

analytical note

In Brussels 11<sup>th</sup> of June 2015

Subsidiarity Steering Group

# Analytical note

# Port reception facilities for ship-generated waste and cargo residues Directive 2000/59/EC

#### Introduction

The EU directive 2000/59/EC on port reception facilities for ship generated waste and cargo residues came as a follow-up to the MARPOL convention and introduced obligatory waste reception facilities in EU ports. The Directive obligates all ships, no matter the flag, to use the facilities for discharging different types of waste. The European Commission (EC) recently carried out an evaluation of the implementation of the directive as well as an impact assessment on potential legislative changes aimed at further strengthening the implementation of this Directive.

In its 1999 opinion on the 'Proposal for a Council Directive on port reception facilities for ship-generated waste and cargo residues', the Committee of the Regions (CoR) outlined several issues that were not addressed by the Directive. The CoR underlined that the varying fee collection system should not limit the competitiveness of ports (especially smaller ones) and that inter-port cooperation should have been envisaged allowing multi-port plans (especially for small and specialised ports). As the plans were to be reviewed within a fixed time frame, the CoR suggested that this should have been changed, allowing time frame flexibility in plan reassessments, avoiding unnecessary administrative burdens.

As this Directive is applied only on the territory of the European Union, the full protection of the marine environment did not reach its full potential. The CoR believed that established cooperation with third country ports should have been envisaged in order to achieve this. In its 1999 opinion<sup>2</sup>, the EESC outlined the same concerns, adding that economic constraints also needed to be taken into account. The evaluations of the European Commission, 15 years later show that indeed the Directive should have addressed these points in the first place.

Even though the benefits of the Directive are undeniable, there are a number of issues that need to be clarified and reviewed to reach the full potential of the Directive. Some of these issues were underlined in the 1999 CoR opinion; adding a burden to EU ports, leading to misinterpretations and did not give enough incentive for the port users to discharge the waste in appropriate facilities. The EC carried out the evaluations of the Directive as well as an Impact Assessment, analysing the possibilities for legislative changes; a new Impact Assessment of different options is planned for this year and it could potentially lead to a revision of the Directive. Taking into account the importance of the

<sup>&</sup>lt;sup>1</sup> Committee of the Regions opinion CdR 362/1998

<sup>&</sup>lt;sup>2</sup> European Economic and Social Committee opinion CESE 0325/1999

Directive and its benefits for the marine environment, the EC should proceed with a legislative review, addressing the problems detected by the evaluation and include the original proposals of the CoR.

None of the reports and evaluations of the Directive took into account the territorial dimension. In order to have the most efficient Directive, the EC should have looked into the potential asymmetric territorial effects and focused on the challenges of the smaller ports that receive a large share of marine traffic. The specific needs of the smaller ports should be addressed in this Directive.

Therefore, the CoR should consider issuing an own-initiative opinion on the evaluation of Port Reception Facilities, underlining these issues and focusing on the fact that in its opinion from 1999 some of the problems observed today had already been anticipated and warned about by the CoR.

#### Methodology

This report is produced by the CoR Secretariat in the context of its 'territorial impact assessment' work programme activities. It is meant to assist the Rapporteur and the relevant Commission in preparing the relevant opinion. It can also serve other internal needs of the CoR. This report is a summary and analysis of different reports, such as the impact assessment and the evaluation reports prepared by the European Commission, the European Maritime Safety Agency and their contractors.

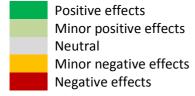
#### Disclaimer

This report is produced by the Committee of the Regions secretariat, to assist the Rapporteur and the relevant Commission in preparation of the opinion or for the internal needs of the Committee of the Regions.

# **Acronyms**

EP	European Parliament		
CoR	Committee of the Regions		
EESC	European Economic and Social Committee		
PWC	PricewaterhouseCoopers consulting		
SWH	Ship Waste Handling		
PRF	Port reception Facilities		
SGW	Ship-Generated Waste		
<b>EMSA</b>	European Maritime Safety Agency		
MS	Member State		
EC	European Commission		
CR	Cargo Residues		
PA	Port Authorities		
PSC	Port State Control		
IMO	International Maritime Organisation		
PO	Port Operator		
ICT	Information and Communication Technology		
PWM	Port Waste Management		
PSC	Port State Control		
WRH	Waste Reception and Handling		
CRS	Cost Recovery System		
Effects of the directive - colour code			

# Effects of the directive - colour code



# **Legend – direction of effects**



Increase



Decrease

# **Member states**

Austria

ΑT

BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DE	Germany
DK	Denmark
ET	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HU	Hungary
ΙE	Ireland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
UK	United Kingdom

**UK** United Kingdom

**MT** Malta

**NL** The Netherlands

PL PolandPT PortugalRO RomaniaSV Sweden

SL SloveniaSK Slovakia

# Purpose of the directive <sup>3</sup>

Main aim of the directive	Environmental protection of the EU seas		
Goals	Reduction of discharges into the sea	Better availability of reception facilities	
	Improved enforcement of the regime	Common environmental standards for ships and ports	
	Proper administrative framework	Appropriate information and monitoring system	

Sea transport accounts for approximately one third of intra-EU trade, which makes it the second most important mode of transport in Europe after road haulage. A report carried out for the European Commission concludes that nearly 700 commercial ports in the European Union receive around 750 000 visits a year by ships loading or unloading cargo. In its recent communication on 'A zero waste programme for Europe', the Commission set a target for reducing marine litter by 13% by 2020 and 27% by the year 2030. Ports in the European Union receive around 900 000 car and passenger ferry visits annually. According to estimates, these ships together produce between five and seven million tonnes of oil residues and one million tonne of solid waste annually.

