



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

EXECUTIVE SUMMARY

This is a summary of the report issued by Carlbro following its interviews with port authorities in different Member States. Its content does not necessarily reflect the Commission's or EMSA's views

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ABBREVIATIONS:

CR	Cargo Residues
CRS	Cost Recovery System
ECSA	European Community Ship-owners Association
ESPO	European Seaports Organisation
FOC	Free of Charge
FONASBA	Federation of National Associations of Ship Brokers and Agents
IA	Inspection Authority
LPOC	Last Port of Call
MS	Member State
NSF	No Special Fee = Indirect Fee
PA	Port Authority
PO	Port Operator
PRF	Port Reception Facilities
PWM	Port Waste Management
SWH	Ship Waste Handling
SGW	Ship-Generated Waste (waste oil from machinery space, sewage and garbage)
The Directive	EU Directive 2000/59/EC

DEFINITIONS (according to The Directive integrated with further clarifications).

Cargo residues

Mean the remnants of any cargo material on board in cargo holds or tanks which remain after unloading procedures and cleaning operations are completed and shall include loading/unloading excesses and spillage

Cost Recovery System.

A mechanism to generate revenue, which is used to cover the capital, operational and administrative costs of operating port reception facilities. Overview of CRS in Member States in appendix

Direct Charge

Payment of services only if requested. No indirect fee.

EU Directive 59/2000

- Article 5 Port shall prepare waste management plans
- Article 6 Ships/agents shall notify ports regarding waste delivery
- Article 8 Ports shall implement a cost recovery systems with significant indirect fee
- Article 9 Ships can be exempted due to "regular traffic" or if categorized as "green ship"

Incentives

Incentives for waste delivery - often economic incentives meaning that full or significant part of a waste fee is paid regardless of delivery.

Marpol 73/78

Shall mean the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as in force at the date of adoption of this Directive;

Notification system

A system where the ships (shipping agents) can declare the type and amounts of different waste types to be collected.

No Special Fee (= Indirect Fee)

A cost Recovery system implemented in the Baltic Sea, where a fee is paid regardless of delivery. A number of interpretations are seen in Baltic Ports.

Port

Shall mean a place or a geographical area made up of such improvement works and equipment as to permit, principally, the reception of ships, including fishing vessels and recreational craft.

Port reception facilities

Mean any facility, which is fixed, floating or mobile and capable of receiving ship-generated waste and/or cargo residues;

Port Operator

Most often a private waste operator

Port Waste Management

The management of SGW and cargo residues in the port. Shall be described in a PWM plan, which among others include all procedures for delivery

Ship

Shall mean a seagoing vessel of any type whatsoever operating in the marine environment and shall include hydrofoil boats, air-cushion vehicles, submersibles and floating craft;

Ship-generated waste.

Shall mean all waste, including sewage, and residues other than cargo residues, which are generated during the service of a ship and fall under the scope of Annexes I (Oily wastes), IV (sewage) and V (Garbage) to Marpol 73/78 and cargo-associated waste as defined in the Guidelines for the implementation of Annex V to Marpol 73/78 (Cargo Associated waste: Material which has become waste as a result of use on board a ship for cargo stowage and handling)

Ship Waste Handling

How collection treatment and final disposal are handled in the port

1 EXECUTIVE SUMMARY REPORT

1.1 Objectives

The overall objective of this study is to give a clear picture of the Port Reception Facilities functioning within EU in order to enhance the effectiveness of the Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues and to ensure a harmonised implementation amongst Member States.

The specific objectives are

- to acquire a deeper understanding of the cost recovery and waste notification systems applied in Community ports,
- to analyse the effectiveness of waste handling plans,
- to obtain information on fee reduction for “green ships” - such as ships whose environmental management, design, equipment and operation reduce the quantity of SGW,
- to determine any problem encountered by ports users.

1.2 Methodology

The study was carried out based on the visit of 50 major European ports and on detailed discussions with the relevant stakeholders, as well as on information such as port waste management plans, national implementing measures and legislation.

The main source of information are detailed interviews with the PAs. Therefore the study is the result of the analysis following information, oral and written, provided by the PAs and by the stakeholders invited by the PAs at the meetings.

A detailed questionnaire was developed with assistance from EMSA to register all information needed. Relevant stakeholders such as ECSA, FONASBA, ESPO and Maersk were also consulted in order to achieve highest credibility.

A close and very constructive dialogue was established with EMSA throughout the study. Whenever problems arose in organising meetings with ports, EMSA would provide assistance and ensure that objectives were met.

The ports visited were generally very cooperative and provided valuable information.

