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THE ECOLOGICAL SECURITY OF THE BALTIC SEA FROM THE POLISH PERSPECTIVE

Abstract

The article presents the issues related to ecological security of the Baltic Sea. The issue was taken from the perspective of Poland as one of the Baltic States, and also as a Member State of the European Union. The authors discussed the mechanisms and legal instruments which are crucial for the ecological security of the Baltic Sea (i.e. Helsinki Convention of 1974, or Agenda 21 for the Baltic Sea Region "Baltic 21"). The importance of cross-border cooperation has also been emphasized as an essential element of the security policy in the Baltic Sea area. The article also indicated threats to the protection of Baltic waters, among others, eutrophication.

Keywords: the Baltic Sea, ecological security, CSCE, sustainable development, Baltic 21, Water Framework Directive (WFD), eco-conversion

The traditional interdependence of the States in the economic and military areas was extended with the environmental issues more than three decades ago. In contrast, in particular to the military security, the environmental security enhances more enduring relationships among the States and their co-operation,

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since it is not confrontational. The occurrence of the large-scale natural disasters and ecological calamities such as, for example, earthquakes, oil spillages, flood, tsunamis, windstorms, forest fires, water pollution, threatens the security of many States. Thus, on the international arena, the need for cooperation has started to be noticed, since no State acting alone is able to stop the threats and ensure an adequate level of security. The numerous treaties and agreements, concluded to protect water, air, combat waste and protect the upper layers of soil, may serve as examples thereof. Those numerous environmental links, confirmed by law, have created interdependence in the international relations in the area of the environmental protection and ecology. They have extended the traditional concept of security and the State sovereignty, which even several years ago meant, first and foremost, protection against the external attacks[1].

Water or air pollution can neither be eliminated by the military means nor stopped at any State border with the administrative measures. The degradation and environmental pollution do not recognise any boundaries set. In practice, there are many examples thereof: water pollution of the Baltic Sea by contaminated water from the input rivers or the extinction of the Sudetenland forests as a result of transboundary air pollution. The international treaties aiming at combating the common threat may support especially the States living in the common ecosystem. The Baltic Sea area is such an ecosystem, which together with the Member States located around that sea, forms the so-called Baltic Europe. This notion, which is not purely legal, but political rather, has received its *raison d ' être* for four reasons[2].

The first covers the realm of the political relations. The States of that region in spite of different degrees of economic development have been interested in the development of the permanent political foundations for years, which is reflected by the documents of the Conference for Security and Cooperation in Europe (Helsinki 1975).

The second reason represents the sphere of economic relations. In the area of Baltic Europe there are conditions favourable for the activation of that cooperation. The economic significance of the Baltic Sea is designated by the economic power of the States surrounding thereof.

The third reason results from the importance of maritime transport in that area. With reference to the above, an issue of competitiveness of the Baltic Sea ports in the field of general cargo handling, particularly the cargo loaded in the containers, arises. Although the Baltic Sea covers only 1/900 of the surface of the

[1] *Bezpieczeństwo międzynarodowe. Teoria i praktyka*, K. Żukrowska, M. Grącik (ed.), Warszawa 2006, pp. 28–29; *Raport o stanie świata 1985–1988*, Warszawa 1990, pp. 453–459.

[2] J. Zalewski, Cz. Wojewódka, *Europa Bałtycka. Zarys monografii gospodarczej*, Wrocław 1977, pp. 8–15.

seas and oceans all over the world, it encompasses as much as 15% of the global transport[3]. With a view to opening the second Deep Water Quay in the Polish container terminal DCT 2, in October 2016, this share will certainly be gradually increasing.

Finally, the fourth reason is a common struggle for life in the Baltic Sea and the protection of its waters against pollution. In this area, in the last 50 years, many developments took place. On 13 September 1973 in Gdańsk the Baltic States concluded the Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and Belts. Under that Convention the International Baltic Sea Fisheries Commission – IBSFC was founded which operated until 31 December 2005 and on 22 March 1974 the Convention on the Protection of the Marine Environment of the Baltic Sea Area was concluded in Helsinki[4]. Under that Convention the Baltic Marine Environment Protection Commission, known as the Helsinki Commission (HELCOM), as the executive body thereof, was established.