The Directive pursues the same aim as the 73/78 Marpol Convention on the prevention of pollution by ships, which all the Member States have signed. However, in contrast to the Convention, which regulates discharges by ships at sea, the Directive focuses on ship operations in European Union ports. It addresses the legal, financial and practical responsibilities of the different stakeholders involved in delivery and receipt of ship-generated waste and cargo residues.

This Directive covers all ships, whatever their flag, and all the Member State ports. Member States must ensure that port reception facilities are provided and that they meet the needs of the ships without causing too many delays. These facilities must be appropriate to the size of the port and to the categories of ship discharging waste. A waste reception and handling plan must be drawn up in each of the ports and they have to be approved by the Member State.

The plans must be re-approved at least every three years. Ship-generated waste implies all waste, including sewage, and residues other than cargo residues, which are generated during the service of a ship. The cargo residues imply the remnants of any cargo material on board in cargo holds or tanks which remain after unloading procedures and cleaning operations.

The Directive also defines the notification system and the cost recovery systems to encourage the delivery of waste on land and discourage dumping at sea. All ships calling at a Member State port will bear a significant part of the cost, whether they use the facilities or not.

It also defines the inspections. Ships operating in an EU port may be inspected. There is a 25 % minimum inspection requirement. Inspections are carried out on ships which have not complied with the notification requirement and on those suspected of not having delivered their waste as a priority.

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<sup>&</sup>lt;sup>3</sup> Based on the <u>Summary from the EC's web site</u>

<sup>&</sup>lt;sup>4</sup> COM(2014) 398 final

# Effects and the problems observed

Obtaining quantitative data and statistics has been challenging as there was no reporting system in place before the implementation of the Directive and most waste operations in ports are contracted out to private operators. These often do not report to Port Authorities (PA) and therefore only few or no statistics at all were available.

The ex-post study carried out by Price Waterhouse Coopers (PWC) also encountered problems in gathering data, however through desk research and public consultations valuable data was gathered. A large majority of the findings obtained through different studies are aggregated on the EU level, most of them not even mentioning the local and regional level.

The Directive has been transposed in all Member States (MS) through national or regional legislation. The level of implementation of the Directive by ports differs from MS to MS, especially regarding the provisions related to the cost recovery system (CRS) as well as the incentives for ships to deliver waste in ports.

#### **Environmental effects**

The main goal of this directive is to limit the various waste discharged by the ships directly into the sea, protecting the marine environment and the environment around the EU seas. In all ports the Directive has led to an improvement (from low to high) of the ship waste handling (SWH) systems and to an increased awareness among stakeholders about the environmental impact of illegal discharges into the sea. This has resulted in increased waste delivery from ships.<sup>5</sup> In short the main impacts observed are the following;



Increase in ship waste collection in comparison to the period before 2000



Decrease in illegal discharges



Cleaner marine environment

The public consultations showed that a large majority of the stakeholders, besides the port users, see the administrative burden brought by the Directive and the costs arising, as proportional to the environmental benefits. Only around 30% of port users agree with this, as they find the costs too high and consider that they outweigh the environmental benefits.

Member States, Ports and Port Reception Facilities (PRF) operators have been asked if they experienced any potential overlaps between the PRF Directive and other EU environmental legislation, in particular the Marine Strategy Framework Directive. A large majority of stakeholders does not see substantial overlaps between the existing directives<sup>6</sup>.

As the data about discharges on the sea is not available per region, it is difficult to say which regions have benefited more and which less from this Directive. What is certain is that this directive has contributed to the better collection of waste in all the Member States leading to a cleaner marine environment. This also results in health benefits for the marine flora and fauna and consequently the animal and human population that directly or indirectly benefits from the marine environment.

<sup>&</sup>lt;sup>5</sup> EMSA Study on "A Study on the Availability and Use of Port Reception Facilities for Ship-Generated Waste"

<sup>&</sup>lt;sup>6</sup> Ex-Post evaluation of 2000/59/EC - Annex 3 - Interim Report Part: Findings from stakeholder consultation

# Figure 1: Environment Aerial observable oil spills between Member States around the North Sea

Source: Bonn Agreement (2012), Annual report on aerial surveillance for 2012

From the chart below it can be observed that the quantity of observed oil spills in the North Sea has been decreasing over the years. The same can be observed in the statistics available for the Baltic Sea.

