship’s requirements.

Also, should consider the question of how to deal with waste downstream from reception facilities in developing countries, where ship generated waste can often be a burden to physically restricted land systems.
Outcome:
It was agreed that the methodology for determining the required capacity of port reception facilities by determining the number and types of ships frequenting any given port and multiplying it by the calculated waste volume for each ship and type of ship will be developed under the new ISO Interim standard.
Category:  4 Types and amount of wastes
Work item:  4.3 Development of a uniform methodology for calculating the required capacity and technical capability of a port reception facility

Background information:
The use of a uniform methodology for the estimation of the required capacity of a port reception facility, which would take into account the results of work items 4.1 and 4.2, would be of great assistance in the design of new facilities or the upgrade of existing ones.
Category: 4  Types and amount of wastes
Work item: 4.3  Development of a uniform methodology for calculating the required capacity and technical capability of a port reception facility

Outcome:
As with work item 4.2, FSI agreed that the methodology for calculating capacities and technical capabilities at PRFs should be developed under the new ISO standard.

Also, ISO/CD 21070 incorporates formulae for estimating amounts of different wastes to be expected for the types of ships using a port.
Category: 5  Regulatory matters  
Work item: 5.1 Development of Guidelines for establishing regional arrangements for reception facilities

Background information:
MEPC 49, having considered the issue of the establishment of “regional agreements” on the provision of reception facilities among the countries of a particular region, agreed generally that “regional arrangements” could be an acceptable way to satisfy the MARPOL obligations to provide adequate reception facilities for ships and that this approach could have the potential to resolve obstacles for many counties to ratify the MARPOL Convention.
Background information (continued):
Taking into account the provisions of the MARPOL Convention on providing reception facilities as a condition for ratification of the Convention, MEPC agreed to further consider:

.1 whether an MEPC resolution to recognize the regional arrangement for reception facilities would be desirable; and

.2 whether any general guidelines should be established for such cases, taking into account the provisions of MARPOL relating to avoiding undue delay

MEPC 55 agreed to recognize regional arrangements as a means to provide reception facilities and invited Members to provide views to future sessions of the Committee on how regional arrangements could be better institutionalized.
Category: 5 Regulatory matters
Work item: 5.1 Development of Guidelines for establishing regional arrangements for reception facilities

Outcome:
This work item remained with MEPC and was not dealt with by the FSI Sub-Committee.

Following earlier discussions, MEPC 60, in March 2010, recognized that certain concerns had to be addressed before approving the necessary amendments to MARPOL institutionalizing regional arrangements, and it requested interested delegations and observers to submit a joint document to MEPC 61 with draft amendments to MARPOL Annexes I, II, IV, V and VI and with draft guidelines for establishing those arrangements.

No submissions were received at MEPC 61 and therefore the Committee invited submissions to MEPC 62.
Category: 5 Regulatory matters
Work item: 5.2 Revision of the IMO Comprehensive Manual on Port Reception Facilities

Background information:
The current edition of the Manual was issued in 1999. Therefore, it should be updated to include amendments to legislation and new developments in the area of port reception facilities.
Outcome:
The manual remains a very useful document, but in need of updating. For example, MARPOL Annexes IV and VI have now come into force requiring reception facilities.

FSI’s correspondence group on the Action Plan has reviewed the existing manual and has highlighted the areas of the manual needing revision. MEPC is now seeking funding to allow the completion of this work.
Category: 5 Regulatory matters
Work item: 5.3 Development of a Guide to Good Practice on Port Reception Facilities

Background information:
A Guide to Good Practice on Port Reception Facilities should be developed with the aim of providing guidance and easy reference to good practices related to the use and provision of port reception facilities as well as a list of applicable regulations and guidelines.
Outcome:
FSI agreed that the purpose of the Guide is to provide a practical tool to the industry (both masters/owners and PRF operators) for delivering and for receiving MARPOL residues/wastes.

FSI 17 completed the development of the Guide which contains helpful and practical sections on: corporate and social responsibility; on obligations of ships and of port operators; on good practices for ships, owners and port reception facility operators, plus appendices with copies of the standard forms for advance notification, for waste delivery receipts and for reporting alleged inadequacies.

MEPC 59 in July 2009 approved the “Guide to Good Practice for Port Reception Facilities” and issued it as MEPC.1/Circ.671. MEPC also endorsed the proposals by FSI for the wide dissemination of the Guide, which can now also be downloaded from the PRFD of GISIS.
Background information:
A programme of assistance should be designed, where required, to support developing countries in the enhancement of their institutional and human capacities for improved and effective port reception facilities.

Mobilization of in-kind support for the provision and management of port reception facilities, supported by a training programme to be delivered at national or regional levels.
Category: 6 Technical co-operation assistance
Work item: 6.1 Development of assistance and training programme

Outcome:
FSI 18 recommended to MEPC that PRFs should be identified as a priority theme, which external donors should be invited to support with funds, and to endorse this as a priority theme for IMO’s next ITCP biennium 2012-2013.

Specific types of assistance that may be useful were outlined in a document entitled Draft Plan of Assistance and Training on Port Reception Facilities for Developing Countries (available in FSI 18/5, Annex 3).

It was also noted that the future work of the ISO in developing a standard for port reception facilities could enhance IMO’s programme of assistance and training for the setting up and operation of port reception facilities in developing countries.
And finally, a few words on the reporting of alleged inadequacies

MEPC 56 in July 2007 issued circular MEPC/Circ.469/Rev.1 providing the latest amended form for reporting alleged inadequacies in reception facilities (the very first format having been issued by MEPC 26 in 1988 as MEPC/Circ.215). The new format has been disseminated widely and can also be downloaded from GISIS.

According to the reporting procedure, following the completion of a report on inadequacies by a ship’s Master, the ship’s flag State is required to inform the port State of the alleged inadequacies and also to notify IMO, whose Secretariat posts the report in the PRFD.

(note that delegates at MEPC 61 in September 2010 were informed that non-Party flag States can submit reports of alleged inadequacies)

Port States should respond to reports of inadequacies, informing IMO and the reporting flag State of the outcome of their investigation.

The IMO Secretariat again posts the port State reply in the PRFD.
In the last four complete years, IMO Secretariat has received an average of 26 reports of alleged inadequacies per year (over 40% of these being issued by a single flag State).

With 50,000 ships over 500GT in the world fleet, and assuming an average of 10 port calls per ship per year, we have half a million port calls per year.

If five percent of port calls gave rise to a complaint on inadequacy (25,000) and if only one percent of these complaints resulted in a formal report we should have expected 250 reports annually, which is ten times the number of reports we are receiving.

It would appear that we are only seeing the tip of the iceberg.
thank you for your attention