

Ballast water management for sustainable development – some remarks on Polish law

Dorota Pyc^{1,*}

¹Maritime Law Department, Faculty of Law and Administration, University of Gdańsk, Poland

Abstract. The main aim of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) is to prevent, minimize and ultimately eliminate the risk of introducing harmful aquatic organisms and pathogens (HAOP) transferred in ships' ballast waters and sediments to non-native environment for them, mainly for waters in seaports and coastal waters. The BWM Convention entered into force globally on 8 September 2017. This convention is based on the precautionary principle and the ecosystem approach to achieving sustainable development goals. Effective protection and preservation of the maritime environment depends on the preventive and reasonable actions, especially in case of environmental threats or combating pollution. This means that it is necessary to react efficiently by relevant authorities and boost international and regional cooperation, as well as development of other instruments such as inspection and reporting systems. The purpose of this paper is to present the state of preparation to the implementation of the BWM Convention in connection with its ratification by Poland, which is planned for 2018.

1 Introduction

Effective protection and preservation of the marine environment and coastal ecosystems is in the sphere of international concern. At the United Nations Conference on the Human Environment in Stockholm in 1972 an increasing group of environmental problems were found to have a regional or global scope, either refer to a common international domain, or require in the common interest wide cooperation between States, as well as relevant activities of international organizations [1]. Efforts to ensure stricter standards for the protection and preservation of the marine environment in practice will be increasingly high and it is already visible how important it is to strengthen international cooperation and coordination of reasonable actions.

International shipping has undergone tremendous changes in the last few decades. They are related not only to the constantly growing economic importance of the maritime commercial fleet in the global dimension, but also to a technical and technological progress, changing the face of the shipping industry. This tendency does not happen in a vacuum. It also affects the environment in many different ways. Therefore, equally important is

* Corresponding author: dpyc@prawo.ug.edu.pl

compliance of domestic law with international standards relating to the prevention of pollution from ships and various types of threats or risks that have negative effects in the marine environment and its living resources [2].

Nowadays, ships have become the primary vector for the introduction of harmful aquatic organisms and pathogens (HAOP). The uncontrolled discharge of ballast water and sediments from ships has led to the transfer of HAOP, causing injury or damage to the environment, human health, property and resources. This has been noticed by the international community more than thirty years ago, and the phenomenon itself is accompanied by the intensification of maritime transport in international maritime trade. Ballast water is taken by ships in ports during unloading goods, and discharged to port waters at the places of loading of goods. The most vulnerable to introduction of HAOP are the ecosystems of port waters and adjacent coastal waters [3, 4].

The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) as well as other international agreements concluded in recent years have been introducing forms of control and management which contribute to ensure effectiveness of prevention and preservation of marine environment. In connection with the planned ratification of the BWM Convention by Poland, in order to ensure its implementation, appropriate work on new regulations has been initiated. It turns out that the BWM Convention can significantly affect, among others, the scope of the definition of pollution by introducing HAOP into it. Thus, measures to prevent pollution from ships will also protect some species from the others.

2 Harmful aquatic organisms in ballast water

The problem of HAOP in ballast water was first raised at the International Maritime Organization (IMO) in 1988. Canada and Australia were among countries experiencing particular problems with alien species. Since then the IMO Marine Environment Protection Committee (MEPC) together with the Maritime Safety Committee (MSC) and the IMO technical sub-committees, have been dealing with the issue, focusing in the past decade first on guidelines and then on developing the new convention [5, 6].

In 1991 the MEPC adopted "Guidelines for Preventing the Introduction of Unwanted Organisms and Pathogens from Ships' Ballast Water and Sediment Discharges" [7]. In November 1993, the IMO Assembly adopted "Guidelines for Preventing the Introduction of Unwanted Organisms and Pathogens from Ships' Ballast Water and Sediment Discharges" [8], based on the Guidelines adopted in 1991. The resolution requested the MEPC and the MSC to keep the Guidelines under review with a view to developing internationally applicable, legally-binding provisions. It is also worth adding that the precautionary approach set out in Principle 15 of the Rio Declaration on Environment and Development was referred to in "Guidelines on incorporation of the precautionary approach in the context of specific IMO activities" adopted by the MEPC in 1995. The 20th Assembly of IMO in 1997 adopted "Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens" [9].