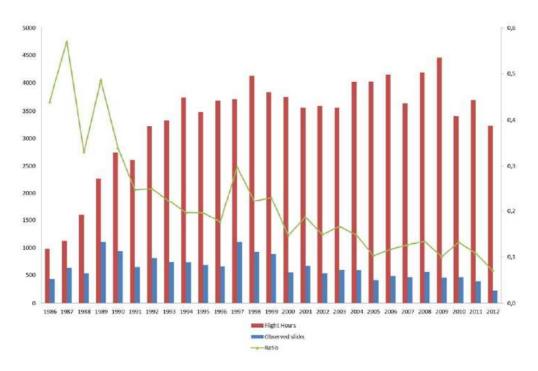
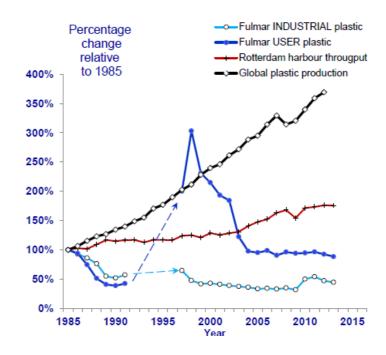


Figure 2: Environment Amount of plastics found in the stomach of seabirds, the Northern Fulmar

Source: The Institute for Marine Resources and Ecosystem Studies

This chart shows the increase of global plastic production from 1985 to today. It also shows that since 2000 when the Directive was adopted the amount of plastic in the stomachs of birds has decreased considerably indicating a healthier environment.



#### **Administrative effects**

The implementation of this directive has a very local character and the effect on local and regional stakeholders has been the most significant.



Increase in administrative burden for the PRF and Ports



Increased burden on the inspecting authorities



Increased waiting in the ports (ships)



Increased financial burden on some ports not managing to cover the costs

The ports have interpreted the Directive differently leading to confusion among stakeholders. The Impact Assessment by the  $EC^7$  found that the main negative consequences related to administration and governance are:

# Sub-optimal use of PRF

Insufficient infrastructure | insufficient capacities | ineffective segregation of waste Physical reception facilities and related services may not always satisfy the reasonable needs of users

# Excessive cost and administrative burden related to PRF service Uneven incentives | unintelligible fees system |

This is affecting the competitiveness of European ports and ship operators. The main stakeholders involved do not always cooperate and there is insufficient competition between ports under the PRF framework to ensure the efficient provision of PRF services

# Low transparency of the overall functioning of the European system of PRF Uneven access to exemption regime | inefficient procedures for hazardous ships | The control of delivery requirements and the detection of ships in breach of legislation are not always effective

The implementation of this Directive has proved to be challenging and a number of MS had infringements and reasoned opinions brought against them. An overview can be seen from the table below;<sup>8</sup>

Country	Reasoned opinion	Case at the European Court of Justice	Verdict
Poland		19 December 2005	
Greece	19 December 2005	29 June 2006	C-81/07, 13 March 2008
Slovenia	19 December 2005		
France		29 June 2006	C-106/07, 6 December 2007
Italy	14 May 2009	29 June 2006	C-368/07, 25 September 2008
Finland		29 June 2006	C-523/06, 4 October 2007
Portugal		29 June 2006	
Germany	29 June 2006	27 June 2007	C-26/08, 24 January 2008
Spain		27 June 2007	C-480/07, 11 December 2008
Estonia	29 June 2006	31 January 2008	C-46/09, 30 January 2009
Belgium		31 January 2008	

<sup>&</sup>lt;sup>7</sup> http://www.euroshore.com/sites/euroshore.com/files/documents/0.%20workshop%20presentation%2010%20may%20-%20europe%20economics%20-%20final.pdf

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http://eur-lex.europa.eu/legal-content/EN/LKD/?uri=CELEX:32000L0059

#### Ship exemptions

The Directive envisages exemptions for "green ships" and ships that visit the port frequently. However the situation remains rather unclear, since the definition in the Directive leaves room for various interpretations. In the public consultations carried out by the European Commission and PWC it is clear that the stakeholders are very divided on this issue, further indicating the need for clarification if the Directive is to be reviewed.

Based on inspection visits to the 50 major ports in 2004-2005, EMSA found that less than half of the ports visited (23 out of 50) had introduced such fee reductions for 'green ships'<sup>9</sup>. Among these ports where such provisions were in place, a wide variety of criteria could be identified for ships' eligibility for a reduced rate. And these provisions are not the same across the EU.

The European Maritime Safety Agency - EMSA identifies another problem with this variety of criteria, as these are often set and inspected by National Competent Authorities and not by ports. Normally the criteria for approving reduced fees to "green ships" are based on the certificate, the certificate on equipment, the green award, use of segregated ballast tank or use of marine diesel oil. In order to have a reliable fee reduction scheme in place, it is necessary for enforcement inspections to be conducted to check whether the vessels have the equipment or environmental management plans on board.

In order to qualify for such an exemption, a ship needs to deliver 'sufficient evidence of an arrangement to ensure the delivery of ship-generated waste and payment of fees in a port along the ship's route', and show that it is 'engaged in scheduled traffic with frequent and regular port calls' However what it is "sufficient" varies from MS to MS.