Focusing on the examination of the fourth factor mentioned above, relating to the ecological threats in the area of the Baltic Sea, the conclusion can be reached that they are considerable and dangerous enough to talk about the ecological security of that region. The total liquidation or reduction to a minimum of the variety of threats to human life and health, which have their source in the human life environment, biosphere, should be understood as the environmental security. Those are the threats that arise in the environment, as a result of conscious or not fully conscious actions of a man himself, and which are addressed against him, against the specific populations. Therefore, these are the ecological threats of an anthropogenic nature.

The Final Act of the Conference on Security and Co-operation in Europe (CSCE) provides for a specific programme of shaping the ecological security on our continent. In accordance with the essence of the CSCE process the ecological cooperation covers not only the elimination of risks and damage arising in individual States but, first and foremost, the harmonious development of cooperation in accordance with the interests of all the participating States and the establishment of a system for coordinating activities on a regional scale in the field of environmental protection. Currently, the European States (including Poland) as well as Canada and the United States are the signatories thereof.

Poland, commencing the implementation of the CSCE resolution in the field of environmental protection, was developing two areas. Firstly, industry restructuring, including closing the industrial plants particularly disruptive for the natural

[3] M. Bogalecka, *Bezpieczeństwo transportu morskiego w regionie Morza Bałtyckiego*, The Journal of Management and Finance, No 3, part 1, Gdańsk 2012, p. 574.

[4] *Umowy międzynarodowe o ochronie morza przed zanieczyszczeniem*, Gdańsk 1977, p. 32.

environment[5] and secondly, a significant increase in investment expenditures for the environmental protection in industry and municipal economy. Poland has extended its cooperation in the field of the environmental protection, particularly with the Baltic States. For instance, the treaties relating to the ecological security of the Baltic Sea can serve as the examples of that cooperation. On 1 July 1992 Poland and Latvia concluded the Treaty on Friendship and Cooperation in which it was decided that the two countries would cooperate closely in matters related to the environmental protection, as well as on the reasonable use of natural resources in order to ensure the sustainable ecological security, in particular in the Baltic Sea region. What is more, the Treaty concluded on 2 July 1992 between Poland and the Republic of Estonia on the Friendly Cooperation and the Good Neighbourhood has the similar context[6]. In addition, Poland participates actively in multilateral cooperation at the forum of the United Nations Economic Commission for Europe. The fortieth session of the United Nations General Assembly, at which Poland proposed to take more effective actions on the global and regional scale for the environmental protection, could serve as an example. The expression thereof should be the free flow of technology and know-how in this field.

In international law numerous treaties, to which the parties are, among others, the Baltic States including Poland, are known. Their provisions, to various degrees, pursue the environmental protection objectives. These treaties can be grouped as follows[7].

The first group covers the treaties prohibiting the use of certain areas of the Earth and beyond the Earth for the continuation of the arms race, for example, the Treaty of 11 February 1971 on the prohibition of the Emplacement of the Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil thereof. The importance of this treaty in order to prevent radioactive contamination of marine waters is particularly emphasised. The parties undertook not to install or place, on the seabed and the ocean floor, any nuclear weapons or other weapons of mass destruction or any structures, launchers or any equipment especially designed to store, try or use such weapons. That Treaty provides for the conditions excluding the occurrence of ecocide and marcide, the criminal acts of an ecological nature in the marine environment, most often resulting from the arms race.

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[5] *Polska a realizacja uchwał KBWE*, eds. A. Rotfeld, Warszawa 1988, pp. 74–75.

[6] J. Ciechanowicz-McLean, *Wpływ Ramowej Dyrektywy Wodnej na bezpieczeństwo ekologiczne Morza Bałtyckiego, Gdańskie Studia Prawnicze*, vol. XXXII, Gdańsk 2014, pp. 88-89.