Before the text of BWM Convention was prepared and this convention was adopted in 2004, issues related to invasive species in the marine environment appeared in the Convention on the Law of the Sea (UNCLOS) [10] and Conventions on Biological Diversity (CBD) [11], and also they were the subject of an international debates at the United Nations Conferences on sustainable development.

UNCLOS refers to invasive species in Article 196(1). It provides that "States shall take all measures necessary to prevent, reduce and control pollution of the marine environment resulting from the use of technologies under their jurisdiction or control, or the intentional or accidental introduction of species, alien or new, to a particular part of the marine

environment, which may cause significant and harmful changes thereto". This provision should be interpreted in the context of the principle of protection and preservation of the marine environment expressed in Article 192 of UNCLOS.

The preamble of the BWM Convention takes into account the objectives of CBD, particularly that the transfer and introduction of HAOP *via* ships' ballast water threatens the conservation and sustainable use of biological diversity, as well as decision IV/5 of the 1998 Conference of the Parties (COP 4) to the CBD concerning the conservation and sustainable use of marine and coastal biological diversity [12], and decision VI/23 of the 2002 Conference of the Parties (COP 6) to the CBD on alien species that threaten ecosystems, habitats or species, including guiding principles on invasive species [13]. The basic principle for the management of invasive alien species is included in the Article 8(h) of CBD, which requires that as far as it is possible each contracting State should "prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species".

It is also worth mentioning that the 1992 United Nations Conference on Environment and Development (UNCED) requested the IMO to consider the adoption of appropriate rules on ballast water discharge, as well as the 2002 World Summit on Sustainable Development, in paragraph 34(b) of its Plan of Implementation calls for action at all levels to accelerate the development of measures to address invasive alien species in ballast water [14].

The BWM Convention does not contain the definition of invasive alien species (IAS), but uses its own concept of HAOP. According to the CBD Guiding Principles (CBD Decision VI/23) and the European Strategy on IAS, the invasive alien species means an alien species whose introduction and/or spread threatens biological diversity. The scope of the concepts of HAOP and IAS has not been specified in the legal doctrine in a uniform manner. HAOP are defined in the BWM Convention as aquatic organisms and pathogens that, if introduced into the sea, including estuaries, or into freshwater courses, may create hazards to the environment, human health, property or resources, impair biological diversity or interfere with other legitimate uses of such areas (Article 1(8) of the BWM). The BWM Convention is based on the precautionary principle and environmental management instruments characteristic for the ecosystem and holistic approach.

3 Ballast Water Management Convention

The International Convention for the Control and Management of Ships Ballast Water and Sediments was adopted at a Diplomatic Conference at IMO in London on 13th February 2004 [15]. Representatives of 74 States, one Associate Member of IMO, observers from two intergovernmental organizations and 18 non-governmental international organizations attended the Conference [16]. The BWM Convention is related to 75 States Parties, accounting for 75.34% of the world tonnage (as of August 13, 2018) [17].

The BWM Convention is the international instrument encompasses measures designed to prevent a risk of the transfer of organisms by ships in ballast waters and sediments. It is the first international convention that has introduced into international maritime legislation legal instruments and technical standards aimed at limiting the risk of organisms entering ballast waters into non-native marine and coastal environments. By ratifying the BWM Convention, Poland commits itself to introducing into Polish law provisions that will ensure compliance of and enforcement with international obligations. The BWM Convention is divided into Articles and an Annex which sets out the technical standards and requirements for the control and managing of ships' ballast water and sediment, listed in Sections A to E (General provisions; Management and Control Requirements for Ships; Special Requirements in Certain Areas, Standards for Ballast Water Management, Survey and Certification Requirements for Ballast Water Management) and Appendixes that contain specimens of

required documents. The IMO adopted over 15 sets of guidelines and other documents contained in MEPC resolutions and circulars to complement the BWM Convention.

