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PREVENTION OF POLLUTION BY YACHTS' SEWAGE IN THE PORTS OF NAUTICAL TOURISM – THE LEGAL FRAMEWORK

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ABSTRACT

The paper deals with the positive law regulating the standards of prevention of pollution by sewage from yachts and pleasure craft and its specific application in the context of the ports of nautical tourism (marinas). The problem of pollution by sewage from yachts and other recreational is specific considering the large and increasing number of yachts sailing in Croatian waters, the particular technical characteristics of pleasure craft, the way they are constructed and certified, the manner in which they are used and operated, and the fact that the nautical ports in which the yachts and other pleasure craft are berthed are special purpose ports subject to a specific legal and management regime. Croatia, is a party to MARPOL, the main international convention covering prevention of pollution of the marine environment by ships. In particular, the standards of prevention of pollution by sewage are governed by MARPOL Annex IV. Whilst MARPOL regulates prevention of pollution standards for the larger vessels, most of the yachts and pleasure craft are outside its scope of application. However, these vessels are subject to the Directive 2013/53/EU on recreational craft and personal watercraft imposing mandatory installation of holding tanks to watercraft fitted with toilets. The relevant MARPOL and EU standards are implemented in the national law through the Croatian Maritime Code, the Maritime Domain and Seaports Act and the respective by-laws, enforced through the flag and port state jurisdiction of the Republic of Croatia and the system of inspection control and sanctioning of maritime offences. The discharge of sewage into the sea is prohibited within the Croatian territory. The adequate port reception facilities must be fitted in all Croatian ports, including the ports of nautical tourism where it is a responsibility of the concessionary of the port. The authors critically examine whether and how the relevant pollution prevention standards are implemented in the context of yachting and marinas with a view of proposing certain improvements.¹

KEY WORDS

Marine pollution, Sewage, Yacht, Recreational craft, Marina, MARPOL, Directive 2013/53/EU, Nautical touri

¹ This paper is a result of the authors' joint research under the research project of the Adriatic Institute of the Croatian Academy of Sciences and Arts, funded by the Croatian Science Foundation, titled *Developing a Modern Legal and Insurance Regime for Croatian Marinas – Enhancing Competitiveness, Safety, Security and Marine Environmental Standards* (DELICROMAR, UIP-11-2013-3061, project period: 1st March 2016 – 28th February 2019). More information about the project is available at www.delicromar.hazu.hr.

1. INTRODUCTION

Nautical tourism, and particularly further development of the ports of nautical tourism is of a strategic interest for the Republic of Croatia. It is the role of the state to set the optimal balance between private and public interests, by attracting further investments in this sector whilst ensuring that the development is planned, controlled and sustainable. In this respect, it is important to consider the specific aspects of pollution prevention related to the activities usually carried out within the ports of nautical tourism. In the official Nautical Tourism Development Strategy of the Republic of Croatia 2009 – 2019² it is rightly stated that the biggest threat to the to long-term development of nautical tourism is the uncontrolled use of naturally formed areas and natural resources.”³ Therefore, the responsible management and environmental protection “is an imperative for the creators of economic development.”⁴

The negative influence of tourism on the area and the environment can be reduced to the minimum only by regulating its development and implementing the adequate environmental protection measures.⁵ One of such measures is a mandatory system of reception facilities in the ports for the collection of various types of wastes from vessels (sewage, oil, communal waste), which, along with the compliance with the global environmental standards, effectively contributes to environmental protection.⁶

In this paper, the authors deal with the standards of prevention of pollution by sewage from yachts and other pleasure craft with a special focus on the relevant aspects related to the legal status, statutory duties and business practice of the ports of nautical tourism. The authors critically analyse the relevant legal framework, with a view of

identifying the main obstacles for a more efficient implementation of the prescribed standards and of making proposals for potential improvements.

2. STANDARDS OF PREVENTION OF MARINE POLLUTION BY SEWAGE FROM RECREATIONAL WATERCRAFT

2.1. MARPOL Standards

The problem of marine pollution by *ship's sewage* has been regulated on the international level by Annex IV of MARPOL 73/78 (Regulations for the prevention of pollution by sewage from ships).⁷ MARPOL prescribes the equipment (ship sewage systems such as sewage treatment plants, sewage comminuting and disinfecting systems or holding tanks, standard discharge connections of the port reception facilities' pipes and the ship's discharge pipelines, sewage reception facilities at ports and terminals), control of the discharge of sewage into the sea and the corresponding survey and certification system. According to MARPOL standards, the discharge of sewage into the sea is prohibited within 12 nautical miles from the nearest land, subject to certain exceptions, when the ship uses an approved comminuting and disinfecting sewage system, or a system of an approved, certified and tested sewage treatment plant. In any case, the sewage that has been stored in holding tanks shall not be discharged instantaneously.⁸ Furthermore, it is prescribed that the port states that are parties to MARPOL must ensure the provision of facilities at ports and terminals for the reception of sewage.⁹

Generally, MARPOL applies to all ships flying the flags of the states parties to the MARPOL convention and to all ships operating under the authority of a state party.¹⁰ However, the MARPOL standards relating to prevention of marine

² Ministry of the Sea, Transport and Infrastructure & Ministry of Tourism, Zagreb (December 2008), <http://www.mppi.hr/UserDocsImages/Strategija%20razvoja%20nautickog%20turizma%20ENGL%201.pdf> (21/02/2017)

³ *Ibid*, p. 21.

⁴ *Ibid*.

⁵ *Ibid*, p.22.

⁶ *Ibid*

⁷ International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978, (further: MARPOL).

⁸ Regulation 11, Annex IV of MARPOL.

⁹ Regulation 12, Annex IV of MARPOL. See more on this aspect *infra*.