[7] W. Radecki, *Ekologiczne aspekty rozbrojenia we współczesnym prawie międzynarodowym*, "Przegląd Stosunków Międzynarodowych" 1981, No 6, p. 49; see also: *Rozbrojenie a środowisko naturalne*, [in:] R. Rajecki, *Stolica Apostolska wobec rozbrojenia*, Warszawa 1989, pp. 100–102.

The second group includes the treaties prohibiting trying and using, as well as requiring the elimination of specific types of weapons particularly dangerously influencing the environment, for example, the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water signed in Moscow on 5 August 1963; the Convention of 10 April 1972 on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction.

The third group are the treaties prohibiting the direct impact on the environment for the military purposes, for example, the Convention of 18 May 1977 on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques[8]. It covers the techniques that aim at affecting deliberately the processes occurring in nature, the dynamics, composition or structure of the Earth. In the Protocol Additional to the Geneva Convention of 12 August 1949 and relating to the Protection of Victims of International Armed Conflicts, submitted for signature in Bern on 12 December 1977, it is prohibited to employ the methods or means of warfare which are intended to cause widespread, long-term and severe damage to the natural environment.

Poland is the signatory to numerous international treaties and agreements relating directly to the security issues and international relaxation regarding the global ecological issues. These treaties apply indirectly to the ecological security of the Baltic Sea. For example, the following treaties should be listed in this place:

1. the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water of 1963,
2. the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies of 1967,
3. the Treaty on the Non-Proliferation of Nuclear Weapons of 1968,
4. the Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof of 1971,
5. the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction of 1972,
6. the Agreement (of the Socialist States) on Cooperation in the Exploration and Use of Outer Space for Peaceful Purposes of 1976,

[8] *The Law of Naval Warfare A Collection of Agreements and Documents with Commentaries*, ed. by N. Ronzitti, Dordrecht, Boston, London 1988, pp. 673–767. All texts of the conventions are available on Internet in the Polish language as well as in the original languages of drafting the respective texts. In addition, the texts are available in ILM-International Legal Materials annuals.

7. the Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques of 1977,
8. the Convention on the Transfer and Use of Data From the Remote Sensing of the Earth From Outer Space, 1978.

Among the treaties relating directly to environmental protection several international conventions may be listed:

– on Biological Diversity of 1992 ,
– on the Law of the Sea of 1982,
– on the Climate Change of 1992,
– on Intervention on the High Seas in Cases of Oil Pollution of 1969,
– on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter of 1972
– on Long-Range Transboundary Air Pollution of 1979,
– on Low and Non-Waste Technology and Reutilization and Recycling of Wastes of 1979.

The implementation of the provisions of the above mentioned international conventions on ecological security depends, in addition to the consensus of their signatories, on many circumstances of an objective nature, since discharging the obligations, arising from those conventions, requires the signatory States to provide relevant financial resources and a relevant technological level, as well as the suitable orientation of their own economic development. As a rule, it is not enough to adapt law applicable in an individual State to the international obligations assumed, through issuing respective primary and secondary legislation.

The issue of ecological security[9] should be considered also by linking economy with ecology and implementing the sustainable development policy. The ecological barriers, for the further economic development, in the Baltic Europe States which are required to implement the sustainable development policy, should be sharply seen.

The aim of the sustainable development policy, which is carried out in all the States of the region, is primarily to prohibit and prevent any further degradation of the Baltic Sea environment while maintaining the economic development. The legal system has also been subjected to sustainable development, for example, in Article 5 of the Constitution of the Republic of Poland of 1997. It was followed by the change in the management systems (EMAS, ISO), the increase of ecological knowledge and awareness of the society, the increase in control over compliance with law and the growing importance of the non-governmental ecological groups and organizations, that is, the social participation in environmental protection.

[9] M. Ilnicki, A. Karkoszka, L. Kościuk, A. Makowski, *Security and Politico-Military Stability in the Baltic Region*, Warszawa 1991, "PISM Occasional Papers", No 21.

