

European and IMO framework on the disposal of ship waste - Greek legal interventions

Ntente P.^{1,*}, Manoglou S.¹, Tselentis V.²

¹PhD Candidate - University of Piraeus - Department of Maritime Studies

¹PhD Candidate – University of Piraeus – Department of Maritime Studies

²Professor – University of Piraeus – Department of Maritime Studies

*corresponding author: e-mail: pendede@gmail.com

Abstract

For almost every type of ship-generated waste, there is a variety of waste flows and on-board treatment methods. Studies show that ships use different treatment methods and often only treat part of a waste stream. This results in a difference between the amounts of waste generated and the amounts landed, indicating that measures, such as for example IMO's obligatory Garbage Management Plans, fall short of sustainable and operational efficiency. The fact that IMO is encouraging voluntary cooperation between ports and shipping sectors to solve such problems indicates the urgency in developing the legislator framework of waste management, amongst other issues plaguing the shipping industry. This paper is part of a broader insight into ship generated waste and addresses the existing legislation pertinent to waste management on ships and the role of ports. In this respect the European institutional framework is presented in addition to IMO Conventions and regulations. The Greek legislative framework is also studied, in an attempt to highlight possible novel contributions to the ongoing debate.

Keywords: Ship waste, Port waste, European Guidelines, Waste management, Greek legislative framework

1. Introduction

The sector of maritime transportation significantly contributes to the discharge of oily waste, solid and sewage waste in the marine environment. It is estimated that on average 20% of marine litter in the marine environment comes from ships, with significant differences between the different sea basins (European Commission, 2018). In the 1950s and 1960s, the International Community established International Institutes and Legal Institutions to address the ever-increasing volumes of waste discharged on the coast and the open sea. Today many international and local institutes and bodies exist, dealing with the challenges that marine litter presents to the marine environment. The European Union has developed a significant institutional framework addressing the relevant requirements pertinent to European ports, which is set out in detail in the paper. However, there are still problems related to ship-generated

waste and general waste, which is illegally discharged into the sea. The European Maritime Safety Agency (EMSA) has reported that European ports have sufficient infrastructure and expertise to receive and manage wastes (Port Reception Facilities - PRFs) (EMSA, 2012). On the other hand, the same study indicates that there are several cases of large European ports where the provision for reception facilities and services is considered "poor", especially for petroleum products. These failures are inherent in many small ports, such as marinas and fishing ports, where waste management is not implemented (EMSA, 2010). Obtaining reliable data on the quantities of waste delivered to European ports is intrinsically perplexed, making it difficult to assess the effectiveness of legal interventions and management measures already in place. The fact that studies (Sealy, 2007) estimate that only 27% of wastes from ships are delivered to ports worldwide, with the remainder either discharged into the sea or burned, highlights the importance of studies that methodically investigate and critically assess the existing legal framework. This paper contributes on developing novel ways and approaches by which the existing institutional and legal frameworks can improve environmental performance in the marine transportation.

2. Legislative Framework

2.1. International legislative framework

At the international level, the International Convention for the Prevention of Marine Pollution from Ships (MARPOL 73/78) Annex V, deals with the prevention of pollution by garbage from ships. Since discharging garbage and several other types of waste generated on board ships, into the sea is generally prohibited, MARPOL requires port States to provide adequate reception facilities for the safe and sound management of wastes. For the proper implementation of MARPOL 73/78, the International Maritime Organization (IMO) has published manuals, guidelines and instructions for facilities receiving ship-generated waste (IMO Comprehensive Manual on Port Reception Facilities, IMO Consolidated Guidance for Port Reception Facilities

Providers and Users), which are constantly being revised by each MEPC, such as MEPC 67/11 11-7-2014: Revision of the IMO Comprehensive Manual of Port Reception Facilities and MEPC.1/Circ.834 15-4-2014: Consolidated Guidance for Port Facility Providers and Users. IMO is considering future revisions to the legislation in order to incorporate provisions and guidelines that will address the option of providing land-based facilities for receiving and treating ballast water from ships.