¹⁰ MARPOL, Art. 3(1).

pollution by ship sewage (Annex IV) apply to ships engaged in international voyages with GT of 400t and above, or those with GT below 400t certified to carry more than 15 persons.¹¹

The Republic of Croatia applies the MARPOL standards to the ships registered in the Croatian Register of Shipping and through port state control to the ships sailing into Croatian ports. In addition, under Art. 49.b of the Croatian Maritime Code¹² (further: CMC), there is a general prohibition of discharge of sewage into the sea or on the shore applying to all types of maritime objects (vessels, floating facilities, fixed offshore facilities). This prohibition applies to the territorial sea and internal waters, whilst in the ecological and fisheries protection zone, the discharge of sewage is prohibited if contrary to Regulation 11 of MARPOL Annex IV.¹³ Under CMC, Art. 49.c all types of vessels and floating objects are allowed to discharge sewage from the holding tanks exclusively on the designated locations in the ports or outside the ports where the adequate reception facilities are provided.

When we speak of marine pollution by ship sewage in the marinas and other ports of nautical tourism¹⁴, we primarily deal with the problem of pollution from recreational vessels, i.e. yachts and pleasure boats, since these are the most usual types of vessels berthing in the ports of nautical tourism. It should be clarified that in this context the term sewage is mainly meant to include the so called *black waters* (drainage and other wastes from any form of toilets and urinals) and *grey waters* (waste waters from the sinks, tubs, shower cabinets, bathrooms, vessel kitchen etc.).¹⁵ Considering the above mentioned scope of

application of the relevant MARPOL standards, it follows that most of the vessels using the ports of nautical tourism do not fall under the application of MARPOL, except large yachts of GT 400t and above, or of over 24 meter length, or those which are certified to carry more than 15 persons (including passengers and crew).¹⁶

2.2. EU Standards

As regards the recreational watercraft of up to 24 meter length, the relevant standards of prevention of pollution by sewage on the EU level are provided under the Directive 2013/53/EU of the European Parliament and of the Council of 20 November 2013 on recreational craft and personal watercraft and repealing Directive 94/25/EC (further: Directive 2013/53/EU).¹⁷ In the preamble of this Directive it is stated that “In order to contribute to the protection of the marine environment, it is appropriate to adopt a requirement imposing mandatory installation of holding tanks to watercraft fitted with toilets.”¹⁸ One of the requirements prescribed by this Directive is that “Watercraft shall be constructed so as to prevent the accidental discharge of pollutants (oil, fuel, etc.) overboard. Any toilet fitted in a recreational craft shall be connected solely to a holding tank system or water treatment system. Recreational craft with installed holding tanks shall be fitted with a standard discharge connection to enable pipes of reception facilities to be connected with the recreational craft discharge pipeline. In addition, any through-the-hull pipes for human waste shall be fitted with valves which are capable

¹¹ Regulation 2, Annex IV of MARPOL.

¹² Croatian Maritime Code, Official Gazette no. 181/2004, 76/2007, 146/2008, 61/2011, 56/2013, 26/2015, Art. 49.b

¹³ See Art. 7. of the Ordinance on the Protection of Marine Environment in the Ecological Fisheries Protection Zone, Official Gazette, no. 47/2008.

¹⁴ Under Croatian legislation, the ports of nautical tourism are regulated as special purpose ports. Marina is the most developed and the most recognisable type of nautical tourism port.

¹⁵ See The Rules for the Statutory Certification of Seagoing Ships, Part 22 - Pollution Prevention, Official Gazette no. 97/2015 – Annex V. Prevention of Pollution by Sewage, Rules 5.1.2.3 – 5.1.2.4.

¹⁶ These large yachts are usually subject to the certification and classification standards applying to seagoing ships or similar international standards such as e.g. MCA – The Large Commercial Yacht Code. In Croatia, the large and mega yachts are subject to the Rules for the Certification of Seagoing Ships, in particular, when prevention of pollution by sewage is at stake, to Annex V. (Prevention of Pollution by Sewage) of the Rules for the Statutory Certification of Seagoing Ships – Part 22, Pollution Prevention, Official Gazette no. 97/2015.

¹⁷ OJ L 354, 28.12.2013.

¹⁸ Directive 2013/53/EU, *ibid.*

of being secured in the closed position.”¹⁹ The deadline for the transposition of this directive into the national laws was 18 January 2016.

Prior to Directive 2013/53/EU, the standard for the prevention of pollution by sewage from recreational craft was prescribed under Directive 94/25/EC of the European Parliament and of the Council of 16 June 1994 on the Approximation of the Laws, Regulations and Administrative provisions of the Member States Relating to Recreational Craft, (further: Directive 94/25/EC),²⁰ as amended by the relevant subsequent EU legislation. This Directive, similarly prescribed that “Craft shall be constructed so as to prevent the accidental discharge of pollutants (oil, fuel, etc.) overboard. Craft fitted with toilets shall have either: (a) holding tanks, or (b) provision to fit holding tanks.”²¹ Craft with permanently installed holding tanks shall be fitted with a standard discharge connection to enable pipes of reception facilities to be connected with the craft discharge pipeline. In addition, any through-the-hull pipes for human waste shall be fitted with valves which are capable of being secured in the closed position.”²² Directive 94/25/EC was in application in all EU countries from 16 June 1996 until 17 January 2016 when it was repealed by Directive 2013/53/EU.²³

¹⁹ *Ibid*, Annex I (Essential Requirements), Rule 5.8. (Discharge prevention and installations facilitating the delivery ashore of waste)

²⁰ OJ L 164, 30.6.1994.

²¹ The original text of this provision before the amendments was “provision to fit holding tanks on a temporary basis in areas of use where the discharge of human waste is restricted.” Therefore, logically, if a country prescribes by its national laws that the discharge of sewage within its jurisdiction is prohibited, the subsequent fitting of the recreational craft with holding tanks will be mandatory during the time the vessel remains within the jurisdiction of that country.