Currently, in Poland the "Energy Security and Environment – perspective by 2020" Strategy adopted on 15 April 2014 by the Council of Ministers is applicable[10]. In accordance with the provisions thereof, the priority in the field of environmental protection is held by the changes designed to reduce air pollution, and the water management system reform (including, among others, ensuring the access to clean water). An instrument aiming at assisting in achieving the objectives set should be proper management of the environment, which should be based on the modern system of spatial planning and the environmental impact assessments. An important challenge, faced by Poland, is to reconcile the economic growth with care for the environment and the social approval thereof. A condition for sustainable development is to ensure the high quality of life for both the present and future generations, and at the same time, the rational use of the resources available. Sustainable development is a priority in law and international politics. It is worth noting that the current changes to the socio-economic systems aim at the so-called green economy, the example of which is the environmental maritime economy. The Strategy adopted is the foundation for the development of the provincial, district and municipal environment protection programmes (including those developed in the Baltic Sea region)[11].

The problems of the ecological security are the interdisciplinary issues which, due to their complexity, exceed the limits of the traditionally developed division into the particular scientific disciplines. The fundamental issues here are the existing ecological threats, prevention of their formation and liquidation of those that have already occurred.

The ecological threats of the Baltic Sea have their origin primarily in the economies of the Baltic States. The Baltic Sea is situated among the densely populated, highly industrialized and politically divided, part of the world; the Baltic Sea region is inhabited by approximately 150 million people. Thus, the Baltic Sea is constantly "receiving" a certain amount of pollutants from the coastal States. The low temperatures of water in the Baltic Sea cause the slow pace of the natural decay of the polluting substances and the various kinds of waste. The exchange of the Baltic Sea water is completed within 30-50 years. Those and other factors (among others the intensive industrialization, the development of the Baltic cities, sewage and waste water) cause that the Baltic Sea is considered the most polluted regional sea area all over the world.

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[10] Monitor Polski of 2014, item 469.

[11] In addition, also, *"The guidelines for the development of provincial, district and municipal environmental programmes"*, prepared by the Ministry of Environment are applicable. See: R. Fucks, *Zielona rewolucja,* Instytut Wydawniczy Książka i Prasa, Warszawa 2016, pp. 357–378. J. Ciechanowicz-McLean, M. Nyka, *Podstawowe założenia środowiskowej gospodarki morskiej*, Prawo Morskie, vol. XXX, Gdańsk 2014, pp. 53–73.

Eutrophication, i.e. "excessive fertilization" is considered the most serious problem as far as the Baltic Sea waters protection is concerned. It is a process of enrichment of water with nutrients. This is due, above all, to the excessive inflow of nitrogen and phosphorus. This phenomenon may occur naturally, but in most cases, it is a result of human activities: fertilizing the fields, no treatment of urban waste water, input of rain water directly into marine waters, introducing chemicals into food products. This causes the development of phytoplankton, and consequently, the increase in the fertility of the waters, since in the Baltic Sea there are not enough organisms able "to consume" all phytoplankton. The remaining phytoplankton becomes rotting in a natural way, absorbing oxygen dissolved in water. As a result, water is no longer clear and begins to emanate toxic substances (among others hydrogen sulphide).[12]

The first, and one of the most important of the international treaties aimed at protection of the marine environment of the Baltic Sea, was the 1974 Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea area amended in 1992. In the provisions of the Convention the principles for protection, by the State parties, of the marine environment against various types of pollution from land[13], sea and atmosphere were formulated. In the annexes to the Convention there is the list of harmful substances, the discharge of which into the Baltic Sea is prohibited or whose number is limited. The provisions of the Convention are implemented by the Helsinki Commission (HELCOM) which is an executive body consisting of the representatives of the Baltic States.

The draft decisions are prepared for the Commission by the following Committees: technological, maritime, for removal of spillages and the results of the disasters and for environmental protection. The Committees rely on work of the domestic working groups, carrying out, among others, continuous monitoring of the sea. The mechanism of the operation of those bodies is as follows. For example, if monitoring indicates exceeding the indicators - the standards of the specified contaminants in fish tissue, then one of the working groups of the Committee for Environmental Protection shall notify thereon the Technical Committee group, which deals with, among others, land based pollution. The latter determines the source of pollution in a particular branch of industry. Then, the proposal of a recommendation requiring all the Baltic States to introduce technological or operational changes in that branch of industry shall be developed jointly. In those recommendations the permissible pollutant concentrations, the proposals for the technological solutions and the time limits for implementation of the obligations assumed shall be provided. The recommendations, adopted by the

[12] T. Żylicz, *Eutrofizacja Morza Bałtyckiego*, Aura, 2014, No 5, pp. 30–31.