2.2. European legislation

The EU has adopted several legislative measures to implement the MARPOL convention and ensure strict implementation of the measures outlined in the above mentioned convention. In Directive 2000/59/EC “Port reception facilities for ship-generated waste and cargo residues”, the provision of adequate waste reception facilities in all EU ports, including recreational ports and marinas, is clearly set out, as well as instruments to ensure that all ships, including fishing vessels and recreational craft, will deliver their waste to the facilities provided, before departure. In the recent evaluation (REFIT evaluation) the Commission identified shortcomings and proposed the following:

- Annex II of the Directive (waste notification) to be revised to incorporate the new garbage categorization of Annex V MARPOL, and include the waste deliveries in the previous port of call (Directive 2015/2087/EU);
- EMSA has been asked to develop a system to achieve an effective exchange of information between Member States based on SafeSeaNet and THETIS;
- Technical recommendations developed by EMSA will clarify key issues and harmonize practices in Member States.

Important European and Greek Legislation governing ship waste management are collated in Table 1.

Table 1. Major EU and Greek waste management legislation

European legislative framework	
Directive 2000/59 / EC	Port reception facilities
Directive 2007/71 / EC	Amending Annex II to Directive 2000/59 / EC
Directive 2015/2087/EC	Amending Annex II to Directive 2000/59 / EC
EMSA guidelines:	Implementation of Directive 2000/59/EC
Directive 91/156 / EEC	Amending Directive 75/442 / EEC
Commission Decision 96/350 / EC	Adapting Annexes IIA and IIB to 75/442/EC Directive
Directive 2008/98 / EC	On waste and the repeal of certain Directives

Greek legislative framework	
Joint Ministerial Decision 3418/07/2002	Port reception facilities for ship-generated waste and cargo residues
Ministerial Decision 2263.1-6/84381/2017	Garbage Record Book.
Ministerial Decision 2331.5 / 96657/2016 -	Terms and conditions for petroleum residues
Ministerial Decision 181051/1090/82/1982 -	Ships, barges or floating structures used for the reception of solid waste
Ministerial Decision 181051/536/1980 -	Land-based facilities for collection and processing of petroleum residues
Ministerial Decision 181051/2080/78/1978 -	Port to construct facilities for the reception of residues

3. Conclusion

The EU, through Directive 2005/35/EC as amended by Directive 2009/123/EC makes sure that non-compliance with the MARPOL standards (Annexes I and II) is met with penalties for pollution offences, which are regarded as criminal offences. It is therefore clear that the EU ensures strict enforcement of the measures proposed both by IMO and the EU, to reduce the pollution from ships. Greece, on the other hand, does not develop an institutional and legal framework, as one would expect, due to its leading position in global shipping (19.89% of the world fleet is owned by shipping companies of Greek interests) and the experience of its main ports. Greece limits its role to incorporating European Instructions and Regulations, as well as International Conventions from IMO, into its national legislation.

References

- EMSA Study on the Delivery of Ship generated Waste and Cargo Residues to Port
- EMSA (2010), “Green Ship” Study
- EMSA (2012), Final Report: Study on the delivery of ship-generated waste and cargo residues to PRF in EU ports
- ESPO (2000), A Waste Management Plan for Ship Generated Waste
- GESAMP (2007), Report number 75: Estimates of oil entering the marine environment from sea-based activities
- IMO (2017) prevention of pollution by sea waste from ships, Regulations for the prevention of pollution by sewage are contained in Annex IV of MARPOL 2017
- Reception Facilities in EU Ports. Reference No. EMSA/OP/06/2011. (2012), Available from: HELCOM eneredated-waste-andcargo-residues-to-port-reception-facilities-in-euports.html
- Sealy, S.B. (2007), National Marine Debris Monitoring Program: Final Program Report, Data