²² Directive 94/25/EC, *ibid*, Annex I (Essential Requirements), Rule 5.8. (Discharge prevention and installations facilitating the delivery ashore of waste)

²³ Directive 2013/53/EU provided a transitional period under Art. 55 according to which it was allowed to place on the market or to put into service (for the first time) watercraft conforming to Directive 94/25/EC, latest by 17 January 2017. Directive 94/25/EC, on the other hand, prescribed that EU

2.3. Croatian National Law Standards

Considering Croatia’s strategic orientation towards further development of nautical tourism, and the constantly growing number of vessels sailing in Croatian waters for the purpose of nautical tourism, marine pollution by waste waters from yachts and other pleasure craft, particularly by sewage, poses a threat to the preservation of marine environment. It is therefore essential to have in place adequate national regulation for the prevention of pollution from yachts and pleasure craft registered in Croatia, as well as such foreign flag vessels sailing in Croatian territorial waters and berthing in the Croatian ports.

The control of seaworthiness for the yachts and other pleasure craft registered in Croatia is regulated under the CMC. Art. 11 provides that a yacht or a boat is seaworthy for the navigation within certain geographical areas and for a specified use if it fulfils the requirements prescribed by the CMC, the relevant by-laws and rules for the statutory certification that, *inter alia*, refer to pollution prevention.²⁴ Whilst Croatian Register of Shipping determines seaworthiness of yachts registered in Croatia through the regular technical inspections, seaworthiness of boats is subject to the competence of the harbour master’s offices.²⁵ In accordance with CMC, Art. 113., technical inspection also takes place upon the construction or conversion of yachts and boats. The Ordinance on Boats and Yachts²⁶ (further: OBY) and the Rules for the Statutory Certification of Boats and Yachts²⁷ (further: Rules) prescribe

Member States had to accept the placing on the market and putting into service the recreational craft which complied with the rules in force in their territory on the date of the adoption of the Directive (16/06/1994) during a period of four years from that date (16/6/1998).

²⁴ CMC, Art. 111.1.2.

²⁵ CMC, Art. 112.1 and 112.3.

²⁶ Ordinance on Boats and Yachts, Official Gazette, no. 27/2005, 57/2006, 80/2007, 3/2008, 18/2009, 56/2010, 97/2012, 137/2013, 18/2016

²⁷ The Rules for the Statutory Certification of Boats and Yachts, Official Gazette, no. 19/2016. These rules prescribe the technical requirements for the yachts and boats of Croatian nationality with regard to the procedures of conformity

special requirements that yachts and boats must fulfil. It should be pointed out that the OBY and the Rules are harmonised with the Directive 2013/53/EU prescribing “the necessary elements for effective conformity assessment procedures and CE-marking, accreditation of notified bodies (the certifying bodies), and market surveillance including the control of products from outside the Union, creating a more coherent regulation for the EU single market.”²⁸ The directive sets the conditions for the first time sale and putting into service of recreational craft, their engines and certain components in Europe.²⁹ This ensures that recreational vessels placed on the market and/or put into service within the EU fulfil the standards of the safety of navigation and pollution prevention.

It is interesting to note that according to OBY, Art. 2 the provisions of this Ordinance apply to yachts and boats registered in Croatia and to all the yachts and boats sailing in Croatian internal waters and territorial sea when it is expressly provided so under OBY.³⁰ However, the provisions of OBY or of the Rules relating to pollution prevention apply to all yachts and boats sailing in internal waters, territorial sea and the ecological and fisheries protection zone of the Republic of Croatia,³¹ which seems to include the technical requirements relating to prevention of pollution by sewage prescribed by the Rules. The scope of application of these particular requirements relating to prevention of pollution by sewage includes the recreational craft, meaning boats and yachts intended for sport and leisure between 2,5 m and 24 m length, regardless of the propulsion system, excluding personal watercraft having a water jet pump as its primary source of propulsion and designed to be operated by a person or persons sitting, standing or kneeling on, rather than within

assessment of design and construction, statutory certification of the vessels intended for sport and leisure (recreational craft) and conformity assessment after construction, technical norms for the inspections of seaworthiness of yachts and boats. (Rules, Art. 1).

²⁸ Guide to the New Recreational Craft Directive 2013/53/EU, European Boating Industry/International Council of Maritime Industry Associations, Spring 2015, http://www.europeanboatingindustry.eu/boatingdownloadables/EUGUIDE_pdf_version.pdf (20/02/2017)

²⁹ *Ibid.*

³⁰ OBY, Art. 2.1.

³¹ OBY, Art. 2.2.

the confines of a hull.³² Similarly as the Directive 2013/53/EU, the Rules provide that the vessels must be constructed so as to prevent the accidental discharge of pollutants into the sea (oil, fuel, etc.).³³ Any toilet fitted in a recreational craft shall be connected solely to a holding tank system or water treatment system.³⁴ Recreational craft with installed holding tanks shall be fitted with a standard discharge connection to enable pipes of reception facilities to be connected with the recreational craft discharge pipeline.³⁵ Any through-the-hull pipes for human waste shall be fitted with valves which are capable of being secured in the closed position.³⁶ If the implemented sewage system complies with the Croatian norm HRN EN ISO 8099:2004 – “Small vessels – sewage collection system”, the conformity is presumed.³⁷ In addition to these essential technical requirements applying to all recreational craft, the Rules provide for certain technical requirements for statutory certification of yachts of Croatian nationality. The relevant provisions with regard to the standard of prevention of pollution by sewage prescribe that the yachts of up to 24 m length built on 1 January 2006 or later intended to carry up to 15 persons (including passengers and crew) must comply with the requirements of the Croatian norm HRN EN ISO 8009:2004 – “Small vessels – System for the collection of sewage” or an equivalent technical norm.³⁸ The existing yachts, i.e. those already registered in the Croatian Register of Yachts, built before 1 January 2006, of up to 24 m length, certified to carry up to 15 persons, that have a toilet with a direct outlet into the sea, must be fitted with a holding tank for sewage and with a discharge connection or another solution allowing for the reception of the waste on land, provided that this requirement had to be complied with latest by the first regular inspection in 2007. If such yacht is fitted with two or more toilettes, the holding tank must be provided for at least one of the toilettes which is then the only toilette that

³² Arg. Annex II (Surveillance and Conformity Assessment During the Construction of the Yacht or Boat), Rule 2.6.8. in connection with the Rules 1.2.1. – 1.2.3.