[13] J. Ciechanowicz, *Prawne problemy zanieczyszczenia morza z lądu* [in:] Prawnomiędzynarodowa ochrona środowiska naturalnego, eds. J. Gilas, Warszawa 1991, pp. 97–130.

Helsinki Commission, are subsequently implemented by the States governments through the relevant authorities and departments. The activities of the latter, in an aspect interesting to us, depend on the financial and performance potential of a particular State.

HELCOM, throughout all the years of its operation, has contributed seriously to the protection of the Baltic Sea environment. Its major achievements include, among others, agreeing on the monitoring programmes in the Baltic States and designing the protected areas of the Baltic Sea. It is worth noting that the Commission's actions have also contributed to the reduction of inflow of nutrients and dangerous substances, and to the improvement of some of the populations living in the northern parts of the Baltic Sea (a white tailed eagle, wild salmon, seals)[14].

One of the first projects, after the cold war, aiming at strengthening the international relations in the Baltic Sea area was the meeting of the Prime Ministers of the Baltic States in Ronneby in Sweden in September 1990 (convened upon the initiative of the Polish and Swedish Governments). At that conference the Declaration of the Baltic Sea States was adopted. As a consequence, an organization of the Council of the Baltic Sea States (CBSS) was established in 1992 in Copenhagen. The Copenhagen Declaration identified six areas of cooperation between the members of the forum: the support for democratic institutions, economic and technical cooperation, environmental protection and energy, humanity and health, culture, tourism and information, as well as transport and communication[15].

For the ecological safety of the Baltic Sea the program: Agenda 21 for the Baltic Sea Region "Baltic 21", adopted at the 7th Ministerial Session of the Council of the Baltic Sea States in Nyborg in 1998 is of the paramount importance. The Baltic 21 program emphasises primarily the ecological aspects, focusing on the long-term activities based on the regional cooperation, which aims at promoting sustainable development in the Baltic Sea region. Its work is divided into several sectors: agriculture, energy, fisheries, forestry, industry, tourism and transport. The actions taken in each of the sectors are focused, among others, on: the use of renewable energy sources, meetings, shows and projects aimed at the presentation of the practical aspects of sustainable development, cooperation between the cities, providing technology and information for eco-development or aim at increasing the consumer awareness in this regard. The activity presented, aims at contributing to the achievement of a significant improvement in the environment quality in the Baltic Sea region in 2030. The improvement is to take place due to the cooperation in the following three areas: economic, social and ecological. The economic

[14] J. Bolałek, Ochrona *środowiska morskiego od teorii do praktyki*, Gdańsk 2016, pp. 40–42.

[15] I. Śmigierska-Belczak, *Współpraca w regionie Morza Bałtyckiego – Rada Państw Morza Bałtyckiego*, Kwartalnik KES "Studia i Prace", No 1/2012, Warszawa 2012, pp. 178–181.

differences are to be liquidated and unemployment reduced which should improve the condition of the environment considerably. It is hoped that even the tax systems should include the solutions supporting protection of the environment and sustainable development. The conditions for fishing and seaside tourism are to be improved. It is possible to achieve that scenario over the following years. However, what is particularly emphasised, the cooperation of the whole Baltic Sea region is necessary in that respect.[16]

The organization, which is also relevant for the subject in question, is the Union of the Baltic Cities (UBC). It is a cooperation forum currently including more than 100 cities. The Union was established in 1991 in Gdańsk. One of the primary objectives of the Union is aiming at providing the friendly environment in the Baltic Sea region[17].