Ballast operations (ballasting and deballasting operations) are carried out in sea ports and in areas adjacent to them during transshipments or refuelling. They vary depending on the size of the sea-going vessel and the shipping lane. About 76% of the total amount of transported ballast water is carried by tankers (37%) and bulk carriers (39%).

Procedures relating to ballast water management include mechanical, physical, chemical and biological processes, single or in combination, used to remove, neutralize or avoid the uptake or discharge of HAOP along with ballast water and sediment (Article 1(3) of BWM). Sediment is a substance embedded in ballast water on a ship (Article 1(11) of BWM).

The BWM Convention has introduced an inspection system. Any vessel engaged in marine navigation should have a valid International Ballast Water Management Certificate, Ballast Water Management Plan (BWMP) and Ballast Water Record Book (BWRB). There are two types of ballast water standards in the BWM Convention: Ballast Water Exchange (based on specified distances and depths where a vessel may discharge) and Ballast Water Performance (based on the number of viable organisms allowed per unit of treated water). Ships should exchange ballast water at a distance of not less than 200 nautical miles from the nearest land and in waters with a depth of at least 200 meters, observing the adopted procedure. In case the ship is unable to replace the ballast water, she should make it as far as possible from the nearest land. At that time, the distance should not be less than 50 nautical miles, and the depth of the sea at the place of carrying out this operation should not be less than 200 meters. During inspections, inspectors must check certificates and other documents (plans and managing ballast water and sediment) to ensure maritime safety.

All new technologies regarding control and ballast water management and sediments can be implemented as alternatives. However, it must satisfy the condition that they provide at least the same state of environmental protection, human health and natural resources and will be adopted by the MEPC.

In Poland the draft of the Act amending the Act on the Prevention of Pollution from Ships and Certain Other Acts (Amending Act 2018) has been developed to implement the requirements of the BWM Convention. The Amending Act 2018 is not in force yet.

4 State of preparations for the ratification of the BWM Convention by the Republic of Poland

Preparatory works for the ratification of the BWM Convention by Poland had lasted several years before the required formal procedure was initiated. The procedure for the ratification of the BWM Convention by Poland formally started in 2016, and its completion is scheduled for 2018.

The rationale for the ratification of the BWM Convention were the recommendations contained, among others, in such documents as: (1) European Union Strategy for the Baltic Sea Region, Action Plan [18], which shows that limiting the introduction of alien species in connection with ballast operations on the area of the European Union can be achieved mainly by the entry into force of the BWM Convention and its provisions, and (2) HELCOM Baltic Sea Action Plan [19] signed in 2007 by the Ministers of Environment of the State Parties to the Convention on the Protection of the Marine Environment of the Baltic Sea Area, which recommends the ratification of the BWM Convention by states located in the Baltic Sea area as soon as possible. Implementation of the BWM Convention by States Parties will, therefore, reduce the introduction of new species due to such methods as water treatment on board or installation of ballast water discharge equipment in ports of significant traffic towards the Baltic Sea and beyond the Baltic Sea. In the Baltic Action Plan, the HELCOM States agreed to ratify the BWM Convention as far as possible by 2010, and by 2013 at the latest. The

HELCOM Action Plan focusing on ballast water management for vessels navigating within the Baltic Sea was agreed.

The consequence of the ratification of the BWM Convention by Poland will be joining the group of States that have committed themselves to act comprehensively in order to fully and effectively prevent the introduction and spread of harmful aquatic organisms and pathogens transferred in ballast waters.

The threat of introduction and spread of alien species and pathogens has also been identified as one of the main pressures and impacts on the marine environment in the Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) [20]. In accordance with the Marine Strategy Framework Directive, in 2016 the National Marine Waters Conservation Plan was prepared in Poland, which provides for the preparation and implementation of an action plan on priority routes for the transfer of invasive alien species to include alien species from ballast water [21].