³³ Annex II, Rule 2.6.8.1

³⁴ Annex II, Rule 2.6.8.2

³⁵ Annex II, Rule 2.6.8.3

³⁶ Annex II, Rule 2.6.8.4

³⁷ Annex II, Rule 2.6.8.5

³⁸ Annex II, Rule 5.3.4.2.1

may be used whilst the yacht is in the area where it is prohibited to discharge sewage into the sea.³⁹ All the other toilettes must be marked with the text "Do not use whilst on berth or anchorage".⁴⁰ However, this particular technical provision is not in line with the relevant CMC provisions prohibiting the discharge of sewage anywhere within the territorial sea and internal waters of the Republic of Croatia, and should therefore *de lege ferenda* be amended to the effect that all the other toilettes are kept out of use whilst in the territorial sea and internal waters of the Republic of Croatia.

All such yachts built before 1 January 2000 may be exempted from the requirement of a mandatory holding tank, provided that a documentary evidence, showing that such exemption is justifiable considering the year of built, the technical problems related to the retrofit and the price of this conversion compared to the value of the yacht, is submitted to the Croatian Register of Shipping.⁴¹ Furthermore, the Rules prescribe that the agents used for disinfection of sewage must not be hazardous for the marine species.⁴²

As already explained above, the yachts of over 24 m length and those certified to carry more than 15 persons (including passengers and crew) follow the Rules for the Statutory Certification of Seagoing Ships – Part 22. Pollution Prevention and the relevant MARPOL standards.⁴³ Finally, the Rules provide that it is prohibited to discharge sewage into the sea within 0,5 Nm from the mainland, islands or the sea farms of less than 10 m water depth, provided that sewage must not be discharged instantaneously and during discharge the yacht must be *en route*.⁴⁴ As regards this provision, it is submitted that, first, its place is not in the Rules the purpose of which is to set the technical standards for the respective types of vessels. Second, such provision is in direct contradiction with the relevant national law, i. e.

³⁹ In connection thereto, under Croatian law, as already explained, it is generally prohibited to discharge sewage into the sea anywhere within the internal waters and the territorial sea (CMC, Art. 49.b, 49.c).

⁴⁰ Annex II, Rule 5.3.4.2.3

⁴¹ Annex II, Rule 5.3.4.2.4

⁴² Annex II, Rule 5.3.4.2.6

⁴³ Annex II, Rules 5.3.4.2.2 and 5.3.4.2.5. See fn. 16

⁴⁴ Annex II, Rule 5.3.4.2.7

the general prohibition of the discharge of sewage within the internal waters and the territorial sea arising from the CMC, Art. 49.b and from the CMC, Art. 49.c according to which all types of vessels and floating objects are under a duty to discharge sewage from the holding tanks exclusively on the designated locations in the ports or outside the ports where the adequate reception facilities are provided. Therefore, *de lege ferenda* such provision of subsidiary legislation, which is not in line with the overriding provisions of the CMC, should be cancelled from the Rules in the interest of legal certainty.

It should be pointed out that the standard of prevention of pollution by sewage envisaged by Annex I, Rule 5.8 of the Directive 1994/25/E, was introduced for the first time into the Rules for the Statutory Certification of Boats and Yachts adopted by the Decision on the Technical Rules of the Croatian Register of Shipping of 2005.⁴⁵ The relevant technical requirements, as provided first by the Directive 94/25/EC as amended, and subsequently by the Directive 2013/53/EU, have been applicable in Croatia for the vessels built after 1 January 2000. The latest edition of the Rules, as cited, prescribes for a "retrofit" applying to yachts built before that date. However, it is submitted that there is a substantial number of pleasure boats intended for a longer stay at sea registered in the boat registries of Croatian harbour master's offices and sailing in Croatian territorial waters, that are built before the year 2000, and which do not conform to the respective technical requirements relating to the prevention of pollution by sewage.⁴⁶ On the other hand, it is strictly prohibited to discharge sewage into the sea from any type of maritime object (CMC, Art. 49.b). Therefore, *de lege ferenda*, it is necessary to amend the relevant Rules for the Statutory Certification of Boats and Yachts, to prescribe the obligation of "retrofit" within a transitional period. I.e. the obligation to subsequently install the adequate holding tanks for sewage, should apply to pleasure boats built before 1 January 2000, as well as those built after that date but which have not been fitted with such a holding tank, similarly as it has been done for the yachts. It is submitted that such *de lege ferenda*

⁴⁵ Official Gazette, 20/2005.