Since 2004, Poland has been a Member State of the European Union which deals with the environmental issues by means of its legislation and other activities. The most important legal act influencing, both indirectly and directly, the ecological security of the Baltic Sea is the Water Framework Directive (WFD)[18]. The objective of WFD is to achieve a good condition of all waters by 2015 and its maintenance or improvement thereafter. That objective results from the adoption of the principle of sustainable development. The directive applicable in the Member States is also applicable in the EU Baltic Member States. This means, that the provisions of WFD for the protection of the environment of all waters cover also the protection of the Baltic Sea waters. This is the consequence of interdependence between the condition of inland waters and groundwater in the catchment areas of that Sea. As it has been mentioned above, pollution of the Baltic Sea mostly has land based origins. This means that through the proper implementation of WFD provisions "on land", the objective of the clean sea waters, reducing pollution of the sea and the inhibition of eutrophication[19] can be achieved.

The mission of the WFD directive is to protect water resources not only for the present, but also for the future generations. It requires all the Member States to use water resources reasonably and protect them. All actions taken by the States must be also in accordance with the principle of sustainable development. Water management plans, which should be updated every 6 years, aim at achieving that goal. In Poland, the most important document in that respect is the Waters Management Plan. Planning in accordance with the provisions of WFD is divided

[16] J. Bolałek, *Ochrona środowiska morskiego*…, pp. 44–49.

[17] http://www.ubc.net/ (online access: 12.04.2017).

[18] Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy Official Journal EC L 327 of 22.12.2000.

[19] J. Ciechanowicz-McLean, *Wpływ Ramowej Dyrektywy*…, p. 85 and ff.

into the river basins. Currently, there are 10 such river basins areas, namely: the Vistula, the Odra, the Dniester, the Danube, the Jarft, the Elbe, the Niemen, the Pregoła, the Świeża, and the Ücker[20]. All plans are the basis for taking appropriate actions, and consequently, contribute to protection of the aquatic environment in the particular areas and waters.

The implementation of WFD provisions has a huge impact on the condition of the environmental and ecological security of the Baltic Sea. However, it is worth noting that at the EU level, there are also other legal acts that contribute to the protection of those waters. They are, among others, Council Decision 75/437/EEC on concluding the Convention for the Prevention of Marine Pollution from Land-based Sources, Council Directive 76/160/EEC concerning the quality of bathing water or Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources. In accordance with the EU policy and legislation in the field of the coastal and marine areas, it is required to reduce, by 2020, the impact on marine waters in order to achieve or maintain a good environmental condition, as well as to manage the coastal zones in a sustainable way[21].

At the EU level, the protection of the Baltic Sea has been provided for in the European Union Strategy for the Baltic Sea Region as well[22]. The Strategy was adopted on 26 October 2009. That is the integrated framework, which will enable the European Union and the Member States to identify the needs and match them to the resources available, through the coordination of the relevant political actions, which are supposed to provide, to the Baltic Sea region, an opportunity to use the sustainable environment and an optimal economic and social development of that region. This strategy includes eight EU Member States, which are located at the Baltic Sea coast. They are: Denmark, Estonia, Lithuania, Latvia, Finland, Germany, Sweden and Poland. The European Union Strategy for the Baltic Sea Region is the first macro-regional strategy which has been based on the four subject pillars: the sustainable environment, prosperity, accessibility and attractiveness, as well as safety and security. The greatest emphasis has been put on the first one, that is, the environmental protection. The actions taken under the Strategy, first and foremost, aim at reducing eutrophication, but also at limiting land based pollution and the impact of the hazardous substances.

[20] http://www.rdw.kzgw.gov.pl/pl/obszary-dorzeczy (online access: 13.04.2017).

[21] *Sprawozdanie dotyczące wdrażania polityki ochrony środowiska-Polska*, 2017; *Sprawozdanie Europejskiej Agencji Środowiskowej w sprawie Morza Bałtyckiego*.

[22] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the European Union Strategy for the Baltic Sea Region, COM(2009)248.