According to Article 18(3) of the BWM Convention, its requirements will become effective in Polish maritime areas after 3 months from the date of deposit by Poland the instrument of ratification to the Secretary General of the International Maritime Organization. Until then, national regulations should be prepared in such a way as to enable compliance with and enforcement of the provisions of the BWM Convention.

5 Legislative work aimed at implementing the provisions of the BWM Convention into Polish law

Poland is not a State Party to the BWM Convention yet. Thus, the Polish law does not contain any legal provisions *expressis verbis* concerning the prevention of introduction of alien species from ship's ballast waters or sediments.

Bearing in mind the planned ratification of the BWM Convention, as well as in order to properly implement the provisions of this treaty into the Polish legal order, in 2018 certain legal provisions were prepared. The Polish legislator considered justified to introduce, *inter alia*, a new Chapter (not yet in force) to the Act on the prevention of pollution from ships, 1995 [22]. This Act is primarily an implementation of the MARPOL Convention into the Polish law.

According to the Article 1 of the Polish Act on the prevention of pollution from ships, 1995, to prevent pollution from ships provisions of the following international agreements with amendments valid from the date of their entry into force for the Republic of Poland published in a correct manner, shall apply: (1) the International Convention for the Prevention of Pollution from Ships [23]; (2) the Convention on the Protection of the Marine Environment of the Baltic Sea Area [24]; (3) The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter [25]; and (4) The International Convention on the Control of Harmful Anti-Fouling Systems on Ships [26]. After the ratification of the BWM Convention by Poland and the entry into force of the new regulations, the BWM Convention will be added to the aforementioned conventions.

A new Chapter 3(a) on the ballast water and sediments management to the Act, addresses the following issues: (1) the scope of application of the requirements, mainly where and for which types of ships the provisions on the ballast water management will be applied; (2) standards for ballast water management, including: the ban on ballast waters discharge in Polish maritime areas, unless these waters have been treated in accordance with regulation B-3 and standards specified in regulation D-1 as well as standards specified in regulation D-2 of BWM Convention, collection of sediments from ballast tanks in shipyards and terminals where ballast tanks are cleaned and repaired; (3) providing ships with exemptions from

certain types of ballast water managing procedures in Polish maritime areas, taking into account the IMO guidelines and the Common Harmonized Procedures for HELCOM and OSPAR in the scope of granting exemptions under the BWM Convention (Joint Harmonized Procedure for the Contracting Parties of HELCOM and OSPAR on the Management of Ships' Ballast Water and Sediments, Regulation A-4); (4) required documents (International Ballast Water Management Certificate, Ballast Water Management Plan; Ballast Water Record Book); (5) certification and reviews regarding the requirements of the BWM Convention for ships under the Polish flag, including ships with gross tonnage (GT) less than 400, which are not subject to certification and reviews under the E-1 regulation of the Annex to the BWM Convention, using, *inter alia*, IMO guidelines or technical regulations for the ballast water management on these ships issued by a Recognized Organization; (6) approval of ballast water treatment systems or changes to these systems on ships by or on behalf of maritime administration on the basis of G-8 guidelines adopted by resolution MEPC.279 (70) of 28 October 2016; (7) authorization of a Recognized Organization to perform maritime administration tasks, including in the field of certification and approval of ballast water treatment systems and changes in these systems; (8) countermeasures and handling of ballast water in emergency situations including IMO guidelines and regional solutions of the Helsinki Commission in this regard; (9) providing information on ballast operations on the ship *via* the Polish Harbours Information and Control System (PHICS); (10) a ship inspection system to verify compliance with the requirements of the BWM Convention; and (11) sanctions.