⁴⁶ See tables 1, 2 and 3

proposal would affect the recreational boats registered in Croatia, but also those under foreign flags that are used commercially for the purpose of charter or rental.⁴⁷ Namely, under the Ordinance on the Conditions for the Carrying out of the Business of Chartering of the Vessels With or Without Crew and Providing Accommodation of Guests on the Vessels⁴⁸, it is prescribed that such activities may be carried out by the vessels of Croatian nationality, or by those flying the flag of one of the EU countries, or of a third country if approval for cabotage has been obtained (Art. 3). In such case the foreign vessel by which the activity is carried out must comply with the technical standards and requirements that are at least equivalent to those prescribed by the relevant Croatian rules for the statutory certification of vessels.⁴⁹

Table 1. Pleasure craft registered in Croatia in 2015⁵⁰

Year:	2015	
	BOATS	YACHTS
TOTAL:	113.523	2.292

Table 2. Pleasure craft registered in Croatia in 2016⁵¹

Year:	2016		
	BOATS		YACHTS
	9 m < (built before 2000)	2.371	
	7 – 9 m (built before 2000)	5.673	
	2,5 – 7 m (built before 2000)	75.135	
	SUBTOTAL (built before y. 2000)	83.179	
	SUBTOTAL (built in	37.090	

⁴⁷ Although in practice there are not many recreational boats commercially used for chartering that are built before the year 2000, since the operation of such boats usually follows the leasing cycle (5 years). The effect of “retrofit” would be much more significant in respect of the pleasure boats in private non-commercial use.

⁴⁸ Official Gazette, no. 99/2013.

⁴⁹ Ordinance on the Conditions for the Carrying out of the Business of Chartering of the Vessels With or Without Crew and Providing Accommodation of Guests on the Vessels, Art. 4. See also Instructions for Charter Companies Intending to Carry out Chartering of Foreign Yachts and Boats, Ministry of the Sea, Transport and Infrastructure, Zagreb, March 2014, http://www.mppi.hr/UserDocImages/eng-UPUTA%20Charter%20sa%20stranim%20plovilima%202014%2021-3_14.pdf (20/2/2017)

⁵⁰ Statistical data of the Croatian Ministry of the Sea, Transport and Infrastructure.

⁵¹ *Ibid.*

	2000 or later)	
TOTAL:	120.269	2.544

Table 3. Pleasure craft registered in Croatia: comparison for the years 2015 and 2016⁵²

Years compared:	From 2015 to 2016	
	BOATS	YACHTS
TOTAL:	+5,91%	+11,09%

It is noted hereby that under Art.55.1 of the Directive 2013/25/EU, “Member States shall not impede the making available on the market or the putting into service of products covered by Directive 94/25/EC which are in conformity with that Directive and which were placed on the market or put into service before 18 January 2017.” This means that if such vessel was placed on the EU market or put into service for the first time within that deadline, it can be freely used and resold any time thereafter, without impediment by any of the EU Member States. The prescribed “retrofit” of yachts and *de lege ferenda* proposal of “retrofit” of boats as explained above, does not amount to such impediment, because:

- recreational craft (i.e. pleasure boats and yachts) covered by the previous Directive already had to have a holding tank or a provision to fit a holding tank,
- such holding tank, had to in fact be fitted and used during the navigation in Croatian territorial sea and internal waters due to the prohibition of the discharge of sewage into the sea and the obligation to discharge sewage exclusively into the adequate reception facilities on land (CMC, Arts. 49.b, 49.c – in force since May, 2013).

As for the older vessels already registered in Croatia and built before the year 2000, that do not conform to the Directive 94/25/EC or Directive 2013/53/EU respectively, the state may set the standard of prevention of pollution by sewage by prescribing the adequate technical requirement to be met within a transitional period.

⁵² *Ibid.*

3. STANDARDS OF PREVENTION OF MARINE POLLUTION BY SEWAGE IN THE PORTS OF NAUTICAL TOURISM

The Republic of Croatia, as a party to the MARPOL Convention, which requires ships operating in waters under its jurisdiction and visiting ships while in its waters to comply with the pollution prevention standards undertakes to ensure the provision of facilities at ports and terminals for the reception of sewage and other waste and cargo residues, without causing delay to ships, adequate to meet the needs of the ships using them.⁵³ MARPOL pollution prevention standards applying to ports are implemented into Croatian law through CMC, the Maritime Domain and Seaports Act⁵⁴ (further MDSPA) and the respective bye-laws.

According to CMC, Art. 56.1, the ports shall comply with the conditions prescribed for the safety of navigation as well as for the prevention of marine pollution.⁵⁵ Port administrations and the concessionaries in the special purpose ports are bound to comply with the rules on the port order, safety of navigation, protection of life at sea and the protection from marine pollution,⁵⁶ as prescribed by the Ordinance on the Conditions and Methods for the Maintenance of the Order in the Ports and Other Parts of Internal Waters and the Territorial Sea of the Republic of Croatia (further: Ordinance on the Port Order).⁵⁷

In addition to MARPOL pollution standards, the CMC has been harmonized with the 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, as amended by the subsequent legislation (further: Directive 2000/59/EC)⁵⁸ which was brought to ensure joint ecological standards for port reception facilities (for liquid and crude waste from ships and cargo residues) in all ports within

the EU. It enhances the availability and use of port reception facilities and establishes a regime of enforcement, including a system for inspections and for the exchange of information. The environmental protection requirements apply to all ships (including yachts and boats), regardless of the flag, sailing into the ports of the EU and to all ports within the EU countries (including the ports of nautical tourism as special purpose ports).⁵⁹

In this respect, the ports of nautical tourism are special purpose ports subject to a special legal and management regime, whereby the obligation to comply with the respective MARPOL, EU and national pollution prevention standards lies on the concessionaries of the ports of nautical tourism as they are the operators of these special purpose ports responsible for the maintenance of the port order.⁶⁰

3.1. Reception Facilities

According to the CMC and the Ordinance on the Port Order, the concessionaries of the ports of nautical tourism as special purpose ports have to provide adequate equipment and facilities for handling and acceptance of solid and liquid waste (including sewage) as defined in MARPOL 73/7 and to prepare and implement the waste reception and handling plan.⁶¹ The plan should be approved by the harbourmaster's office for a period of maximum three years. The equivalent duty of the concessionaries is prescribed by the MDSPA and the Regulation on the Requirements to Be Met by the Ports.⁶²

⁵³ MARPOL, Annex IV, Regulation 12.