There is no common definition of 30% 31% frequent and regular port calls There is no common duration of the 30% 25% exemption There is no common definition of which type of evidence is required 32% 21% in support of the exemption request There is no obligation for MSs along the ships' regular route to be 37% 23% informed about the exemption There is no sufficient control that arrangements on whether waste 40% 21% delivery in other ports are actually in place It is an issue ■ Somewhat an issue Not an issue

**Figure 3: Administration: Exemption of certain types of ships**Source: Ex-Post evaluation of 2000/59/EC - Annex 3 - Interim Report Part: Findings from stakeholder consultation

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<sup>&</sup>lt;sup>9</sup> EMSA (2005), Technical report evaluating the variety of cost recovery systems adopted in accordance with Article 8 of Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues, page 26

<sup>&</sup>lt;sup>10</sup> Directive 2000/59/EC, Article 9

## Waste management plans

The PRF Directive requires that each port develops and implements appropriate waste reception and handling plans. In fact, in 95% of the coastal Member States, the evaluation conducted by EMSA found at least some elements of the waste reception and handling plans were not in line with the Directive<sup>11</sup>. EMSA reports that in 55% of the Member States there are ports that did not develop or implement waste reception plans<sup>12</sup>. These are frequently smaller ports such as recreational and fishing ports. In these cases, often the designated authorities did not require the port to develop a plan or did not check whether the port did indeed develop a plan, particularly the ports used by recreational craft with less than 12 persons.

Among the plans of recreational ports analysed, it is clear that these have overall the lowest compliance with regard to the mandatory elements of Annex I when compared with other types of ports. However in general, a large number of waste plans in place in various types of ports across the EU are not in line with the requirements set out in Annex I. EMSA reports for 2010 that 8 Member States did not monitor the implementation of waste reception plans at all, some others had mechanisms in place of announced and unannounced visits, whereas a last group allowed self-monitoring by ports.<sup>13</sup>

The large majority of the ports, around 90%, outsource their waste operations either entirely or partially. Even though this is to recommended, the Port Authorities should play a more active role in the waste management plans. When talking about Waste Management Plans, according to the port users they have been adopted but only very few of them have been consulted in the process of drafting these plans.

The WRH plan has been adopted

You have been consulted on initial drafting of WRH plan

You have been consulted during the implementation of the WRH plan

The WRH plan describes the cost recovery system

The WRH plan describes the waste delivery procedures

The WRH plan describes the waste delivery procedures

The WRH plan describes the waste delivery procedures

Figure 4: Administration: Waste Reception and Handling plans and consultations Source: Ex-Post evaluation of 2000/59/EC - Annex 3 - Interim Report Part: Findings from stakeholder consultation

#### Adequacy of the facilities

The main target of the Directive is that Member States ensure adequate port reception facilities in their ports, meeting the needs of the ships normally using that port<sup>14</sup>. EMSA concludes in a horizontal study that "almost all Member States have port reception facilities that are adequate and available, especially when it comes to ship generated waste" <sup>15</sup>. In five Member States, EMSA found instances were port reception facilities were not provided <sup>16</sup>.

<sup>11</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC)

<sup>12</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC), page 11

<sup>&</sup>lt;sup>13</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC), page 14

<sup>&</sup>lt;sup>14</sup> Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues, Article 4(1)

<sup>&</sup>lt;sup>15</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC), page 41

<sup>&</sup>lt;sup>16</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC), page 41

A previous study conducted by an external contractor for EMSA indicates that the following types of waste are being received by the major commercial ports across the EU<sup>17</sup>:

- All ports accept oily waste from machinery space (annex I)
- 47% accept oily CR (annex I)
- 70% accept noxious liquid substances; (annex II)
- 92% accept sewage (annex IV)
- All ports accept garbage (annex V)
- 80% accept Annex V liquid CR (annex V)

Although it is important for stakeholders that the facilities provided allow the collection of different types of waste, it is equally important that sufficient capacity is provided. Without sufficient capacity, the unloading of waste may cause delay for the users.

In relation to the requirements on the provision of port reception facilities for various types of waste, the Directive has only relatively limited provisions with regard to cargo residues. Based on various inspection reports, EMSA notes that cargo residues are normally a matter for the terminals and shippers to handle, and are often not under the direct competence of the port authorities<sup>18</sup>. One reason for this is that the discharge of cargo residues generally requires specialised treatment, while the residues generally also have commercial value.