The Amending Act 2018 includes definition of pollution, due to the introduction of HAOP into it. The new definition covers all emissions from ships to the sea or atmosphere, which are subject to control under the Act on prevention of pollution from ships, 1995, including the introduction of harmful aquatic organisms or pathogens. The pollution means any emission of a substance or energy from a ship, or the introduction of harmful aquatic organisms or pathogens into the sea or atmosphere that may cause a danger to human health or threat to living resources and life in the sea, deteriorate recreational values or hamper other compliant the right to use the sea and any substance subject to control under the Act on the prevention of pollution from ships, 1995, (Article 4(6) of the draft of amending provision). The Amending Act 2018 also includes definitions of terms based on the BWM Convention. This applies in particular to: ballast water, ballast water management and harmful aquatic organisms and pathogens. According to the BWM Convention (Article 1(2)), as well as to the draft of Polish provisions, ballast water is a water with its suspended mater taken on board a ship to control trim, list, draught, stability or stresses of the ship. Ballast water management means mechanical, physical, chemical and biological processes, either singularly or in combination, to remove, render harmless, or avoid the uptake or discharge of harmful aquatic organisms and pathogens within ballast water and sediments (Article 1(3) of the BWM). HAOP means aquatic organisms or pathogens which, if introduced into the sea including estuaries, or into fresh water courses, may create hazards to the environment, human health, property or resources, impair biological diversity or interfere with other legitimate uses of such areas (Article 1(8) of the BWM Convention).

According to the solutions adopted in the new Chapter 3(a), in Polish maritime areas, the discharge ballast water and sediment non-treated in the manner specified in the BWM Convention and guidelines developed by the IMO, to the sea is prohibited. It has been determined to which ships the ballast water management regulations will not apply in Polish maritime areas. In this respect, these provisions fully correspond to the content of Article 3(2) of the BWM Convention.

In accordance with Article 3(2)(e) of the BWM Convention concerning ballast water management, the draft of the Amending Act 2018, in compliance with the requirements provided for in the BWM Convention, excluded Navy, Border Guard and Police vessels and

other vessels performing special state service, provided that they will comply with the provisions of the Act specifying alternative solutions in the field of ballast water management on these vessels. The ballast water management requirements do not apply to sport vessels not exceeding 50 meters in length and a maximum ballast capacity of 8 cubic meters, and analogously to crafts used solely for search and rescue purposes. It is assumed that the nature of shipping, as well as the minimum amount of ballast water discharged from these vessels will not have a significant impact on marine ecosystems. In order to protect the marine environment against the possible introduction of alien species by these ships, ballast water management solutions should be in the line with the IMO guidelines (e.g. G-3 Guidelines for ballast water management equivalent compliance). When these solutions prove to be insufficient, the minister competent for the maritime economy is authorized to issue separate regulations on ballast water management on ships with a gross tonnage (GT) of less than 400 or to declare the applicable technical ballast water management regulations on these ships issued by a Recognized Organization.

The draft of the Amending Act 2018 also introduced an optional authorization for the minister competent for the maritime economy to specify regulations on ballast water management in Polish maritime areas, in situations where ballast water on board does not meet the standards set out in the BWM Convention. Such situations may occur, for example, when the ship is not equipped with a ballast water treatment system; when a system failure occurs or ballast water does not meet the requirements for other reasons. It may therefore be necessary to prepare procedures which will prevent the discharge of untreated and environmentally damaging ballast waters. According to the authorization, the minister competent for the maritime economy in defining the rules of conduct in the abovementioned situations will be guided by the IMO guidelines in this regard. Among possible solutions currently considered on the international forum are: installation of emergency ballast water pre-treatment systems, construction of port facilities or barges for the collection and treatment of ballast water or provided of facilities in the ports from which ships could collect ballast water in compliance with the requirements of the BWM Convention.

In addition, the ballast water management provisions for ships obliged to use the D-1 standard were specified in the draft Act. This is due to the lack of areas in the Baltic Sea that meet the requirements of the BWM Convention in terms of the minimum depth (minimum 200 m) and distance from the nearest land (50-200 nautical miles), where ships could exchange ballast water in accordance with technical standards of the Annex to the BWM Convention. Therefore, in compliance with the provisions of the circular BWM.2/Circ.63 of 27 July 2017 approved during the 71st Session of the IMO Marine Environment Protection Committee [27], in Polish maritime areas, ships navigating exclusively in the Baltic Sea area, will not be required to carry out ballast water treatment system in the manner specified in the BWM Convention. It has also been pointed out that for those ships the fulfilment of the standard set out in Regulation D-2 of the Annex to the BWM Convention will be required in accordance with the schedule specified by the IMO. This schedule refers to the date of the next review for the renewal of the International Oil Pollution Prevention Certificate and, as anticipated by the IMO, the period for adapting ships to the abovementioned standard set out in Regulation D-2 of the Annex to the BWM Convention falls in the period 2019-2024.