⁵⁴ Official Gazette, no. 158/2003, 100/2004, 141/2006, 38/2009, 123/2011, 56/2016

⁵⁵ CMC, Part 3, Ports and other Parts of Internal Waters, Art. 56.1

⁵⁶ CMC, Art. 56.2

⁵⁷ Official Gazette no. 90/2005, 10/2008, 155/2008, 127/2010, 80/2012, 56/2013, 7/2017

⁵⁸ OJ L 332, 28.12.2000, p. 81–90.

⁵⁹ Summary of Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues, <http://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX:32000L0059> (20/02/2017)

⁶⁰ Ordinance on the port order, Art. 2.1.6, Art. 3.

⁶¹ CMC, Art. 56.a; Ordinance on the port order, Art. 62.

⁶² MDSPA, Art. 83; Regulation on the Requirements to Be Met by the Ports, Official Gazette, no. 110/4, Art. 2, Art. 3., Annex I. It is noted that this parallel regulation relating to the pollution prevention standards in the ports, which also entails the parallel legislative system of the corresponding sanctions and inspections, is a result of the situation whereby both MDSPA and CMC were under revision and the policy decision was to shift the elements of the port order related to maritime safety and pollution prevention from the MDSPA to the CMC. However, whilst the CMC successfully passed through the legislative drafting and parliamentary procedure leading to its revision in 2013, the revision of the MDSPA, on the other

The concessionaries of the ports of nautical tourism have to equip the port with the reception facilities capable of accepting the types and amounts of liquid and solid waste⁶³ considering the type and size of vessels that commonly use the port, and considering the size and geographical position of the port, in a manner that does not cause unnecessary delays of vessels. Waste reception facility means the fixed, floating or mobile facility capable of receiving the waste from vessels.⁶⁴

The above mentioned waste reception and handling plan prepared and implemented by the concessionaries of the port of nautical tourism must contain the assessment of the need for port reception facilities considering the needs of the vessels commonly using the port, description of the type and capacities of the port reception facilities, instructions for use of the reception facilities, description of the waste collection system, procedures for the reporting of the deficiencies of the reception facilities, procedures for the consultations with the users of the port, the waste handling contractors, operators and other interested persons, types and amounts of the collected and processed waste from the vessels, summaries of the relevant legislation and formalities related, the list of persons responsible for the plan implementation, and certain other technical descriptions according to Annex 1 of the Regulation on the requirements that have to be met by the ports. Authorised persons of the concessionaries are obliged to report to the

hand, has not passed the legislation making process to this date. The reasons are many and complex, such as conceptual disagreements amongst the professionals and the decision makers regarding the legal status of the maritime domain and ports, but they are beyond the topic of this paper. The drafting of the revised MDSPA is currently underway within the Ministry of the Sea Transport and Infrastructure. With its long expected revision, the elements of the port order relating to maritime safety and pollution prevention should be removed from the MDSPA and remain regulated by the CMC and the relevant subsidiary legislation.

⁶³ Waste from the maritime objects means all types of waste, including sewage and the residues that occur during the use of the ship and to which Annexes I, IV and V of MARPOL apply, except for cargo residues. (Regulation on the Requirements to Be Met by the Ports, Art.2).

⁶⁴ Regulation on the Requirements to Be Met by the Ports, Art. 2.

Ministry of Maritime Affairs on the condition of the waste reception facilities once a year.⁶⁵

The reception facilities for sewage have become mandatory for all ports, including the ports of nautical tourism, since the entry into force of the amendments to the CMC in May 2013.⁶⁶ However, in practice, many of the ports of nautical tourism have not implemented in full the respective standard, in the absence of the expected new subsidiary legislation as well as the lack of demand on the part of the recreational craft. The issue of non-conformity, i.e. the lack of the adequate reception facilities also exists in many of the ports open to public traffic where the capacity of nautical berths for pleasure craft is substantially increasing. It should, however, be taken into account that the true efficiency of the implementation of the respective ecological standards also depends on the adequacy of the existing communal sewage and drainage infrastructure. To reach the desired results further investments into the port reception facilities for sewage should be made in harmony with the development of the adequate infrastructure of the ports' hinterland, particularly in the coastal areas where there are no facilities for the treatment and processing of the waste waters discharged from the land into the sea.

For a better implementation in practice, the relevant provisions of the CMC relating to the port reception facilities need to be thoroughly elaborated through the new Ordinance on the Method and Conditions for the Maintenance of the Order in the Ports and other Parts of the Internal Waters and the Territorial Sea of the Republic of Croatia which is currently in the final phase of drafting within the Ministry of the Sea, Transport and Infrastructure. During the respective legislative drafting process, inter alia, it was necessary to evaluate the existing port reception facilities and services, considering their availability and cost. It is expected that the new Ordinance, will have a strong impact on the successfulness of the implementation of the pollution prevention standards, especially regarding the issue of the port reception facilities.

⁶⁵ Ibid, Art.14.

⁶⁶ Amendments to the Maritime Code, Official Gazette no. 56/2013.