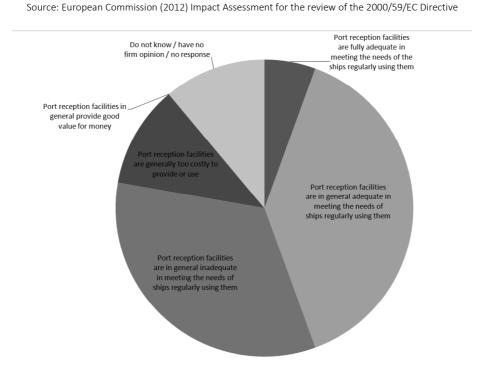


Figure 5: Administration: Adequacy of the facilities

A very important point raised through the consultations is that the port reception facilities are inadequate in capacity and to the type of waste (Hazardous waste, expired medicine and signalling

 $<sup>^{17}</sup>$  EMSA (2012), Study on the delivery of ship generated waste and cargo residues (Ramboll), page 51

<sup>&</sup>lt;sup>18</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC), page 42

fires, cargo residues and washing waters) they accept, further prompting port users to discharge the waste in the sea.

#### **Waste Notification System**

An important aspect of the PRF is notification. All ports in the Member States have implemented a Waste Notification System, some of them by implementing an effective IT system (PT, ES, NL, BE, FR) which facilitates communication between the stakeholders covered by this Directive. Some he MS (IT, UK) do not have a proper IT system in place. The consultations showed that in most ports the majority of ships (64%) notify the port before arriving. Nevertheless in 14% of ports only 0-20% of notifications were observed.

The PRF operators and ports in majority see the notification system as a positive factor in their planning and management. EMSA would like to see a common delivery certificate, as requested by almost all port, in order to have a system avoiding any fraud concerning certificates. According to EMSA, efficient, modern and competitive ports should move towards a "one stop job" where ships/agents only have to deal with one "organisation" (PA) and where all or most waste delivery costs are included in the fee, with the PA collecting the waste fees from agents/ships and negotiating/controlling prices with waste operators.

With the exception of fishing vessels and recreational craft that are not authorised to carry more than 12 passengers, the master of each ship bound for an EU port must report to the relevant body the information requested by Annex II of the PRF Directive. Each Member State may determine who this relevant body is, which may for instance vary between the port authority, the central administration or the local waste operators. Therefore, notification is not always made to port authorities, but can also be directly to waste operators, and may be made to both. Ships calling at a port must notify that port 24 hours in advance of the type and amount of waste they will deliver.

For all these types of waste, vessels must report the volumes they intend to deliver, the maximum dedicated storage available, the amount of waste that will be retained on board, the port where remaining waste will be delivered and the estimated amount of waste to be generated between the two scheduled ports. EMSA notes that generally, EU ports have advance notification requirements for ships in place, in line with the format required in Annex II<sup>19</sup>.

It is important to note that there are two different forms, with some ports collecting notification forms based on Annex II, and others based on the IMO format. While the type of information collected is relatively similar, the different formats have caused difficulties in integrating the reporting requirements into a harmonised waste notification form in SafeSeanet.

Type of notification

Ports with electronic waste notification

Ports with notification by fax/email

58%

43%

0%

20%

40%

60%

80%

100%

Figure 6: Types of notifications observed

Source: Evaluation of the Directive by PWC and European Commission (2015)  $\,$ 

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<sup>&</sup>lt;sup>19</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC)

It is particularly difficult to estimate the amount of cargo residues to be delivered before unloading<sup>20</sup>. The values entered in these notification forms are therefore not always accurate. While some port authorities have accurate data on actual waste deliveries available, the Directive does not provide any requirement or guidance for this, and such data is not collected in a harmonised way by designated authorities.

Given the importance of advance notification for the enforcement regime put in place by the Directive, penalties may exist in order to increase compliance. However, the current Directive does not provide guidance on such penalties.

While the Directive requires that ships send advance notification of their estimated volumes of on board waste, no further guidance is given how to confirm or revise these estimates upon delivery. As a result, ports use different approaches to confirm the delivery of waste to visiting ships, ranging from a mere stamped remark on the ship's original notification, to a copy of a waste delivery receipt, signed by the two parties, or nothing at all<sup>21</sup>. Currently, many European ports often make use of a template waste receipt form, developed by the IMO<sup>22</sup>. EMSA regrets the fact that a harmonised delivery receipt is currently not in place, particularly because the notification forms required by the Directive are only composed of estimates, instead of actual volumes<sup>23</sup>.

#### Fee

One of the key elements of the Directive is the introduction of a framework for fee systems through which Member States are required to ensure that the costs of port reception facilities for shipgenerated waste, including the treatment and disposal of the waste, are covered through the collection of a fee from ships. One of the key elements of the Directive is the introduction of a framework for fee systems to be applied for port reception facilities that provide 'no incentive for ships to discharge their waste into the sea'.

Directive also seeks to apply the 'polluter pays principle'. The Directive is relatively clear that all ships need to contribute to the costs, but other than that leaves the existing variety of different fee systems across ports and Member States untouched. Here, the Directive refers to the subsidiarity principle. EMSA also found that most EU ports aim to cover a minimum of 30% of the annual total costs of waste handling with this fee<sup>24</sup>.

There are many variations at national level and, in some cases, at the individual port level on how to introduce incentives for waste delivery in the ports visited e.g. 100 % indirect fee, indirect fee for garbage only, fixed fee to be paid to Port Authorities. In the public consultations the question on why the directive is not properly implemented clearly shows that the fees are rather high and the punitive actions are insufficient to make sure the waste is delivered in the ports. Nevertheless, all the Member States report that since the introduction of the Directive the gathered quantity of all types of waste has increased.