The draft of Amending Act 2018 authorizes the minister competent for the maritime economy to issue, in agreement with the minister competent for health matters, and the minister competent for the environment, a regulation specifying a detailed procedure for granting exemptions; results levels in the risk assessment tool (JHP), which are required to grant exemption or its refuse to grant exemption and a form for exemption. The draft provisions provide, according to regulation A-4 of the Annex to the BWM Convention, the exemption for ballast water management (in the scope of the regulation B-3 or C-1 of the Annex to the BWM Convention) may be granted to a ship operating only between specified

ports or places, and when ballast water and sediments other, than those from the sea route transferred by the ship between ports or places, do not mix. The exemption applies to the port in which the ship is to discharge ballast water (destination port) taken in another port. The condition for granting an exemption is to conduct a risk analysis related to the discharge of ballast water, and with it, the transfer of alien species that may endanger the health of the human or local environment. The exemption may be granted when the assessment shows that there is a low probability of introduction of alien species between the port where the vessel is taking the ballast water and port of destination. The exemption referred to above may be issued at the request of the shipowner, submitted in writing to the director of the maritime office competent for the port of call (destination port). The implementation of the procedure for issuing exemptions provides for the involvement of the authority of the state inspection of environmental protection and state sanitary inspection, territorially relevant to the port of call. According to the assumptions, the tasks of the above authorities will rely on giving their opinion on the applications for the release of the exemption.

The exemption will be granted by the director of the maritime office after taking into account the abovementioned opinion and the result obtained from the online decision support tool available at the website [28]. Analysis made through the JHP tool determines one of the three possible risk levels: high, unknown or low. The JHP tool, developed as part of the HELCOM and OSPAR works, is based on data from the monitoring of abiotic and biotic elements of the marine environment in ports, carried out in accordance with the methodology specified in the JHP procedure. In selected ports, the salinity of water, the occurrence of alien species and the tolerance of these species to changes in salinity are compared in particular.

Situations that will cause the withdrawal of the exemption through the administrative decision of the director of the maritime office, for example: when the conditions set out in the exemption will not be respected (e.g. change of the ship's route for which the exemption was granted) or at the request of the authorities of the state sanitary inspection or state security inspection environment in connection with the occurrence of emergency situations in the emergency zone, e.g. epidemics, invasions or uncontrolled population growth of harmful aquatic organisms or pathogens. A refusal to grant an exemption will take place if the result in the JHP risk assessment tool - shows high risk or in the case of a negative opinion of one of the authorities. Pursuant to the provisions of regulation A-4 of the Annex to the BWM Convention, the validity of the exemption is maximum of 5 years, subject to the necessity to review the indirect conditions for which it was granted, and the release can be requested again. In order to implement the provisions of the BWM Convention concerning the collection and proper management of sediments from ballast water tanks during ship repairs, the provisions of the Act of 12 September 2002 on port reception facilities for ship-generated waste and cargo residues will apply [29].

For the implementation of the requirements related to the managing of sediments from ballast tanks, appropriate changes will be made, according to which the entity cleaning or repairing ballast water tanks will be required to provide adequate equipment to collect sediments and ensure that the operation of these devices will not cause unreasonable ship delays. and that the sediments will be removed in a manner that is safe for the environment, human health, property and resources in accordance with the provisions of the Waste Act, 2013 [30]. In order to control and monitor information on the quantity and origin of ballast water removed from ships in Polish maritime areas, the draft of the Amending Act 2018 requires to submit information on the amount of ballast water and on-board operations by the master of the ship prior to returning to the port located on the territory of the Republic of Poland. This information, similar to other notifications sent by the ship prior to calling the port, will be sent *via* the PHICS. Specified form will be adopted in compliance with the template introduced by the IMO.