3.2. Reporting and Reception of Waste

The provisions of the Ordinance on the Port Order relating to the reporting and reception of waste refer to all ships, yachts and boats, regardless of their nationality, entering the ports in Croatia, excluding warships and state ships, and to all ports used by the above mentioned vessels.⁶⁷ It is important to stress that pursuant to Art. 64 of the Ordinance on the Port Order, boats and yachts must keep the waste until they arrive to the port, where they must deliver it. It is a duty of the master of the vessel to deliver all of the waste to the port reception facilities before leaving port. In exceptional cases, the vessel may proceed to the next port without delivering the waste if it is clear that there is sufficient space on board to accommodate all of the existing waste and the waste that will be produced during the intended voyage of the vessel to the next port of call where the waste will be delivered to the reception facilities. However, there is no obligation for the masters of yachts and boats to report the waste in the prescribed written form before entry into the port pursuant to Art. 63 and Annex 1. of the Ordinance which applies to ships only (except fishing ships). It is a duty of the port operator, in this case the concessionary of the port of nautical tourism, to ensure that the reception of waste occurs during the cleaning and the regular use of the vessels in the port.⁶⁸

3.3. The Role of the Concessionaries of the Ports of Nautical Tourism in the Implementation of Pollution Prevention Standards

The ports must comply with the prescribed standards of protection from pollution. The concessionaries in the ports of nautical tourism are under a duty to equip the port with the adequate facilities for the reception of sewage from the vessels.⁶⁹ The concessionary, as the operator of the port of nautical tourism is obliged to adopt the Regulations on the Order in the Port⁷⁰ and the

Waste Reception and Handling Plan⁷¹ and is responsible for their implementation. Both acts must be approved by the competent harbourmaster's office.⁷² The concessionary is therefore responsible for the maintenance of the order in the port, including the protection of the port area from pollution. In such capacity, the concessionary shall order the person polluting the sea to immediately stop the pollution and remove the waste.⁷³ The concessionary is also in a position to notice the pollution within the marina, to secure the evidence to respond to the pollution by taking the preventive and cleaning measures and to report the case to the maritime police and the competent harbourmaster's office to prosecute for the offence (arg. CMC, Art. 900). Furthermore, the concessionary may notice a lack of technical conformity of a vessel with the prescribed pollution prevention standards (e.g. in the course of providing the service of maintenance or repair) and encourage the client to remove such deficiency or, eventually, report on the deficiency to the competent harbourmaster's office, which would then be under a duty to send an inspector to carry out the inspection control in the port and to prosecute for the offence.⁷⁴

In an example of the concessionary's (marina operator's) regulation on the order in the port relating to the environmental protection it is prescribed that the use of vessel toilets is prohibited in the marina, that any discharge and dumping into the sea will incur a fine, and that in the event of a major pollution the marina will determine the cause, take measures to prevent contamination and notify the Port Authority and other relevant national authorities, and the costs incurred will be charged to the vessel owner.⁷⁵ The same marina includes the so called "fines" for the discharging and illegal disposal of environmentally

⁶⁷ Ordinance on the Port Order, Art. 61.

⁶⁸ Ibid, Art.62 and 63.

⁶⁹ MDSPA, Art. 83, CMC, Art. 56.a.

⁷⁰ MDSPA, Art. 84.

⁷¹ CMC, Art. 56.a.1.

⁷² MDSPA, Art. 84; CMC, Art. 56.a.

⁷³ MDSPA, Art. 85

⁷⁴ Ordinance on the Carrying out of the Inspection Control of the Safety of Navigation, Official Gazette, no. 39/2011, 112/2014, 33/2015, 86/2015, 29/2016., Art. 81.

⁷⁵ Servisni centar Trogir d.o.o., Regulations on Maintaining Order in Marina Trogir, 2015, <http://www.sct.hr/en/media/pdf/REGULATIONS-ON-MAINTAINING-ORDER-IN-MARINA-TROGIR-2016.pdf> (21/02/2017).

harmful substances on land and the discharging of environmentally harmful substances into the sea in its pricelist.⁷⁶ In this example, the “fine” by its legal nature is rather a contractual penalty, since the concessionary in the marina as a private legal person does not have the authority to issue a public or administrative fine for an offence. This charge against the person who contracted berth in the marina would be in addition to the fine payable for the corresponding maritime offence prescribed by the CMC or MDSPA.

4. INSPECTIONS AND SANCTIONING

Inspection control over compliance with the mandatory standards of prevention of pollution by sewage prescribed by the CMC and the relevant subsidiary legislation⁷⁷ relating to the ports of nautical tourism and to the recreational boats and yachts is in the competence of the inspectors of the safety of navigation of the Ministry of the Sea, Transport and Infrastructure and of the harbourmaster's offices.⁷⁸ Such inspection of a yacht or a boat may take place in a port or in the territorial sea or internal waters of the Republic of Croatia and is primarily undertaken in the case of a report, doubt or direct observation of a lack of conformity to the relevant technical requirement (e.g. a yacht is not fitted with a holding tank, or it has one which is by-passed), or of an actual pollution (i.e. a discharge of sewage into the sea).⁷⁹

⁷⁶ Servisni centar Trogir d.o.o., Marina Trogir - Price List in Euro, from 01.11.2016 until 31.10.2017; http://www.sct.hr/en/media/pdf/CJENIK_31-10-17_EUR_ENG.pdf (21/02/2017).

⁷⁷ The relevant subsidiary legislation in the context of our topic includes: a) in respect of the technical standards of vessels – OBV and the relevant rules for the statutory certification of vessels (ships; boats and yachts); b) in respect of the standards in the ports - Ordinance on the Port Order.

⁷⁸ CMC, Art. 165. The system of the inspection control is prescribed under the CMC, Arts. 165 – 178 and further regulated by the Ordinance on the Carrying out of the Inspection Control of the Safety of Navigation. About the potential overlap with the system of inspection control under the MDSPA (Arts. 94 *et seq.*) which is in the competence of the inspectors of the harbourmaster's offices and the maritime domain inspectors of the Ministry of the Sea, Transport and Infrastructure, see *supra* fn. 62.

⁷⁹ Ordinance on the Carrying out of the Inspection Control of the Safety of Navigation, Art. 81.