However, in some cases, it was difficult to obtain all information needed for a proper analysis. The information was poor for issues such as actual waste volume collected and reduced fee for “green ships”.

Regarding waste volume, information collected was very limited due to two reasons:

1. no reporting system was in place before the implementation of The Directive, which took place in most States during the second semester 2003;
2. most waste operations in ports are contracted out to private operators. These often do not report to Port Authorities and therefore only few or no statistics at all were available.

Concerning “green ships”, the situation also seemed to be quite unclear, since the definition in The Directive leaves space to various interpretations. As a principle and according to The Directive, it is the responsibility of MSs – and not ports - to agree on fee reductions to ships whose environmental management, design, equipment and operation reduce the quantity of SGW. MSs may also grant exemptions for scheduled traffic with frequent and regular port calls and when there is sufficient evidence that SGW is delivered in a port along the ship’s route. For those reasons, most ports did not have much information on the issue.

1.3 Results and Conclusions

The overall picture provided by the survey shows to be very complex, scattered and, in some cases, confused for the ports visited. It can be summarised that **50 ports have defined and implemented almost 50 different systems, based on various approaches.**

A number of issues were identified in relation to the effectiveness of ship waste handling. These are developed hereafter.

I. GENERAL CONCLUSION

1. Status:

The Directive has been transposed in all Member States (MSs) through National and/or Regional legislation. The level of implementation of The Directive by the ports differs from MS to MS, especially regarding the provisions related to CRS as well as the incentives for ships to deliver waste in ports. In all ports The Directive has led to an improvement (from low to high) of the SWH systems and to a stronger awareness among stakeholders of the environmental impact of illegal discharges into the sea. This has resulted in an increased waste delivery from ships.

Ports have interpreted The Directive in different ways leading to some confusion among stakeholders (ships, shipping agents, waste operators and environmental authorities). Most ports and ships have shown therefore a strong wish to have more detailed and clear and uniform guidelines, when these are not provided by central or regional government.

Only in MSs with detailed and clear transposing measures and clear guidelines, in accordance with the principles of The Directive, the waste delivery in ports shows to be significantly higher.

Recommendations:

Detailed and clear guidelines must be defined at EU level to ensure a uniform implementation of The Directive. These guidelines should specify e.g.

- Role of PA
- Cost Recovery (principles and methods for calculation of fees)
- Waste Notification (flow)
- Contractual Framework with waste operators

It should also include a common delivery certificate. Almost all ports have requested it in order to have a system avoiding any fraud with certificates.

It is recommended that Port Authorities and competent authorities appointed at national level play a more active and central role in securing the correct implementation of the provisions of The Directive.

II. TRANSPOSITION AND IMPLEMENTATION OF THE DIRECTIVE

A. Transposition by Member States (MSs) into national legislation

B. Implementation of The Directive and national provisions by ports

A. Status:

The choice of the Directive was decided in order to leave the MSs the necessary flexibility to reach the goals foreseen, adopting internal measures and defining the opportune means to achieve the objectives.

The Directive has been transposed in all MSs through National and/or Regional legislation. In most of the MSs the transposing measures are detailed and clear, providing clear guidelines for the implementation in ports. Other MSs have decided to establish indicative guidelines or none, thus leaving the definition of the implementing measures and provisions (in particular concerning the art. 8) at the level of the port.

B. Status:

The level of implementation of The Directive by the ports differs from MS to MS. In those MSs where the transposing measures are detailed and clear providing clear guidelines, the ports have put in place systems with full or almost full implementation. In these MSs the incentive system in accordance with the principles of The Directive has resulted in an increase of waste delivery in ports.

In the other MSs the absence of detailed and clear guidelines has created uncertainty in ports. Individual initiative of the ports has shown an uneven level of implementation of the provisions of The Directive, in particular concerning the application of art. 8. Therefore, the implementation of The Directive depends on the *ad hoc* initiative of the individual ports, which create a CRS that do not always encourage the delivery of waste in ports.

Recommendations:

Provide detailed and clear explanatory guidelines for SWH to MSs and ports (e.g. similar to the guidelines for the implementation of other environmental directives such as Habitat – art. 6 - and Water Framework) clarifying relevant articles such as art. 6, 8 and 9 of The Directive. This would encourage a clear and more uniform system at European level.

III. INVOLVEMENT AND RESPONSIBILITY

Status:

Some ports take an active approach in SWH and take responsibility for effective SWH. They consider this as part of being a modern port. Despite the SWH being outsourced, they take responsibility for defining terms of reference for waste operators and they monitor and control their performance. Other ports seem to do the minimum and do not really regard this as a core business, but rather as a burden.