There is also a lack of knowledge among the port users about the fact that the indirect fees also include the delivery of waste, and as a result waste is sometimes released into the sea.

<sup>&</sup>lt;sup>20</sup> EMSA Workshop report (2011): EMSA workshop on Port Reception Facilities for ship-generated waste and cargo, page 9

<sup>&</sup>lt;sup>21</sup> EMSA (2011), The Decision-Making Process related to the Obligation or Granted Exception for a Ship to deliver its Wastes or Residues, draft working document, page 5

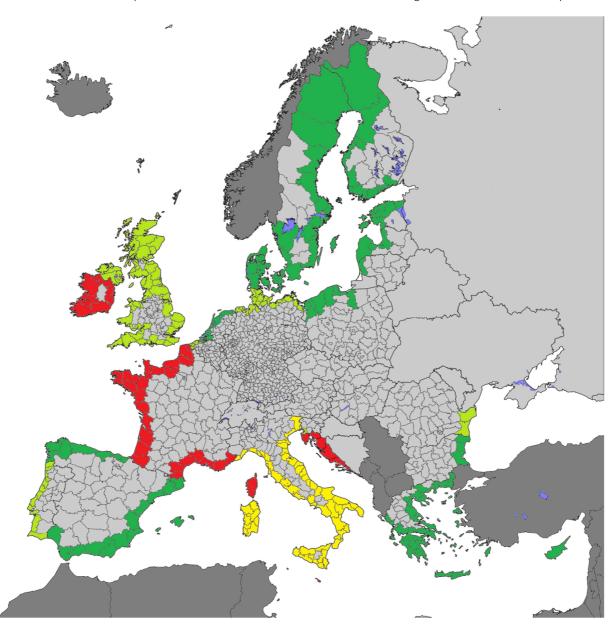
<sup>&</sup>lt;sup>22</sup> IMO circular 645, http://www.imo.org/OurWork/Environment/PortReceptionFacilities/Documents/645.pdf

<sup>&</sup>lt;sup>23</sup> EMSA , Technical report on fee systems, page 47

<sup>&</sup>lt;sup>24</sup>EMSA (2005), Technical report evaluating the variety of cost recovery systems adopted in accordance with Article 8 of Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues, page 23

Map 1 – Overview of fees calculation <sup>25 26 27</sup>

Based on the EMSA reports and the amended Croatian maritime law harmonising Croatian law with the EU acquis





- 1. Indirect fee and direct charge with a possibility of reclaiming part of costs after delivery (DE)
- 2. Indirect difficult to determine related to the collection of garbage (UK, PT, SL)
- 3. Indirect only related to the collection of oily, leaving the garbage collection to be handled directly by the waste operators using direct charges (RO)
- 4. Indirect deposit system (BE)
- Depends on the port (IT)
- Direct charges (FR, IE, HR, MT)

<sup>&</sup>lt;sup>25</sup> EMSA Study on "A Study on the Availability and Use of Port Reception Facilities for Ship-Generated Waste" - 2005
<sup>26</sup> Amendments of Croatian marine law aligning with the EU's acquis, Article 49.e

EMSA Study on "A Study on the Availability and Use of Port Reception Facilities for Ship-Generated Waste - 2012

## Inspections and non-compliance

The responsibility for monitoring whether a vessel delivers its waste lies with different actors in different Member States; in some Member States it is the port authority, in others a separate maritime enforcement agency, and in a third set of Member States, governmental bodies, such as the Coast Guard may be responsible for this<sup>28</sup>

The reception of (types of) waste requires the payment of too high a fee It is easier to discharge at sea Fines/punishment for illegal discharges are too low No sufficient inspections are performed Ports not accepting all types of waste Seafarers are not adequately trained/informed Insufficient port reception facilities capacity It is time consuming to wait for the facilities to be used 0 10 20 30 40 50 60 70 Ports ■ Port Users ■ PRF Operators ■ Member States Other Organisations

Figure 7: Reasons for non-compliance

Source: Ex-Post evaluation of 2000/59/EC - Annex 3 - Interim Report Part: Findings from stakeholder consultation

In the selection of ships for inspection, the PRF Directive calls on Member States to pay particular attention to ships that are not compliant with notification requirements, or ships for which the examination provided shows other grounds to believe that the ship does not comply with the Directive. However, EMSA notes that these criteria are not often adopted in selecting ships for inspection<sup>29</sup>. There is a lack of communication between the port authority and the inspection authority.

Port State Control (PSC) officers do not consider waste reporting and delivery as high priorities for inspection. EMSA indicates that 12 of the 22 Member States did not select ships for inspection based on an examination of the submitted waste notification forms<sup>30</sup>. The inspection regime under the PSC system (the current one, but also under its predecessor 1995/21/EC) focuses on individual ships, whereas the PRF Directive focuses on vessel calls.