Obligations resulting from Article 14 of the BWM Convention regarding the transfer to IMO of all information related to national regulations and procedures related to control and managing of ballast waters, including information on the availability and location of port equipment for the collection of sediments from ballast water tanks, will be performed by the minister competent for the maritime economy.

The draft of Amending Act 2018 sets out the standards to be met by a ship approved for navigation and the requirements for issuing International Ballast Water Management Certificate for ships. The draft provisions also allow the Polish inspection authority to issue an international certificate confirming the fulfilment of the requirements provided for in the BWM Convention. Implementation of the provisions of the BWM Convention also requires supplementing the regulations on the supervision of ships. Therefore, the BWM Convention will be added to the list of international agreements listed in the Act of prevention of pollution from ships, 1995. A check of ballast records also will be added to the list of books controlled by the director of a maritime office. The draft of the Amending Act 2018 introduces a provision ensuring that all activities related to control, inspection and detection of violations should not cause excessive detention or delay of the ship, as well as contains sanctions and penalties provided for in the BWM Convention.

Compliance with and enforcement of the requirements resulting from the BWM Convention requires also same changes to the following Polish legal acts: Act on port reception facilities, 2002, by adding the definition of sediments, as defined in the BWM Convention; Act on maritime safety, 2011, by adding the BWM Convention to the list of international agreements, which ensures that the vessels to which the BWM Convention applies, will be subject to the requirements of safe sea navigation, and will be subject to inspection of the requirements of the BWM Convention in Polish ports, in accordance with the rules provided for in the subject Act.

6 Conclusions

The International Convention for the Control and Management of Ships' Ballast Water and Sediments is the first international agreement which directly provides legal and technical instruments for the prevention of transfer potentially invasive alien aquatic organisms and pathogens by ships. Thus, the BWM Convention establishes an inspection and enforcement regime.

The aim of the BWM Convention is to prevent, reduce and eliminate the risk of introducing harmful aquatic organisms and pathogens transferred in the ships' ballast waters and sediments, and as a result of ballast operations, getting into the non-native marine environment. The ballast water management is recognised as an effective way to stop the spreading of invasive alien species. According to the precautionary principle it is also a good method for the prevention of the marine environment by dumping potentially invasive HAOP especially in coastal zones and ports.

Until now, Poland is not a State Party to the BWM Convention. The Polish law does not contain any legal provision concerning the prevention of introduction HAOP transferred in ships' ballast waters and sediments. Regulations regarding ballast water management in Polish maritime areas have been specified in the draft Amending Act 2018. They were included primarily in its new Chapter entitled "Ballast water and sediment management".

References

1. The Stockholm Declaration, and the Marine Environment, ed. M.H. Nordquist, J.N. Moore, S. Mahmoudi, Martinus Nijhoff Publishers, The Hague, London, New