In addition, the Baltic Sea Region INTERREG Programme has been adopted for the period 2014-2020. It is a cross-border cooperation programme, which supports the development of the integration and territorial cooperation. The development and cooperation aim at increasing innovation, accessibility, and most importantly, ensuring sustainable development of the Baltic Sea. The program covers 11 States, besides the eight Member States listed above, also Norway, Belarus and some circuits of Russia. The program consists of four priority axes: capacity for innovation, efficient management of natural resources, sustainable transport and support for the European Union strategy. The examples of the initiatives that can receive support from this program can be, among others, investments in renewable energy sources, the implementation of the integrated action plans for the protection of the Baltic Sea and inflow waters as well as the development and implementation of the plans for the integrated management of the marine environment[23].

When discussing EU legislation, the provisions of which contribute to ensuring the ecological security of the Baltic Sea, the European Network of Protected Areas-Natura 2000 cannot be forgotten. This programme is designed to preserve certain types of natural habitats and species, which are considered valuable for Europe, and which are at risk. The pillars of the program are the two directives, namely: Directive of the European Parliament and of the Council 2009/147/EC on the conservation of wild birds (the so called Birds' Directive) and Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the so called Habitats Directive). The protective measures applied in the Natura 2000 areas are based on the protective tasks plans or the protective plans. Due to the fact that Natura 2000 sites cover a substantial part of the Polish Baltic Sea waters' surface, there is the increased environmental protection in those areas. What is more, at the Natura 2000 network's sites more attention is paid to spatial planning. The implication thereof is the relevant, rational and effective management of Natura 2000 sites, which will consequently contribute to the achievement of an appropriate, good level of waters and a satisfactory level of ecosystem[24].

In the context of all the above mentioned activities, the situation of Poland is special. It is the largest Baltic pollution producer. Therefore, as far as the issue of the pollution reduction is concerned, the expectations towards Poland are the greatest. However, at the same time, Poland's economic and financial considerations do not allow for solving environmental protection problems on its own. The economic and economical issues can be properly solved only when they are considered in interdependence. Therefore, determining the economic development

[23] http://www.interreg-baltic.eu/home.html (online access: 13.04.2017).

[24] *Morskie Obszary Natura 2000, Generalna Dyrekcja Ochrony Środowiska*, https://www.gdos.gov.pl/files/artykuly/5064/Morskie_obszary_Natura_2000.pdf (online access: 14.04.2017).

nowadays must rely on such shaping of the economic and legal institutions to direct them, simultaneously, at the economic and ecological objectives, with the full social acceptance[25]. Polish waters belong to the Baltic Sea marine region and Poland is a party to the Convention for the Protection of the Baltic Sea Environment. At that sea the main risks for biodiversity are eutrophication, overfishing and by-catch, pollution with dangerous substances, pollutants and oil as well as the introduction of alien species. In 2015, Poland sent to the European Environment Agency information on identifying the condition of its environment and the environmental tasks as well as monitoring of the marine waters programme.

The position of the State authorities towards the actions generating ecological threats is referred to as eco-policy. One of its instruments is environmental protection law, in other words, ecological legislation. The role of this legislation primarily boils down to the legal articulation of the solutions whose basic assumptions are developed by the representatives of other sciences. The common view, whose supporters are willing to recognise the natural sciences dominance within the removal of ecological threats, should be definitely left aside. The implementation of the concept of sustainable development requires equal treatment of natural sciences and technical sciences with economics and environmental law.

The role of law in supporting the concept of sustainable development boils down to two important issues. The first one is, that law sets the optimal range of using the natural resources and the degree of their availability for different groups of users. Therefore, for example, sourcing raw materials for the various production purposes must be limited because the overexploitation economy cannot be pursued. The latter, is to determine by law, the manners of using the natural resources (e.g. water) and the conditions their application is subject to.

Baltic Europe has been facing, for many years, the following question: How to ensure, in the best way, the security of that region, including its ecological security? Should this be achieved by the application of the legal measures only? In the past, also the economic solutions used to be applied, for example, eco-conversion, which is the conversion of some portions of the debts into the expenditures made for the protection of environment. Poland applied that solution as early as in 1990.

The idea of eco-conversion was raised, for the first time, in 1984 by dr T.E. Lovejoy of "World Wildlife Fund". Under the scheme in question, some portions of the foreign payment liabilities of certain States are purchased for the purpose of allocating the funds obtained in that way to the activities aimed at the protection of the environment in those States.

The first eco-conversion transaction in Europe took place in 1989. In one of the Dutch banks, the "World Wildlife Fund" purchased 50 thousand dollars of our

[25] B. Fiedor, *Przyczynek do ekonomicznej teorii zanieczyszczenia i ochrony środowiska*, Wrocław 1990, p. 115 ff.

debt amount. The equivalent of that amount in PLN was allocated to establish the Biebrza National Park.

In 1988, the United States Senate adopted a statute according to which the banks could redeem partly the debts of the developing countries for the implementation of the investments in the area of the environmental protection in those States. As far as the Baltic States are concerned, Sweden was the first to sign a bilateral agreement with Poland regarding the protection of the Baltic Sea and also the first to offer financial aid for those purposes.

After 1990 several international agreements in that respect were signed. Poland by the end of 2003 concluded the agreements on ecoconversion also with the United States, France, Switzerland, Italy and Norway. For the implementation thereof the EcoFund Foundation (*Fundacja Ekofundusz*) was established. The task of this entity, independent of the government, was to administer money of ecoconversion. These funds were to be spent on the implementation of the provisions of the international conventions of the ecological nature. They were mainly intended for the investments in the environmental protection. The eco-conversion scheme in Poland was not only accepted, but also significantly expanded[26]. The last instalments of that Fund were paid out in 2010, when the Foundation ceased to exist (it had been operating until its funds were finished).

In conclusion, it should be noted that the ecological security is currently as important as the economic or military security. The ecological issues are increasingly important, both through greater efforts of the States and international organisations to ensure the appropriate level of protection of the environment as well as the increasing public awareness. The Baltic Sea is an extremely polluted sea. In the Baltic Sea region industry and maritime transport are developing and, what is more, the population is increasing. It is hard to improve the condition of the environment despite the new, pro-ecological technologies applied. As indicated in this paper, to ensure the ecological security of the Baltic Sea, the relevant mechanisms and legal instruments are necessary. These regulations are the result of the cooperation of several countries and the whole Baltic Sea region, since any State acting alone is not able to stop all the pollution sources, not only due to their size, but also because they have a transboundary nature. Therefore, international cooperation covered by the relevant legal framework, based on the principle of sustainable development, is so important. Along with the process of the regional integration, as well as the Polish accession to the European Union, this cooperation has an increased opportunity to achieve the goal also through the implementation of the development strategies for the South Baltic Sea.

[26] W. Zbaraszewski, *Rola fundacji Ekofundusz w finansowaniu ochrony środowiska w Polsce*, Folia Pomeranae Universitatis Technologiae Stetinensis. Oeconomica, 2011, No 65, pp. 175–178.

BEZPIECZEŃSTWO EKOLOGICZNE MORZA BAŁTYCKIEGO Z POLSKIEJ PERSPEKTYWY

Słowa kluczowe: Morze Bałtyckie, bezpieczeństwo ekologiczne, KBWE, zrównoważony rozwój, Agenda 21, Ramowa Dyrektywa Wodna (RDW), ekokonwersja

Abstrakt

W niniejszym opracowaniu przedstawiono zagadnienia związane z bezpieczeństwem ekologicznym Morza Bałtyckiego. Problematyka ta została ujęta z perspektywy Polski, jako jednego z państw nadbałtyckich, a także państwa członkowskiego Unii Europejskiej. Omówione zostały mechanizmy i instrumenty prawne mające kluczowe znaczenie dla bezpieczeństwa ekologicznego Bałtyku (m.in. Konwencja helsińska z 1974 r., czy też Agenda 21 dla regionu Morza Bałtyckiego „Bałtyk 21"). Podkreślono również istotę współpracy transgranicznej, jako niezbędnego elementu polityki bezpieczeństwa na obszarze Morza Bałtyckiego. W opracowaniu wskazano również na zagrożenia w ochronie wód bałtyckich m.in. na eutrofizację.