Recommendations:

The PA must play a central role – dealing with ships and agents on one side and operators on the other side. This can be done through clear procedures for the ships and a detailed contractual framework with waste operators. By playing a central role, the ports can manage SWH with the highest degree of commitment and consequently with the highest effectiveness.

IV. COST RECOVERY

Status :

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 beyond the direct charge from operators with possibilities of being refunded.

An indirect fee of 100 % has been implemented in Denmark, Finland, Sweden, Poland, Estonia, Latvia, Lithuania, Cyprus, Slovenia and one port in Greece (Thessalonica), though with some differences with regard to the volume of waste accepted (Sweden no limitations).

In Germany a “reverse” model of the indirect fee system has been implemented (indirect fee and direct charge with possibility of reclaiming cost (or part of) after delivery.

In Portugal and U.K. the percentage of indirect fee is difficult to be defined since it is only related to the garbage collection.

In Netherlands an indirect fee has to be paid, but it is for some ports only related to the waste collection services.

In Belgium a deposit system has been implemented, which provides an incentive to deliver waste in port. However, it appears that not all ships calling at port contribute to the costs of port reception facilities, since the ships can reclaim their deposit in case of delivery in a Community port.

Spain, Malta, and France have applied a system, based on a direct charge, with possible sanctions through a fee (penalty) for those ships not delivering waste (Spain with a differentiated penalty).

In Italy the situation is more complex. The level of implementation of The Directive depends on the initiative of the specific ports. Ports (except for Napoli where the Italian Decree transposing The Directive is fully implemented) still apply a direct charge, with very limited (or no) incentives to deliver waste.

The direct charge is also applied in two Greek ports, Estonia until 1-1-05 and in Ireland.

Recommendations:

Efficient, modern and competitive ports should move towards a “one stop job” where ships/agents only have to deal with one “organization” (PA) and where all or most waste delivery costs are included in the fee, with PA collecting the waste fees from agents/ships and negotiating/controlling prices with waste operators. This seems to be the most transparent and effective system. Whether this is a 100 % indirect fee system as seen in the Denmark, Finland, Poland, Cyprus, Thessalonica port in Greece, Latvia, Lithuania and Sweden (and Germany) or a partly indirect fee system including some waste types, should be defined in detailed and clear guidelines. It is clear that equal competition conditions are essential in Europe for the shipping industry, in case a 100 % (or less) indirect fee is applied.

V. NOTIFICATION**Status:**

All ports in Member States have implemented a Waste Notification System. Most ports use the form as indicated in annex 2 of The Directive (with small modifications), though with different effectiveness with respect to SWH.

Some ports (such as the Portuguese, Spanish, Dutch, Belgian and the French Port Le Havre) have implemented an efficient IT Waste Notification system, which facilitates the information flow between the ship, the agent, the PA and IAs.

In Denmark, Finland, Latvia, Lithuania, Poland, Germany and Sweden the waste notification is used by PAs to inform the waste operator and to invoice the ships.

In the remaining MSs ports, e.g. some of the visited Italian and most U.K. ports it is not used at all, since a parallel notification system works along with the official one (direct contact between shipping agent/ship and the waste operators).

Waste types included in the form are SGW as well as CR. CR are however always handled by terminal operators and this made difficult to get an overview of the effectiveness of the notification when sent to PA. In addition there is no direct link between the size of the port and the effectiveness of the notification system.

Recommendations:

The ports controlling and managing the waste notification show the most efficient system. They use a transparent system with access to all relevant actors. This should preferably be done using IT.

VI. OUTSOURCING OF SHIP WASTE HANDLING

Status:

More than 90 % of ports have outsourced their SWH to private external waste operators, fully or partly: all ports for collection of “oily waste” and most of them for garbage. Some ports have chosen one operator selected through public tender, others have opted for framework-contracts to various operators, which provide services according to market prices, where ports might regulate the maximum level for tariffs. Still many ports just leave it to the agents to identify waste operators in the “free market”.

Recommendations:

Outsourcing of the operational SWH is recommendable. PA should however play a more central role in the overall management - i.e. definition of terms of reference for the operator(s) (contractual framework), specifications for all procedures, notification, recovery of waste fees and payment of operators - as well as in the monitoring and evaluation of the waste operator performance.

VII. FEE REDUCTIONS FOR “GREEN SHIPS” AND EXEMPTIONS FOR REGULAR TRAFFIC

A. Fee reductions for “green ships”

B. Exemptions to regular traffic

The general picture both for A. and B. is very scattered without any clear trend.