The lack of inspections and insufficient punitive measures contribute to the problem as some of the port users do not see a benefit in discharging their waste in the PRFs. In absence of the inspections and fines some of the users see this obligation as a waste of time and money. The application of a penalty has an effect on a port's competitiveness; if other neighbouring ports do not impose a penalty or only apply a lighter penalty, the former may lose clients.

<sup>&</sup>lt;sup>28</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC), page 28

<sup>&</sup>lt;sup>29</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC), page 32

<sup>30</sup> EMSA (2010), Horizontal Assessment Report - Port Reception Facilities (Directive 2000/59/EC), page 34

Currently, a variety of different penalties can be found. Some ports charge a higher waste handling fee in the absence of advance notification<sup>31</sup>. In other ports, priority is given to vessels that notified the port in advance about their waste volumes, thus causing potential delays for ships that do not report their waste needs in advance.

#### **Economic and social effects**

The studies did not examine sufficiently the economic and social effects this Directive has had on the local and regional communities. Most of the studies have focused on administrative burden and the environmental effects. These are the two most affected fields, but certain economic and social effects have been observed or could be expected such as;



Increase in employment in the waste collection and processing sector in the larger ports



Increase in R&D in the waste collection and processing sector in the larger ports



Increase in R&D in ship construction, trying to create more waste-efficient ships



Local/regional
Entrepreneurship increase
due to the new needs
(PRFs)



Reduced competitiveness of certain ports

The Directive imposed an obligatory system for waste delivery which increased waste collection in some ports multiple times. As over 90% of the waste collection is outsourced it is safe to assume that the implementation of this directive generated employment in the larger ports. This could also mean that certain investment in R&D took place, trying to cope with the sudden large increase of waste and trying to find the most efficient methods in managing the waste. EMSA's study from 2009 supports this argument, listing 256 different known R&D projects<sup>32</sup>.

On the other hand, the "green" ships and those ships that have better waste units aboard should normally benefit from a reduced fee. This could have been an incentive for the shipyards and users to construct and buy those kinds of ships, thus assuming a modest increase in R&D in that sector as well.

Due to the number of different cost-recovery systems around the European Union certain issues in covering the costs have been observed. Therefore the Directive might have had a negative impact on the financial stability of some ports.

#### **Asymmetric territorial effects**

As previously mentioned, all the reports and evaluations have been made at either national or aggregated EU level, avoiding mention of the specific regions that might have had problems in implementing this Directive or might have benefited from it more than others. From the reports it can be concluded that this Directive puts an additional financial burden on some ports rather than others, due to the fact that in certain cases the fee does not cover sufficiently the expenses linked to waste collection. However this is not directly caused by the Directive as the concrete calculation of the fees is left to the national and regional authorities.

<sup>&</sup>lt;sup>31</sup> EMSA (2005), Technical report evaluating the variety of cost recovery systems adopted in accordance with Article 8 of Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues

http://www.emsa.europa.eu/oil-recovery-vessels/opr-documents/opr-inventories/download/416/410/23.html

Increases in the administrative burden can be observed across the whole EU, but may have affected smaller ports to a greater extent. Reports from EMSA and the European Commission show that smaller ports such as recreational ports, fishing ports and marinas do not comply with the Directive in respect to the adequacy of the facilities and often do not have Waste Management Plans. On top of that the requirement to review the plans according to a fixed time frame adds an additional burden and brings into question the need for a fixed time frame when reviewing the plans.

Some of these problems have arisen largely due to the lack of supervision and inspections by the MS. As vessels have a legal obligation to discharge the waste, those smaller ports might find themselves at a disadvantage compared to the larger ports that have good waste reception facilities and better systems in place.

On the other hand it is expected that the legal obligation for the port reception facilities and the fact that 90% of the ports outsource the waste collection, has created additional employment in the waste collection sector. Investments in R&D are a likely effect of this Directive, largely localised in the regions with larger share of ports and notably the larger ports.

# Summary of the effects and issues observed

Even though this Directive has overall had very positive effects on the marine environment protection and all the MS have seen a considerable increase in waste collection, some of the points in the Directive remain unclear and have caused uncertainty and problems of implementation. If the EC were to pursue a legislative review and work on improving implementation, the Directive could reach its full potential with even better marine environment protection and a more reasonable administrative burden.

#### **Environmental effects**



Increase in ship waste collection in comparison to the period before 2000



Decrease in illegal discharges



Cleaner marine environment

#### Administrative effects



Increase in administrative burden for the PRF and Ports



Increased burden on the inspecting authorities



Increased waiting in the ports (ships)



Increased financial burden on some ports not managing to cover the costs

#### **Economic and social effects**



Increase in employment in the waste collection and processing sector in the larger ports



Increased R&D in the waste collection and processing sector in the larger ports



Increased R&D in ship construction, trying to create more wasteefficient ships



Local/regional
Entrepreneurship increase
due to the new needs
(PRFs)



Weaker competitiveness of certain (smaller) ports

Some of the worries voiced by the Committee of the Regions in its 1999 opinion have been proven to be justified. In the interests of subsidiarity, the EC has allowed the Member States to decide how the fee should be calculated with the guiding principle that the 'polluter should pay more'. This has resulted in a number of different fee systems around Europe, sometimes even within the MS. In certain cases, the ports have had problems meeting expenses and the different fee systems may have had a negative effect on the competitiveness of some ports.

On the other hand the some port users were not even aware that in some MS they could dispose of the waste without additional fees as the fees are calculated in indirect form. The EC did not look into these problems in detail, although problems have been observed. Should the Directive give stronger guidelines on the fee calculation or even move towards a harmonised fee calculation method?

The CoR also raised the point of the need for flexibility and cooperation between ports in drafting the WRH plans, thereby reducing the administrative burden. Since this has not been implemented we now see a large number of small ports without any plans. EMSA also identifies this in their reports as one of the biggest issues in implementation of this Directive. EMSA also calls for a common delivery certificate at EU level, something that is largely supported by PRFs and port users. As well as cooperation between EU MS, the CoR also called for cooperation with other non-EU ports, notably on Community quality-guarantee certificates and delivery agreements. This would have further reinforced the effectiveness of the Directive and would have resulted in a cleaner marine environment and a reduced burden on EU ports.

EMSA reports that there are different forms used in the notification system, not always ideal and leaving out some important information such as the cargo waste. Not only should the system be improved, but the responsible authority (varying from MS to MS) should also be defined more clearly. As the notification system is very important in establishing effective waste management plans, a better system should be put in place; a uniform way of reporting.

Besides reporting, the PRFs issue a variety of different certificates confirming waste reception. These certificates might not be recognised by all the PAs in all MS, something that needs to be regulated and a uniform certification should be put in place. When it comes to defining 'green ships' the regulations vary from MS to MS. This needs to be corrected in order to stimulate wider use of these ships. As the administrative burden is one of the most significant effects of this Directive, should the EC address this point more effectively manner in the event of a review?

Finally, the absence of inspections and defined punitive actions resulted in underperformance of the Directive. This aspect should be better defined as the combination of high and unclear fees coupled with a lack of inspections and absence of punitive measures serves as an incentive for port users to continue discharging the waste into the sea.

#### **Issues observed**

Infrastructure: Insufficient infrastructure and capacities in some ports

Infrastructure: Ineffective segregation of waste

**Administration:** Delays

Administration: Uneven incentives and unclear fees system

Administration: Unclear exemption procedures (various provisions in place)

Administration: Insufficient procedures for hazardous ships Administration: Various interpretations of the Directive Administration: Different certificates attesting waste delivery

**Administration:** No cooperation with other Mediterranean ports on the issue **Administration:** Waste Handling Plans not entirely in line with the Directive

Administration: No supervision from the MS

Administration: Unclear provisions in regard to cargo residue

Administration: Different ways of notification – incompatible on occasions with SafeSeaNet

Administration: Lack of inspections and punitive measures

**Administration:** Lack of communication between port authorities and inspection authorities **Administration:** Non-compliance with the Directive is not a priority for inspection authorities

Other: Lack of knowledge among some of the port users about the facilities

# **Annex 1: EC Impact Assessment Policy options**

The European Commission carried out an impact assessment to determine the best course of action and the potential need for a revision of the Directive. The following scenarios were envisaged;

#### Status quo

Eurozone crisis and other economic problems mean resources to maintain or enhance PRF may not be available and environmental improvements generally may have to be given a lower priority

- slow growth of most types of shipping
- Intensified sanctions against discharging at sea
- New IMO and other international agreements for sensitive areas
- Support for environmental goals from leading ship owners
- Technological progress ("green ships" & better ICT)

#### **Revoke Directive**

- Deterioration of PRF
- No political pressure for such de-regulation
- However in time if externalities of discharges to sea are internalised there may be no continuing justification for this legislation

#### Better implementation

There are no fundamental flaws in the Directive as it is, so better implementation could be a good option.

- Some updating can be done through comitology
- Article 17 requires Member States to provide reports on implementation to the Commission these could become fuller and more detailed assessments

#### Extensive legislative reform

Extensive legislative reform would reduce or remove discretion from Member States over how the Directive should be implemented. However the Eurozone crisis and poor economic outlook for the whole EU and particularly for important maritime countries (e.g. in the Mediterranean) and Ireland argue strongly against imposing new costs unless absolutely essential

- Would lead to some additional investment in improved PRF
- Greater standardisation / harmonisation would have some advantages for shipping
- Circumstances vary substantially so that imposing common solutions could lead to inefficiency

#### Extensive legislative reform with recommendations

- Recommendations could be of value, they allow greater flexibility, and should be much less costly to prepare than legislation.
- However this policy option would also include extensive legislation

# Limited legislative reform

Limited legislative reform would bring the Directive into line with current MARPOL definitions. This is desirable if not essential (most Member States would in any case be obliged under international agreements to follow the current IMO and other definitions)

## Limited legislative reform with recommendations

This option would include potentially useful guidance, supplementing that from IMO and elsewhere, and avoid the costs of extensive legislative reform

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