The regular technical inspection of seaworthiness⁸⁰ of the yachts registered in Croatia for the purposes of statutory certification is in the competence of the inspectors of the Croatian Register of Shipping, whilst the seaworthiness of the boats registered in Croatia is subject to the regular technical inspection by the competent harbourmaster's offices.⁸¹

As regards the monitoring of the implementation of the pollution prevention standards, and considering the frequency of the reports of pollution by sewage, it is important to intensify the inspections of the recreational boats and yachts berthed in the marinas, other ports of nautical tourism, but also in the ports open to public traffic since there is a considerable increase of the number of nautical berths in those ports, too. Specifically, it is recommended to organise concentrated random inspections within the inspection control system, especially during the top season. Furthermore, targeted surveys should be undertaken within the regular technical inspections of seaworthiness of yachts and pleasure boats for the purpose of verifying that the vessels conform to the specific technical requirements for the prevention of pollution by sewage.

As for the sanctioning of the non-conformity of yachts and boats with the technical pollution prevention standards, it should be pointed out that such non-conformity renders the vessel unseaworthy and therefore presents a maritime offence defined under the CMC, Art. 1011.1.2. The fine for that offence is 5.000 – 10.000 HRK against the legal person owning the vessel; 800 to 5.000 kn against the natural person owning the vessel or the responsible person within the legal person owning the vessel and against the master.⁸² This offence can be determined upon the inspection by the competent harbourmaster's office inspector of the safety of navigation through the system of inspection control.

⁸⁰ The conformity of the yachts and boats to the technical standards of prevention of pollution by sewage is part of the assessment of seaworthiness within this system of technical inspection and statutory certification. Non-compliance with the relevant pollution prevention standards presents the lack of unseaworthiness as defined under CMC, Art. 111.

⁸¹ CMC, Arts. 111 *et seq.*

⁸² CMC, Art. 1011.1.2, 1011.2, 1011.3.

With regard to the sanctioning of pollution by sewage from yachts and pleasure craft, the CMC prescribes that discharging sewage into the sea or on the shore, as well as emptying the sewage tanks into the sea or on the shore outside of the reception facilities is a maritime offence for which there is a fine of 5.000-50.000 HRK against the master of the yacht or boat, 20.000-300.000 kn against the owner, operator and the manager, and another 5.000 – 50.000 kn against the liable natural person within the company owning, managing or operating the vessel.⁸³ However, for practical reasons it is very difficult to prove such offence, i.e. to ascertain the vessel from which the pollution was caused, except when the discharge took place in a port or elsewhere whilst on berth or anchorage. In our opinion, it is not recommendable to introduce any measures that would administratively burden the operation of the yachts and boats, such as the mandatory reporting, logbooks, certificates and similar documentation ascertaining the compliance with the respective pollution prevention standards. Instead, a possible solution would be that the providers of the service of reception of the waste on land issue a receipt or a similar confirmation showing that a particular vessel actually emptied the holding tanks on a particular date in a particular place and that there is an obligation to keep these receipts on board e.g. for a period of one year and to show them to the inspector at his request. Furthermore, to stimulate the users to regularly empty the holding tanks in the port reception facilities, this service should be made easily accessible, user friendly and inexpensive. The price or the cost of this service could be calculated in the price of the berth, rather than charged separately in addition thereto.

5. CONCLUSIONS

Under Croatian law, there is a general prohibition of discharge of sewage from maritime objects into the sea. Sewage from the vessels and other maritime objects must be discharged into the adequate reception facilities on land. In practice, these pollution prevention standards are not adequately implemented due to the lack of conformity of the vessels, particularly yachts and

boats, but also on the side of the domestic ports, including the ports of nautical tourism.

The Republic of Croatia, as a party to the MARPOL Convention and an EU member state, implements the international and EU standards of prevention of pollution by sewage from vessels in the national legislation enforced through its flag and port state jurisdiction. The MARPOL Annex IV standards relating to ship's sewage, apply to ships of over 400 GT, or certified to carry more than 15 persons, and to large yachts of over 24 m length of hull, enforced through the international system of ship inspections through port state control - Paris MoU. Yachts and other recreational vessels of up to 24 m length are subject to the EU Directive 2013/53/EU transposed into Croatian law by the CMC, OBY and the Rules for the Statutory Certification of Ships 2016. According to the EU standards, any toilet fitted in a recreational craft shall be connected solely to a holding tank system or water treatment system preventing the discharge of sewage into the sea. Currently the standard applies to the vessels built after 1999, whereas the yachts built before the year 2000 must be refitted to conform to the standard within a transitional period. Considering a substantial number of other recreational vessels registered, berthed or sailing in Croatia that do not conform to the prescribed standard, *de lege ferenda* proposal is to amend the Rules by prescribing an obligation of "retrofit" for all such vessels. As for the enforcement, the proposal is to intensify the inspection control over these types of vessels in the ports of nautical tourism, as well as in the other ports providing berths for recreational craft. The regular technical inspections of seaworthiness of the yachts and boats should specifically target the conformity with this specific pollution prevention standard.

The other side of this problem is the lack of conformity of the domestic ports, including the ports of nautical tourism with the mandatory standards prescribed by the CMC and the subsidiary legislation relating to the port reception facilities implementing the MARPOL and EU standards of pollution envisaged under Directive 2000/59/EC as amended. It is expected that the new Ordinance on the Conditions and Methods for the Maintenance of the Order in the Ports and Other Parts of Internal

⁸³ CMC, Art. 1001.a

Waters and the Territorial Sea of the Republic of Croatia, which is in the final phase of legislative drafting, will result in a substantial improvement in the implementation of the pollution prevention standards in the ports. However, to reach the desired results further investments into the port reception facilities for sewage should be made in harmony with the development of the adequate infrastructure of the ports' hinterland.

The specific role of the ports of nautical tourism in this context, and their potential contribution to the implementation of the relevant ecological standards can be significant. The concessionaries in the ports of nautical tourism, i.e. the marina operators should be stimulated to invest in the adequate user friendly port reception facilities and make them easily available to their clients. Finally, it is the responsibility of the marina operator as the concessionary of the port of nautical tourism to ensure that the order in the port is respected.

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