- York 2003; Report on the United Nations Conference on Human Development, Stockholm 15-16 June 1972;
http://www.un.org/ga/search/view_doc.asp?symbol=A/CONF.48/14/REV.1
2. M. Fitzmaurice, *The International Convention for the Prevention of Pollution from Ships (MARPOL)*, [in:] *IMLI Manual on International Maritime Law, vol. III Marine Environmental Law and Maritime Security Law*, gen ed. D.J. Attard, ed. M. Fitzmaurice, N.A. Martínez Gutiérrez, R. Hamza (Oxford University Press, 2016)
 3. P. Lemke, K. Smolarz, A. Zgudo, M. Wołowicz, D. Pyć, C. Halling, *Biodiversity with regard to Alien Species in the Baltic Sea Region* (RISKGGOV Report, 2010)
 4. J. Firestone, J.J. Corbett, *Ocean Development & International Law*, **vol. 36**, 298-302 (2005)
 5. D. Pyć, *Ballast Water Management in the Baltic Sea Region, Polish Review of International and European Law, Inaugural Issue*, (Warszawa, 2012)
 6. D. Pyć, *Zarządzanie ryzykiem introdukcji do środowiska morskiego obcych gatunków inwazyjnych. Analiza Wytycznych IMO do Konwencji Balastowej*, Prawo Morskie, t. XXVII (Gdańsk, 2011)
 7. Resolution MEPC.50(31) - Guidelines for Preventing the Introduction of Unwanted Organisms and Pathogens from Ships' Ballast Water and Sediment Discharges, IMO (1991),
[http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Marine-Environment-Protection-Committee-\(MEPC\)/Documents/MEPC.50\(31\).pdf](http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Marine-Environment-Protection-Committee-(MEPC)/Documents/MEPC.50(31).pdf)
 8. Resolution A.774(18) - Guidelines for Preventing the Introduction of Unwanted Organisms and Pathogens from Ships' Ballast Water and Sediment Discharges, IMO 1993,
[http://www.imo.org/blast/blastDataHelper.asp?data_id=23747&filename=774\(18\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=23747&filename=774(18).pdf)
 9. Resolution A.868(20) - Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens, IMO 1997;
http://www.imo.org/blast/blastDataHelper.asp?data_id=22649&filename=A868.pdf
 10. http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf
 11. <https://www.cbd.int/doc/legal/cbd-en.pdf>
 12. <https://www.cbd.int/decision/cop/default.shtml?id=7128>
 13. <https://www.cbd.int/doc/decisions/cop-06-dec-23-en.pdf>
 14. <http://www.un-documents.net/jburgpln.htm>
 15. <http://library.arcticportal.org/1913/1/International/Convention/for/the/Control/and/Management/of/Ships'/Ballast/Water/and/Sediments.pdf>
 16. www.imo.org
 17. <http://www.imo.org/en/About/Conventions/StatusOfConventions/Documents/StatusOfTreaties.pdf>
 18. The European Union Strategy for the Baltic Sea Region, Action Plan, European Commission, COM final, 248 (2009)
 19. HELCOM Baltic Sea Action Plan signed in 2007 by the Ministers of Environment of the State Parties to the Convention on the Protection of the Marine Environment of the Baltic Sea Area,
http://www.helcom.fi/documents/baltic%20sea%20action%20plan/bsap_final.pdf

20. Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy (OJ L 164, 25.6.2008, p. 19)
21. <http://www.kzgw.gov.pl/files/kpowm/kpowm-2016.pdf>
22. Act on Prevention of Pollution from Ships, 1995, consolidated text: Journal of Laws 2017, item 2000
23. The International Convention for the Prevention of Pollution from Ships, 1973, done at London on 2 November 1973, amended by the Protocol done at London on 17 February 1978 (Journal of Laws of 1987, No 17, item 101) and the Protocol done at London on 26 September 1997 (Journal of Laws of 2005, No 202, item 1679), (MARPOL Convention, Journal of Laws of 2016, items 761, 773)
24. The Convention on the Protection of the Marine Environment of the Baltic Sea Area done at Helsinki on 9 April 1992 (Journal of Laws of 2000, No 28, item 346)
25. The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 done at Moscow, Washington, London and Mexico City on 29 December 1972 (Journal of Laws of 1984, No 11, item 46)
26. The International Convention on the Control of Harmful Anti-Fouling Systems on Ships done at London on 5 October 2001 (Journal of Laws of 2008, No 134, item 851)
27. <http://www.iadc.org/wp-content/uploads/2017/08/MEPC-71-17-Report-Of-The-Marine-Environment-Protection-CommitteeOn-Its-Seventy-First-Session-Secretariat.pdf>
28. http://jointbwmexemptions.org/ballast_water_RA, JHP is developed by the HELCOM and OSPAR Commissions under the Common Harmonized Procedures for States - HELCOM and OSPAR websites regarding the granting of exemptions under the BWM Convention (Regulation A-4).
29. Act on port reception facilities for ship-generated waste and cargo residues (Journal of Laws of 2002, item 168, as amended)
30. Act on Wastes (Journal of Laws of 2018, items 992, 1000)