A. Status:

Fee reductions are granted by National competent authorities and not by ports. Thus, only very little information could be obtained on the issue. In some countries, fee reductions can be granted if the ship can document that it has implemented “Green Technology”, a special environmental management system, design and/or equipment. However, some ports stated that certificate for special “environmental” equipment onboard or special certificates (e.g. Rotterdam Green Award Bureau) are needed for any exemption. Normally the fee reduction is in the port due.

B. Status:

There are no uniform rules among ports regarding exemptions, which are normally granted by National competent authorities. This is why ports have shown a strong wish for detailed and clear guidelines. Most ports have special arrangements with ferry and cruise liner traffic as well as for commercial traffic with regular calls to the port. The exemption includes notification, waste delivery and payment of waste fee. Some ports do not grant exemptions for the waste fee since it is relatively small (e.g. ports with fixed fee for garbage).

Recommendations:

It is recommended to develop a system with uniform guidelines for European ports both for A. and B.

- A. Guidelines on fee reductions for “Green Ships” should be provided in order to achieve a uniform European system. Such system should clearly define the conditions under which a “green ship” can be granted a fee reduction. The guidelines should also reflect a cost benefit point of view (de-centralised – on each ship vs. centralised waste collection and treatment in each port), since it is not always recommendable to invest in environmental equipment on board each ship. It should also specify which document and evidence is necessary to demonstrate that the ship produce reduced quantity of SGW.
- B. A uniform European system must indicate how and when a ship can be exempted, and what the exemption includes (waste fee/notification/delivery exemption). It should particularly clarify the definition of frequent and regular port calls and the criteria demonstrating the existence of an arrangement in order to ensure the delivery of SGW.

VIII. WASTE TYPES

Status:

All ports distinguish between “Ship-Generated Waste” and “Cargo Residues”. They consider SGW as their own responsibility whereas CR should be the responsibility of terminal operators. Often Oil Terminals are regarded as an “individual” port within the port. However, some frustrations were noted among tankers since they cannot discharge oily cargo slops in some terminals, due to non-existing facilities or to other obstacles.

Recommendations:

Actions should be taken to improve the system for notification of CR and to ensure that port or terminal operators provide facilities to collect such residues. Awareness and relevant information on collection of CR should be disseminated to guarantee a better understanding of procedures and responsibilities. IAs should play a more important role in this issue.

IX. INSPECTION AND CONTROL

Status:

In most ports there seems to be a lack of communication between Ports and IAs. Ports do not see inspection and control of the calling ships as their responsibility and therefore do not invest time in dialogue with the IAs.

Recommendations:

Develop communication between Ports and IAs by setting up guidelines for how and when IAs shall be informed (flow of waste notification forms).

X. PRICING OF SHIP WASTE HANDLING SERVICES

Status:

In many ports a lack of transparency was detected regarding the pricing of services provided by waste operators. This happens especially in ports, where PAs do not play a central role. It seems that some waste operators monopolise facilities and unilaterally decide on the price. They deliberately increase service costs taking advantage of the short time ships are present in ports and their immediate need of services. Furthermore, some operators request waste delivery although ships claim they have sufficient capacity to continue to next port.

Recommendations:

PA must play a more active and central role in securing a competitive and fair price level. This can be done by negotiating prices with operators and e.g. ensure competition through a tender procedure for operators to collect and treat waste. Increasing competition by just opening the market for all operators is not recommendable, since it will jeopardise each operator's interest in providing good, cost effective, and profitable services.

XI. EXPERIENCE AND CAPACITY IN PORTS TO DEVELOP A LOGIC AND SIMPLE SYSTEM

Status:

In many ports, where SWH has not been a priority issue, new procedures and systems have been developed to comply with Directive, trying to adapt the existing systems, without any "state of the art" assessment. Lack of specific competence in some ports has lead to systems that are not always logic.

Most ports expressed a wish for further guidance on how to interpret The Directive and a wish for a more uniform SWH system in Europe. *"Tell us how to do and we will do it. Do not give us too many possibilities for variations"*.

Recommendations:

It is recommended to develop (a) model(s) for SWH with detailed guidelines on all issues of importance to obtain efficient SWH. Such model should provide descriptive guidelines on CRSs, notification systems, contractual framework with external operators, role of ports, and guidelines and procedures for SWH, still leaving the possibility of small differences between ports. Technical assistance to ports should also be considered in order to harmonise the level of implementation.

2 OVERVIEW OF MAIN INDICATORS

The below chart gives a brief overview of the issues analysed above. This is based on feedback from the 50 ports visited.

General Overview:

