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Abstract

The aim of this paper is to study the current state and the prospects of ecological collaboration activities to protect the Baltic Sea including both the EU and Russia. The researchers, studying the EU environmental policy in the Baltic Sea region often ignore Russia since this country has separate environmental policy concerning the Baltic Sea area. However, Russia is a member of Helsinki Commission (HELCOM) a supranational body which was established forty years ago to safeguard the marine environment of the Baltic Sea strengthening interstate cooperation. The main focus is the investigation of new patterns of interaction on environmental issues that influence the allocation of space and meaning of societal time in the Baltic Sea region. Relying on multi-level governance theory, three dimensions of space (natural, national and trans-boundary) and five levels of societal time (regional, EU, national, municipal, cross-border) are analyzed. While space is regarded as a politico-social object, which should be subjected to transformation, the societal time is used to plan required environmental changeovers. Both aspects encompass not only area of the EU littoral members in the Baltic Sea region but all states of the Baltic Sea catchment area (Belarus, Czech Republic, Russia, Slovak Republic and the Ukraine).

Keywords

Introduction[*]

The research of change in time and space in the process of protecting and transforming the environment of the Baltic Sea is the subject matter of this article. Although the study of the Baltic Sea environmental cooperation consists of big amount of the work, a spatial dimension of the current transformations in this region has received comparatively little attention in literature (Van Deveer 2004; Metzger & Schmitt 2012). Relying on the multi-level governance approach (Marks 1993; Bache & Flinders 2004), I analyze the re-evaluation of the meaning of time required to complete all the European Union (EU) and the Helsinki Commission (HELCOM) requirements improving the space of the Baltic Sea. This approach facilitates the examination of EU environmental policy through the adoption of obligatory framework directives, which have strengthened transnational interests and diversified the stakeholders involved in the protection and conservation of the Baltic Sea (Kern 2011). A traditional top-down decision making system has been complemented by horizontal network governance, in which the responsibility of actors corresponds to a certain level - supranational, regional, national, and local "as the result of a broad process of institutional creation and decisional re-allocation" (Marks 1993:392). These levels create a framework for analyzing both space and time. Since the Baltic Sea space has been reexamined and received a new dimension after mapping the "hot spots" in the 1990s, i.e. extensively heavy-polluted water areas a part of which is located at the borderland, I am going to turn main focus from the subjects of governance of various actors to the objects of governance of space and time, which are the crucial factors of planning improvement of the Baltic Sea ecology.

Structurally the study will look like that. The first part dissects the importance of the national state and multi-level governance for environmental time and space planning. The second part examines societal space of the Baltic Sea on three levels that constitute common and heterogeneous socio-political area simultaneously. The third section deals with the same thing, but with respect to the societal time of the Baltic Sea during the planned activities aiming at improving the ecological status of the Baltic Sea.

The National State, Multi-level Governance and the Environmental Concern in the Baltic Sea Region

The national governments have been playing a substantial and key role of preservation and exploiting natural resources since they are regarded as "highly visible, legitimised and competent territorial actors and protectors". (Jänicke, 2002:5; also Gross, 1985). A nation state also defines its own territorial borders. As Hassner pointed out, in this case the borders are treated in a conservative sense as a main instrument in the establishment of reliable relations between the states. Through the borders such as lines, walls, fortresses, etc. a state defines its territories independence and the identity of the people who are living within these borders (Hassner, 2002). The international postwar confrontation around Inner German and German-Polish borders, on the one hand, and the process of the delimitation of continental shelf between the Baltic Sea states, on the other hand, reflected such understanding of the borders overtly (Gray, 2003; Franckx, 1996). In spite of the fact that after the end of the Second World War the Baltic Sea became the arena of the acute rivalry of the Eastern Bloc and Western Allies, this region tended to the international cooperation, especially in the sphere of the environmental policy (Hägerhäll, 1980).

The Baltic Sea region was one of the first places in the world in which environmental issues became acute items of the international agenda. The pollution of the Baltic Sea has become the lead

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object in the nascent field of international environmental politics in the aftermath of the 1972 UN Stockholm conference (Jong, 2006:30). Eutrophication was recognized as the main threat to the Baltic Sea, which means the addition of artificial or non-artificial substances, such as nitrates and phosphates, through fertilizers or sewage to the fresh water system. Besides this issue the Baltic Sea suffers from overfishing, invasion of alien species, and the presence of organic toxins in the waters (Håkanson & Bryhn, 2008:1). The first multilateral Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area was signed in 1974. All the states from the Baltic area, East Germany, Denmark, Poland, the USSR, Finland, West Germany, and Sweden ratified the agreement. The executive body of the Helsinki Convention became Helsinki Commission (HELCOM). It assumed the role of an environmental policy-maker, monitoring and evaluating the condition of the Baltic Sea (Brusendorff, 2007)[1].

Although the Convention could be regarded as a significant achievement in the regional cooperation between the Baltic Sea states, the agreement did not regulate the environmental policies of the states within their national borders. In the context of the Cold War and mutual distrust, opportunities for cooperation were limited (Räsänen & Laakonen 2008). Therefore, the Helsinki Convention of 1974 could be treated as a "conservative" agreement that did not intend to create a common space, but introduced some protective measures. The internal waters were out of reach of the Convention because of sovereignty considerations. On the whole, the problem was not solved since these waters constitute the pollution load to the Baltic Sea together with the national part of the catchment area. (Darst, 2001:57-58).

By the mid-1980s the international and national levels seemed to be the most important for implementation of the planned transformations of the Baltic Sea environment. Since the territorial scope determined by the Convention was restricted to the open seas, the littoral states were independently trying to reduce emissions within their national borders. At a regional level HELCOM played a notable role as an expert body organizing the monitoring of pollution of the Baltic Sea as well as publishing recommendations on reducing harmful emissions. But neither time scaling, nor spatial dimension of the Baltic Sea environmental issues was still possible to measure at a transnational level. The state determined time frame and territorial coverage of environmental protection alterations only within its borders. While Western capitalist states did manage to achieve a perceptible reduction of discharges in their own catchment areas, the Socialistic countries failed to fulfill their own deadlines and directions by the end of the 1980s. For example, a rigid and heavily centralized vertical power in Russia was not able to ensure the effective execution of the decrees, which led to further deterioration of inland waters (see Roginko 1996:20-24).

The favorable political climate of the second half of the 1980s and the Soviet Union's openness to a dialogue with Western countries intensified the cooperation between the Baltic Sea countries. HELCOM Ministerial Declaration of 1988, which aimed at reduction of hazardous substances to 50% for a 10-year period, induced the states to act at a national level more actively (Selin & VanDeveer 2004:154). Three years later these goals were questioned because of the economic collapse of the USSR.

The dramatic change on the political map of Europe in the early 1990s led to an increase in the number of the Baltic Sea states from seven to nine. West Germany merged with East Germany in

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[1] Before ultimate ratification in 1980 HELCOM acted as interim commission. Since 1980 HELCOM has been functioning as a small body where every member sends an official representative. All decisions should be unanimous as well as all countries are to share equal dues to support working routine of the Secretariat, which consists of several experts. In practice the main burden of all costs lays on shoulders of the developed states, such as Sweden and especially Finland. The main task of the Secretariat is to elaborate environmental recommendations aiming to prevent further pollution of the Baltic Sea. Each recommendation is needed to be approved by every party, although the recommendations do not have binding status for HELCOM members. Nevertheless, they possess a real significance as long as the EU *de facto* implements them through common environmental policy. In 1992 the EU became one of the parties of HELCOM, which guarantees "harmonization" of the non-binding recommendations with the obligatory Framework Directives.

1990. The following year due to the collapse of the USSR Russia, Estonia, Latvia and Lithuania became independent states. The Iron Curtain fell, the old barriers (ideological, economic, etc.) between the East and the West were broken. Moreover, the former Socialist republics of the Baltic Sea region - Poland, Estonia, Latvia, and Lithuania - proclaimed openly the course of joining the main European institutions - the European Union (EU) and the North Atlantic Treaty Organization (NATO). The main consequence of the geopolitical alterations in the Baltic Sea region was the development of cross-border cooperation (Kern & Löffelsend, 2004). On the background of the EU enlargement process, this interaction went quickly, involving both developed and developing countries. During that period an unfavorable attitude to the border appeared to be unambiguous, since it was perceived as an obstacle to the development of the Baltic Sea region, inherited as the legacy of the "cold war" (Tassinari et al., 2003:17). On the other hand, the border was understood as a starting point of overcoming inequalities and discrepancies between the West and the East (Aalto, 2006:14-27).

In the last decade of the twentieth century the necessity of overcoming gaps between countries with developed market economy relying on stable democracy and Post-Soviet republics in transition compelled affluent capitalist countries and the EU to launch a cooperation, on completely different scale and quality, in the Baltic Sea region. It has had three important consequences. First of all, the former Socialistic countries became the participants of more open international cooperation in environmental issues. Facing significant challenges in transition from planned to market economies, the Eastern European countries were forced to accept the material and infrastructural assistance from their richer neighbors to solve their environmental problems.

Transnational subsidization has become the key mechanism to promote the environmental policy in the developing countries. An extensive cooperation infrastructure was encouraged by the developed countries (Darst, 2001:5-6).

Secondly, by 2005 the Baltic Sea had almost turned into the internal sea of the EU, except for the territorial waters belonging to Russia. This meant that all EU countries should have been in agreement with the EU legislation in the field of the environmental protection. The EU Urban Wastewater (1991) and the EU Water Framework (2000) Directives are the obligatory documents, which set rigid parameters for waste water treatment plants. In addition, the Baltic Sea came within the purview of the Marine Strategy Framework Directive in 2008. This document is governing the European seas exploitation. Finally, the EU adopted a special Strategy for the Baltic Sea Region in 2009 (EU Strategy for the Baltic Sea Region) (Pihlajamäki & Tynkkynen, 2011:42-43).

Thirdly, the extension of cooperation increased the number of actors involved in the solution of environmental issues. The growing role of NGOs and municipalities was associated with a new blueprint proposed by the UN Conference on Environment and Development in Rio de Janeiro in 1992, where Agenda 21 was signed by 179 governments. More importantly, Agenda 21 advanced municipal and cross-border interaction and cooperation, since it launched municipal and regional strategies to solve local problems (Lundqvist 2004a: 32-33). The formation of the Council of the Baltic Sea States (CBSS), which introduced "Baltic 21" strategy in 1996, reflected the fundamental change in the sphere of international relations. Over and above traditional state-centered relations, other levels of reciprocal actions have been involved in the process of the environmental transformation of the Baltic Sea region. They vary from supranational institutions to transnational policy networks (Kern & Löffelsend 2008:120).

The enlargement of the European Union and the development of multi-level governance have changed the role of the nation state radically. In literature scholars have been discussing after-effects of these transformations. While Pierre describes governance as stressing "erosion of traditional bases of political power", Jänicke assigns the state the part of a "local hero" in the sphere of the environmental protection. (Pierre, 2000:1; Jänicke, 2002:5; Eckerberg & Joas 2004:406; Kern & Löffelsend, 2004:459). The common environmental policy of the EU through the adoption of binding framework directives has led to the strengthening of subnational interests and diversification of the

stakeholders involved in the process of protection and conservation of the Baltic Sea (VanDeveer 2011: 44-45).

However, multi-level governance raises the question of borders definition in the case of the environmental management (Kern, 2011:29-30). Since water, air, animals, fish, etc. do not recognize the state and maritime boundaries, the issue of multi-level governance stumbles upon the problem of effectiveness, participation and legitimacy as Lundqvist pointed out. Spatial dimension of the problem has crucial importance since in case of being clearly outlined areas the natural borders could help to delineate "terms of authority and responsibility, as well as terms of democratic accountability, both downward and upward" and "defines the circle of relevant principal stakeholders and participants on the grounds of their relation to the ecologically defined level of governance" (Lundqvist, 2004b: 414).

The environmental multi-level governance tries to set clear parameters for the spatial transformations of the Baltic Sea area, and to target a deadline to be implemented in spite of uncertain and contested process of decision making (Pihlajamäki & Tynnkynen, 2011:27-32). The concrete embodiment of spatial renewal in the region can be traced in various ambitious undertakings such as Common Agricultural Policy (CAP) of the EU, or VASAB long-term strategic document of the Baltic Sea region (1994) aiming at integrated and coherent development of coastal areas. As a matter of fact, the various actors of the region offer an extensive agenda of making common environmental area of the Baltic Sea which ties together both natural and national space by means of developing transnational and cross-border cooperation. Moreover, the environmental concern has caused the necessity to distinguish three dimensions of space *natural*, *national* and *trans-boundary* which constitute three patterns of interaction – conflict, competition and cooperation. These categories reflect the main processes of the governance over the space of the Baltic Sea.

Natural Space: an Uncertain Area between Cooperation and Conflict

In the epoch of spatial turn it seems that the state space as a "sovereign" entity with its own laws and within its strict boundaries does not exist anymore. The global environmental issues emphasized an importance of natural space, which overstepped the national borders (Warf & Arias, 2009:6). The space has been recognized as "constant motion". In other words, "there is no static and stabilized space" (Thrift, 2006:141). The variety and diversity of the spaces just stress an idea of the space contextuality. It appears through mapping practice. Mapping has been an important part of the "imagined community"; it defines the scope of national or regional identity making (Anderson, 1991). In the 1970s when the environmental problems of the Baltic Sea were recognized by the scientific community, mapping of Sea pursued at least two purposes: the dissemination of scientific knowledge of the Baltic Sea natural condition and the establishment of the international research agenda on the protection of the open sea. The Report of the International Council for the Exploration of the Sea (ICES) in 1974 not only raised the awareness of the deterioration of the Baltic Sea ecosystem but it urgently appealed to making further study of the natural space in its integrity. (De Jong, 2006:82-83). In its turn HELCOM also played a notable role in the re-defining of the natural borders of the Baltic Sea. In spite of the Cold war era when the state borders and coastal waters were closed from international surveillance, HELCOM concentrated its efforts on developing non-binding recommendations which were to help to decrease a negative influence of industry and agriculture in the Baltic Sea catchment area. Nevertheless, under these conditions the scientists and experts achieved considerable progress in the study of natural conditions of the Baltic Sea (HELCOM, 1986:143-144). The main consequences of this ambitious research were the identification of the sources of pollution and understanding that the problem could not be solved by separate states. A crucial turn towards more coordinated actions combining scientific prescriptions and proactive decision-making happened after the Chernobyl disaster. In 1988 HELCOM published a report on radioactive substances in the Baltic Sea paying special attention to the necessity of enhancing joint efforts to study this issue thoroughly (HELCOM, 1989:10). Due to the favorable international atmosphere and willingness of the USSR to enlarge cooperation with the West countries this plea met approval of the Soviet government.

Finally, the Soviet part of the Gulf of Finland became accessible for international crew of marine scientists (Darst 2001:64).

From the beginning of the 1990s common environmental space of the Baltic Sea began to be formed. The process was initiated in 1990, when Ministerial Conference in Ronneby, Sweden adopted the Baltic Sea Declaration. This document spurred the elaboration of the "Joint Comprehensive Environmental Action Programme" (JCP) in order to restore the Baltic Sea "to a sound ecological balance" (HELCOM, 1993:I-1). After the collapse of the USSR its four former Soviet republics - Latvia, Lithuania, Russia and Estonia - joined HELCOM. In 1992 HELCOM prepared a new Convention. The new agreement contains a practical implementation mechanism to improve the Baltic Sea ecological status. Due to this programme HELCOM outlines "hot spots" on the map - the heavily-polluted areas of the Baltic Sea - which should be removed in the future (HELCOM, 1993:VI-IX). The programme allowed all the Baltic Sea states to become the participants of more open international cooperation on environmental issues. There were originally 132 hot spots, 98 of which were located in the former Socialistic countries (HELCOM, 1993: VI-IX; 5-5). Table 1 shows that the national states and sub-regions of the Baltic Sea are used as markers to denote the level of eutrophication of territorial water of this or that country. Drawing "hot spots" on the map, HELCOM redesigned both political borders and natural sub-regions of the Baltic Sea. An international concern of the pollution control broadens the target territory from the Baltic Sea itself to the more extensive catchment area. It includes not only all littoral states but also four countries – Belarus, Ukraine, Czech Republic and Slovak Republic which share common rivers with the Baltic Sea states. Hence environmental hot spots also designate the catchment area of these states since the Nemunas (Belarus), the Vistula (Belarus, Ukraine) and the Oder-Odra rivers (the Czech Republic and the Slovak Republic) flow directly into the Baltic Sea (see table 3). The HELCOM list of hot spots demonstrates full interdependence of natural parts and maritime borders of the Baltic Sea (HELCOM, 1993:5-28).

Table 1. Environmental Hot Spots in the Baltic Sea Catchment Area

Sub-regions	Countries of the catchment area related to Sub-regions	Numbers of hot Spots according to the HELCOM list
Bothnian Bay	Finland, Sweden	1-2
Bothnian Sea, Archipelago Sea and Åland Sea	Finland, Sweden	3-10
Gulf of Finland	Estonia, Finland, Russia	11-30
Norhtern Baltic Proper	Sweden, Estonia	130
Western Gotland Basin	Sweden	
Gulf of Riga	Belarus, Estonia, Latvia, Lithuania, Russia	31-48
Eastern Gotland Basin	Belarus, Lithuania, Poland, Slovak Republic, Sweden, Russia, Ukraine	49-96
Bornholm Basin (including Arkona Basin)	Czech Republic, Denmark, Germany, Poland, Sweden	97-118, 131-132
The Sound	Sweden, Denmark	123-125
Belt Sea	Germany, Sweden	119-122
The Kattegat	Denmark, Sweden	126-129

Source: HELCOM, 1993. Vol. 48. Chapter 3, 5.

The ecological space of the Baltic Sea revealed potential not only for mutual cooperation, but also for acute international environment and energy conflict because of laying the Baltic Sea gas pipeline "Nord Stream" (Whist, 2008). All Baltic countries and Poland regarded this joint project of Russia and Germany as a threat to Geopolitical expansion going from Moscow. It was not an idea of the new pipeline but the route itself that caused this vigorous resistance. The main arguments of the project opponents were environmental concerns. In order to challenge the contracting parties to make the pipeline policy, the politicians based their opinions on the data of a scientific community. The negative impact on bird and marine life, the potential threat to the sea bed where a lot of toxic materials including chemical weapons dumped into the Sea in the past decades has been accumulated appeared to be main reasons why Nord Stream pipeline should be disbanded (Karm, 2008: 108-109).

The struggle of the opponents of expert opinions of scientists helped to recognize close interdependence of both state and sub-region borders of the Baltic Sea. The EU States in the region began to perceive their maritime borders as a natural part of the Baltic Sea. Under the influence of Nord Stream discord a new agreement on International Sea Surveillance Cooperation of the Baltic Sea (SUCBAS) was signed in March 2009. SUCBAS unites eight countries - Estonia, Denmark, Latvia, Poland, Lithuania, Germany, Finland, and Sweden to share surveillance of the Baltic Sea information

and to ensure maritime safety and conduct border control in accordance with international agreements (http://www.sucbas.org/).

National Space: A Contest over Maritime Borders

Despite the end of the Cold War all states in the Baltic region were not going to refuse the intension of strengthening their borders as an instrument of consolidating national identity. This aspect was especially evident in the relationships between Russia and Baltic States, former Soviet republics. In the 1990s in Latvia and Estonia some people and politicians discussed the possibility to restore the old borders which had been before 1940 when two districts of Pskov oblast belonged to these states (Aalto, 2003:23). On the contrary, Russia worried about NATO enlargements in the former Socialistic republics and heavily criticized the initiative of location of anti-ballistic missile system in the Czech Republic and Poland (Mankoff, 2011:25). In this sense the "conservative" period of strengthening the borders continued even after the dissolution of the USSR (Hassner, 2002).

Apart from international disagreements on foreign policy the essential aspect of demarcation of the national borders is the delimitation of continental shelf on the Baltic Sea. According to the United Nations Convention on the Law of the Sea of 1982/1994 the sea is divided into several zones. As for the Baltic Sea, three zones are of importance: a) internal waters on the landward side of the baseline; b) the territorial sea extending up to 12 sea miles seawards from the baseline; c) the exclusive economic zone extending up to 200 sea miles (Submariner compendium, 2012: 45). All these zones of the Sea are subjects of the negotiations between the states.

Signing of such agreements is obviously a vast field for competition and conflict between the opposite sides. However, the Baltic Sea region has demonstrated the ability of successful negotiating between the countries on delimitation of the Baltic Sea maritime borders (Franckx, 2001). This process was already launched in the Cold war era. During the period of the late 1950s – the 1960s five two-sided agreements between the USSR, Poland, East Germany and Finland (this state didn't belong to the Soviet bloc) were made. They concerned the delimitation of the continental shelf on the Baltic Sea. Soviet-Polish (1958, 1966), Soviet-Finnish (1965, 1967) and East German-Polish (1968) agreements established comprehensive continental shelf boundaries in the East and in the South of the Baltic Sea. Neue Ostpolitik and Détente expanded this process towards the agreements between the countries of Eastern and Western blocs as well as neutral states (Franckx, 1996). All these agreements continued the general policy of delimitation on the Baltic Sea in order to secure national maritime borders. But this process did not go easily. West Germany and Denmark were not able to resolve the contradictions in fishery in the border area (Jaenicke, 1983); the Protocol Note of FRG and GDR agreement delimitated only a small part of the bay, while the remaining part was not settled. Later, in the 1980s due to Perestroika and political changes in Eastern Europe, the Baltic Sea states became more involved in the negotiations on the delimitation of the continental shelf. A number of treaties between 1985 and 1991 were so great that they might be compared to the ones made for the whole post-war period (Franckx, 1996). After the collapse of the USSR and the formation of new states the agenda was to implement maritime boundary delimitation both within the former Soviet Baltic space and with the EU neighbors. The EU countries and Baltic States put this process into effect more intensively and much faster. It became obvious that the EU policy of creating a common space encouraged opposite sides to achieve mutual consent more actively and quickly (Franckx, 2001). On the contrary, the negotiations between Russia and the Baltic States (especially Russia and Estonia) could be compared to the period of "cold war" when the negotiations between the Baltic Sea countries stretched for a long time. The non-recognition maritime boundary agreements concluded by the USSR caused acute controversies between former Soviet republics preventing them from the signing the border treaties (Franckx, 2012:440-441).

The divided maritime space between the national states has been the subject of the regulatory framework at different international levels. Besides UN and HELCOM Conventions the Baltic Sea are

under the jurisdiction of the EU (see Table 2). A set of various EU directives binds the Baltic Sea region in the united space. The environmental concern has transformed separated spots of pollution into a coherent and functional region. The EU directives on the water protection, especially Water Framework Directive, impel to involve its actors and stakeholders - from supranational (the EU, HELCOM) to local (District Water Authority in Sweden, the municipalities, etc.) - into interaction (Lundqvist, 2004b; Kern & Löffelsend, 2008). Water acts as a go-between linking between the stakeholders according to spatial distribution of hot spots. This spatial distribution is not equal. On the contrary, it forms - using Soja's notion - *hierarchal ordering* which establishes administrative governance of the environmental space (Figure 1). The EU Water Framework Directive and Marine Strategy Framework Directive conform to supranational level heading this hierarchy. Below, at the national level, the countries should elaborate and implement detailed River Basin Management Action Plans (RBMPs) to coordinate actions of all interested parties and, if needed, to develop trans-boundary cooperation (Pihlajamäki & Tynkkynen, 2011:34). To create a sound ecosystem freed from harmful influence of the nitrogen and phosphorus the state maritime borders and the catchment area are delimited as the biosocial zones which require an intensive trans- and cross-border collaboration.

Figure 1. Hierarchal ordering of water governance in the EU

Supranational level (EU's Framework Directives)

National level (RBMP)

Trans-boundary level (cooperation to implement the Framework Directives and RMBP)
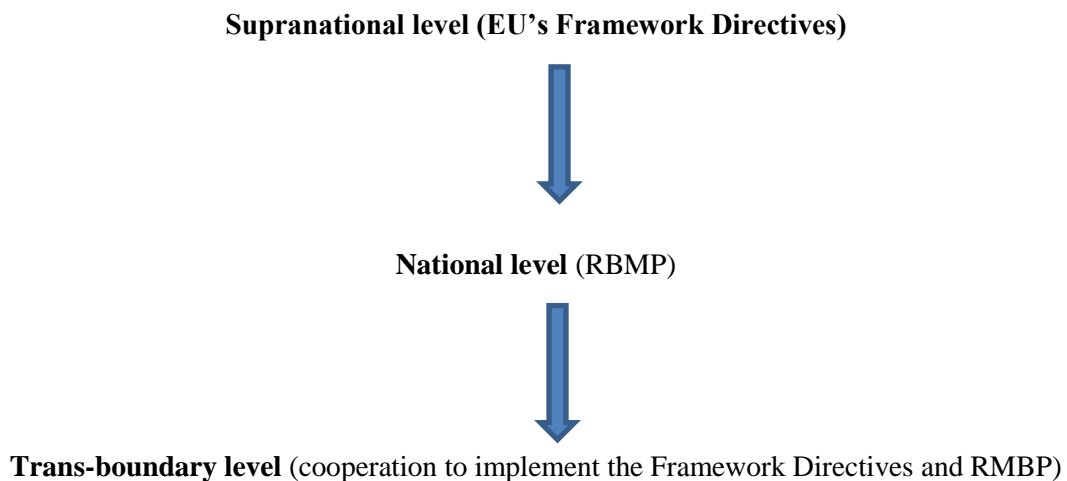
Table 2. The Baltic Sea Space and the Goals of International Regulatory Framework

International Conventions and EU Directives		
Natural space	National space	Trans-boundary space
The Convention on the Protection of the Marine Environment of the Baltic Sea (HELCOM), 1974/92 (Aim: measures for the prevention and elimination of pollution of the Baltic Sea)	*United Nation Convention on the Law of the Sea,* 1982/94 (Aim: to define the rights and responsibilities of nations in their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources)	*EU Urban Wastewater Directive* (Aim: to protect the environment from the adverse effects of urban waste water discharges), 1991 *EU Water Framework Directive* (WFD) (Aim: to protect all waters, surface and groundwater; achieving "good status" for all waters by 2015), 2000 *EU Marine Strategy Framework Directive* (MSFD) (Aim: Good Environmental Status of the EU's marine waters by 2020), 2008

Source: Submariner Compendium, 2012. P. 37.

Trans-boundary Space: On the Way from Random Interaction to Systematic Cooperation at Pan-Baltic Level

The formation of trans-boundary space has become the result of the development of multi-level governance between adjacent states of the EU. International and European regulatory framework of environmental policy prompt various stakeholders to discharge aims of the EU directives by means of sharing responsibilities and joining efforts (Baldersheim & Stahlberg, 2002:78). In literature the scholars have stressed that multi-level governance in the Baltic Sea region is characterized by an intensive development of the various forms of network connections beyond the nation state (Kern & Löffelsend, 2008; VanDeveer, 2011). The transnational networks and intergovernmental cooperation are encouraged by the EU as a supranational actor. The EU strategy for Baltic Sea region and the framework directives set a spatio-temporal perspective of the environmental policy for numerous stakeholders involved in transformation of the regional environment.

The decisive factor in strengthening cooperation at trans-boundary level has become the EU enlargement in the Baltic Sea region in 1995 and 2004 consequently. All littoral states except Russia had joined the EU by 2005. A partnership project "Northern Dimension" started in 1997 upon the initiative of Finland. The goal of this undertaking was to develop regional cooperation of the countries that geographically and politically belonged to the Northern Europe. Since that time the terms "Northern" and "Nordic" have reinforced the regional identity of the Baltic Sea interpreting the borders as a starting point of cross-border cooperation between adjacent areas (Tassinari et al., 2003:18-19).

Ten years later, one of the crucial afterwards of the EU enlargement became the adoption of a new strategy of the Baltic Sea Action Plan in November 2007. The main goals of the plan are the issue of eutrophication, the invasion of alien species, and the maintenance of biodiversity by means of reduction of nutrient discharges into the sea (HELCOM, 2007). The ultimate deletion of hot spots has to lead to a partial restoration of the ecosystem of the Baltic Sea and in its turn it may result in the formation of common environmental space within the Baltic area (HELCOM, 2009). BSAP together with the EU Strategy for the Baltic Sea Region have proved an effective mechanism of solving the environmental issues (Kern, 2011; VanDeveer, 2011). However, in the case of the deletion of the Baltic Sea hot spots the state remains an important if not a crucial actor (Kern & Löffelsend, 2008:135).

Separate state efforts to remove "hot spots" are not enough to create a completely new and good ecological space in the Baltic Sea (Kern 2011). In cross-border maritime territories the problem can be solved only by joint efforts (table 3). For example, the lack of up-to-date waste water treatment plant in Kaliningrad area is an urgent problem not only for the local authorities, but also for their neighbors - Denmark, Lithuania, Poland, and Sweden. The purification of the Gulf of Riga cannot be done by Latvia only. This problem can not be solved without the participation of Estonia, either. Cross-border projects such as "Project on Reduction of the Eutrophication of the Baltic Sea Today" (PRESTO) and "Emajoe-Pskov Water Management Project" (ELRI-13) rely on transnational subsidization, or loans from the European Bank for Reconstruction and Development (see also other examples Roginko, 1996: 37-38; Darst, 2001: 81-86). Thus, the purpose of the spatial division of hot spots is the elimination of environmental inequality among various sub-divisions of the Baltic Sea, and the creation of common and safe practices of the exploitation of the Baltic Sea catchment area.

Table 3. The Trans-Border Cooperation in Environmental Hot Spots Deletion in the Baltic Sea Catchment Area

Countries	Geographical location of hot spot according to HELCOM list	Type pollution	Project
Estonia/Russia	Gulf of Finland, Narva River Basin (# 25)	Treatment of municipal wastewater	ELRI-13
Estonia/Latvia	Gulf of Riga (# 36-37)	Agricultural runoff programme (Estonia)/Environmental management programme (Latvia)	Estonia-Latvia Programme, 2007-2013
Finland/Germany/Latvia /Lithuania/Belarus	Daugava River Basin (# 46-47)/Nemunas River Basin (# 51,61)/ Vistula River Basin (# 93)	Treatment of municipal and industrial wastewater	PRESTO
Lithuania/Russia	Kursiu Lagoon (# 66)	Environmental management programme	Action for the Reinforcement of the Transitional Waters' Environmental Integrity (ARTWEI)
Russia/Poland	Vistula Lagoon (# 73)	Environmental management programme	ARTWEI
Czech Republic/Poland	Odra River – Upper Basin (# 111)	Salt control	Czech Republic – Poland Programme, 2007-2013
Poland/Germany	Odra Lagoon (# 113)	Environmental management programme	ARTWEI
Denmark/Sweden	The Sound (# 123-125)	Agricultural runoff programme/Treatment of municipal wastewater	ARTWEI

Source: http://ec.europa.eu/regional_policy/cooperate/cooperation/index_en.cfm; http://www.territorialcooperation.eu/frontpage/show/7494

Mutual interest in trans-border interaction arises from regional inequality that differentiates the capacity of meeting EU Directives requirements. The Vision and Strategies around the Baltic (VASAB) Long Term Perspective (2009) specifies three main divisions of the Baltic Sea Region:

- The *east-west divide* – the former iron curtain – now reflects differences in prosperity and innovation performance.

- The *north-south divide* results from different climate conditions and is reflected in population density and related density in infrastructure.

- The *urban-rural divide* reflects different developmental perspectives and the importance of economies of agglomeration, resulting in differences in unemployment structure; age structure and migration patterns (Submarine Compendium 2012: 29-31).

The first divide has been an incentive for the development of trans-border cooperation over the hot spot deletion in the Baltic Sea while the other two respond to the socio-economic purposes and needs. The hierarchy in this case means the matter of the institutional development, financing, and the index of environmental concern (Roginko, 1996; Hermanson, 2008). The Western countries demonstrate their leading role in the process of the environmental transformation of the Baltic Sea while the former

Socialistic states have been regarded as a driven party requiring additional investments into out-of-date infrastructure from more affluent neighbors.

The east-west divide also exposes its difference through the extent of environmental activism and the political institutionalization of environmental concerns between the well-developed Western countries and the developing East European states (Kern, Joas and Jahn, 2008:216-217). This discrepancy is the main issue of the sustainable development of the Baltic Sea. The former Soviet countries have had far more modest resources to solve their ecological problems within the national borders of the Baltic Sea. It is not so much a question of the differences in standards of national wealth as of an insufficient development of human resources, organizational strengthening and the quality of the institutional reforms in East European countries (Van Deveer & Dabelko, 2001). During the 1990s, when the environmental movements in Lithuania, Latvia, Estonia and Poland were just beginning to be politically active, influential environmental organizations in Germany and Nordic countries already existed (Hermanson, 2008; Kontio & Kuitto, 2008). In order to equalize the existing discrepancy the EU has been promoting the transnational cooperation projects "Baltic Sea Region Programme, 2007-2013" through the European Neighbourhood Policy and Partnership Instrument. The project "PartiSEApate" ties together the natural and national space, contributing to coherent spatial development while "one space has to be planned at the pan-Baltic level" (The Baltic Sea Region Programme, 2012:34). Three of four priorities of the Baltic Sea Region Programme aim at creating common societal space of the Baltic Sea where a spatial organization produces the patterns of the sustainable development of the safe environment (table 4). However, the absence of Russia (though Belarus participates in PRESTO) in Baltic Sea Region Programme 2007-2013 and obvious narrowness of EST-LAT-RUS cross-border projects (http://www.estlatrus.eu/eng/projects/) demonstrate confined opportunities of EU and Russia to form common environmental space in the Baltic Sea region.

Table 4. Environmental Projects of the Baltic Sea Region Programme, 2010-2014

Project	Participating countries and duration	Goal	Priority
BSR InnoShip (Baltic Sea cooperation for reducing ship and port emissions through knowledge- and innovation-based competitiveness)	Denmark/Estonia/Finland/ Germany/Latvia/Lithuania/ Norway/Poland/Sweden *October 2010 – September 2013*	To become a model region for clean shipping; to reduce the use and impact of hazardous substances	#2 (Internal and external accessibility)
CleanShip (Clean Baltic Sea Shipping)	Denmark/Estonia/Finland/ Germany/Latvia/Lithuania/ Norway/Poland/Sweden *September 2010-September 2013*	To become a model region for clean shipping; to reduce the use and impact of hazardous substances	#2 (Internal and external accessibility)
BERAS (Baltic Ecological Recycling Agriculture and Society Implementation)	Belarus/Denmark/Estonia/ Finland/Germany/Latvia/ Lithuania/Poland/Sweden *September 2010-August 2013*	To reduce nutrient inputs to the sea to acceptable levels	#3 (Baltic Sea as a common resource)
Baltic Deal (Putting best agricultural practices into work)	Denmark/Estonia/Finland/ Latvia/Lithuania/Poland/ Sweden *September 2010-August 2013*	To reduce nutrient inputs to the sea to acceptable levels	#3 (Baltic Sea as a common resource)
SUBMARINER (Sustainable Uses of Baltic Marine Resources)	Denmark/Estonia/Finland/ Germany/Latvia/ Lithuania/Poland/Sweden *September 2010-August 2013*	To reduce nutrient inputs to the sea to acceptable levels; to preserve biodiversity	#3 (Baltic Sea as a common resource)
BALTADAPT (Baltic Sea Region Climate Change Adaptation Strategy)	Denmark/Estonia/Finland/ Germany/Latvia/ Lithuania/Sweden *September 2010-August 2013*	To mitigate and adapt to climate change	#3 (Baltic Sea as a common resource)
PRESTO (Project on reduction of the eutrophication of the Baltic Sea today)	Belarus/Finland/Germany/ Latvia/Lithuania *September 2011-March 2014*	To reduce nutrient inputs to the sea to acceptable levels	#3 (Baltic Sea as a common resource)
PartiSEApate (Multi-level Governance in Maritime Spatial Planning throughout the Baltic Sea Region)	Germany/Latvia/ Lithuania/Poland/Sweden *June 2012 – December 2014*	To encourage the use of Maritime Spatial Planning in all Member States around the Baltic Sea and develop a common approach for cross-border cooperation	#4 (Attractive and competitive cities and regions)

Source: Baltic Sea Region Programme, 2007-2013. http://eu.baltic.net/Approved_projects.4589.html

Societal Time and the Environmental Governance of the Baltic Sea

Societal time is a key resource for the planned transformation of the Baltic Sea environment. It differs from calendar time. The latter is an indication when an event occurs. According to Kellerman, societal time is "time of society"; it cannot be reduced to "the aggregate time of individuals within any given societal context" (Kellerman, 1989:101). The main difference between societal time and individual

time is the scale of perspective. In contrast to the individual time, societal time looks always into the future. Societal time indicates – if it is possible at all - the date by which one needs to solve the problem, as well as delocalizes the area where a disaster can happen (see Beck, 2006:333-334). In the case of the Baltic Sea region delocalization manifests itself in recognition of negative effects of pollution on all the countries of the Baltic Sea catchment area and their neighbors. The examples of these effects may be unsafe ship traffic or invasion of alien species. Societal time needs to transform nature by finite deadline. For example, a hot spot is socially constructed reality in a certain space - the Baltic Sea - and it has clearly defined a life cycle, 1992-2021 according to the BSAP and HELCOM reports. The calendar time framework is common for all countries, although they have different potentials to meet the requirements of this plan. The main distinction is the capacity of actors trying to turn to account the advantages of societal time to solve the same problem at the same span of time. Societal time on environmental issues presumes a well-defined plan of actions usually shared by several relevant actors. Such a blueprint for all stakeholders has been Baltic Sea Action Plan.

Societal time used to fulfill the designed targets can be exposed at several levels. The targets form a "progressive boundary", on which the division is associated with the perception and use of societal time (Hassner, 2002). Again, like societal space of the Baltic Sea region, societal time constitutes *hierarchal ordering*. It arranges societal time according to the main tiers of multi-level governance - supranational, national, regional and local (Hooghe & Marks, 2003:234). In the case of the governing of the Baltic Sea they appear to be HELCOM, EU, national, local, and cross-border ones. Societal time levels are built in vertical multi-level governance although all these levels could be regarded as "a horizontal shift of responsibilities from governmental actors/authorities towards non-governmental actors" (Eckerberg & Joas, 2004:407). Table 5 shows that the rigid schedule of the goals implementation stresses a leading role of the EU and HELCOM that designate the ultimate plans and deadlines to national and municipal authorities. All these deadlines are obligatory for the EU members except for ultimate date – 2021 which is proposed by HELCOM as a desirable goal to improve the conditions of the Baltic Sea. Nevertheless, 2021 as the final target is perceived by all littoral states as eventual since they should fulfill the aims of the EU Framework Directives between 2015 and 2020. So far as these goals coincide with HELCOM's vision of the sound status of the Baltic Sea by 2021, the deadlines set the consequent schedule to carry out all required measures. Hence, at the cross-border level the municipalities collaborate with the variety of the stakeholders to fulfill the goals of the EU Framework Directives and implement HELCOM recommendations at the borderland areas (see also tables 3 and 4).

Table 5. Societal Timeline of the Environmental Cooperation in the Baltic Sea Region

Level	Framework Document	Deadline
Regional (HELCOM)	Baltic Sea Action Plan	2021
EU	EU Strategy for the BSR as all-embracing document *EU Water Framework Directive* (WFD) *EU Marine Strategy Framework Directive* (MSFD)	 2015 2020
National	National Implementation Plan (NIP)	2016 (I) 2020 (II)
Municipal	NIP as well as WFD	2015
Cross-border	Baltic Sea Region Programme	2020

Regional level. The regional level, or HELCOM level is bringing all stakeholders taking part in the environmental rescue of the Baltic Sea together. HELCOM ties all littoral countries of the Baltic Sea region at this level. They form common regional identity striving to improve ecological conditions of the Baltic Sea. HELCOM defines the parameters of the interactions between all states of the region. The general frameworks for cooperation at the regional level are determined by the Baltic Sea Action Plan (BSAP) which was adopted by all the Baltic Sea states in 2007 including Russia. According to

this plan, the Baltic Sea should be discharged from the influence of the anthropogenic eutrophication by 2021 (http://www.helcom.fi/BSAP/en_GB/intro/). Thus, this level is the core of the successful actions at all other levels which are responsible for the implementation of BSAP.

The EU level. At EU level politicians and experts define the scope of societal time of the environmental policy in the Baltic Sea region. Therefore, it has an impact on all other levels. Since the last enlargement in 2004 the EU has taken all responsibilities for the environmental protection of the Baltic Sea, including eutrophication. The environmental policy of the EU set constraints of societal time to the Baltic region, as all the countries will have had to achieve high environmental standards in the areas of water and marine protection, air pollution control, and agricultural policy by 2015-2020.

Thus, the EU environmental policy has been the foundation for the Baltic Sea Action Plan. The latter is not binding for the littoral states, but the EU Framework Directives are. They compel the EU to pursue a policy of close cooperation with non-EU states, since it is necessary for the EU to implement the targets of the Water Framework Directives. The only possible solution is in the development of trans-border projects with Belarus, Russia and Ukraine aiming at drastic reduction of the nutrient load in the Baltic Sea catchment area. The goal of the various programs under the aegis of *the EU Neighbourhood Policy* and *Northern Dimension Environmental Partnership* is to involve the non-EU countries (Belarus, Ukraine, and Russia) into EU environmental policy, which aims to achieve good status of the marine waters by 2020. But the success of such cooperation does not only depend on a generous funding. In order to synchronize differences in the use of societal time in the sphere of the environmental policy, it is necessary to adopt the general plan for all the countries of the Baltic Sea catchment area. This agenda is EU strategy for the Baltic Sea region which was approved by the European Council in 2009.

National level. In order to achieve a common goal by the specified time the Baltic Sea Action Plan impels all littoral states to elaborate the National Implementation Programmes by 2010. The ultimate HELCOM objective will target in 2020 when all the Baltic Sea countries and especially the states in transition decrease the emission of the hazardous substances (http://www.helcom.fi/Recommendations/en_GB/rec19_5/?u4.highlight=2020). The more a country implements HELCOM recommendations, the less societal time it has if compared to the countries that have fulfilled the necessary regulations.

As for the countries with the developed economy - Germany, Denmark, Sweden, Finland - the main problem for them is not so much the embodiment of innovations, reducing harmful emissions into the sea, but making consensus decisions. Theoretically, the latter should be suitable both for the government bodies and NGOs, on the one hand, and the economic interests of the business, on the other hand. Tight requirements designed by HELCOM, are beneficial for the environment, whilst in some cases they worsen competitiveness of some sectors of economy, especially, agriculture (Pihlajamäki & Tynkkynen, 2011:93,99,105).

Municipal level. All these difficulties in coordinating the national plans are directly related to their implementation at the municipal level. Here the perception of societal time differs from that at the two previous levels. Since every national implementation plan has a deadline to which all the planned activities should be completed, the municipalities are supposed to be the first to meet the requirements of national programs of reducing harmful emissions into the sea. In spite of a great variety of these plans, according to both its contents and structure, 2015 is the definitive year for all EU states at the municipal level (Pihlajamäki & Tynkkynen, 2011:26, 58, 76). According to that schedule all countries are defined to propose the implementation of the main goals on the water protection by 2015.

Consequently, the municipalities interested in the implementation of HELCOM recommendations may suffer from more rigid restrictions in the use of societal time. This means less time-lag for the implementation of HELCOM requirements. In other words, the municipalities should fulfill all measures of the national plan earlier than by 2020. The constraints of societal time also imply other significant limitations: economic, infrastructural, political, etc. For example, the Russian political

system is characterized by the huge dependence of the municipalities on the Federal Government. The regions' financial dependency and the local authorities' inability to use target investments effectively raise doubts as to the capacity of Russia to use societal time at the municipal level properly (VanDeveer & Dabelko, 2001; Pihlajamäki & Tynkkynen, 2011:54).

Cross-border level. This level implies at least two tiers of cooperation. First of all, a cross-border level means coordinated interaction between two or more different states. In the 1990s Agenda 21 pushed forward the harmonized measures on the protection of both the catchment area and the Baltic Sea waters. The examples of such cooperation nowadays are shown above in table 3. The main urgent issue complicating the efficacy of cross-border reciprocal ventures is the potential difference in the capacity of the states to achieve the same results within the same time framework. This problem is especially exposed at the municipal tier and means inequality in ability of the neighboring municipalities (at least one of them) to use societal time skillfully to transform the common environment. Indeed, such cooperation transcends national borders, but it is often powerless before the economic and political obstacles that prevent them from successful interaction. An example of such inefficient collaboration is the project ARTWEI (see table 3). Because of different administrative and legal systems in Poland, Lithuania and Russia, the local municipalities could achieve the mutual cooperation and success only in some limited area such as GIS mapping. At the same time a bulk of trans-border issues have been remaining unresolved, i.e., the common management of the lagoons (http://www.balticlagoons.net/artwei/). As a result, societal time has not only "positive constraints", forcing the stakeholders to carry out all the necessary recommendations, but also negative ones, limiting their full accomplishment.

Conclusions

The environmental concern of the Baltic Sea has revealed the necessity of multi-level governance when responsibility is shared between the various actors - NGOs, municipalities, supranational bodies like the EU, HELCOM, or international finance institutions like NEFCO, EBRD. The governance of shared watersheds is a challenge to adjacent national states and local municipalities. More economically developed and environmentally advanced countries could not isolate themselves from their neighbors polluting adjoining territories even more. Pollution from a neighbour state reaches the other shore anyway not only by water, but by air, animal, food, etc. The negative impact of nature degradation of the Baltic Sea region economy is also an important reason to develop trans-boundary and cross-border cooperation. Joint efforts for solution of the environmental problems help to enhance the region's competitiveness at the global scale.

The perception of hot spots as a threat to sustainable development of the Baltic Sea has formed a new view on the environmental space as a dynamic reality in time. Indeed, hot spots construct a specific timing-spacing homology when time is used "as a means to the pattering of space" (Kellerman, 1989:28). Space is regarded to be a politico-social object, which should be subjected to transformation. In practice, this is a partial conversion, ideally it should be total, because each element of planning (agriculture, energy, maritime traffic, extensive urban development, etc.) may have a negative impact on the environment. New treatment practices with the environment of the Baltic Sea region - agricultural practices, recycling practices, reducing emissions from shipping, etc. - have been leading to more intensive *spatio-temporal specification* of the environmental policy at all levels: the EU, regional, national, municipal, and cross-border. Removal of hot spots is a complex project and, therefore, requires interaction of many different stakeholders. This has led to the development of multi-level governance especially at cross-border level when the stakeholders share the responsibility to fill a discrepancy gap between the neighboring areas. As a result, new patterns of spatial governance in the Baltic Sea region have started their formation inside the framework of multi-level governance since the 1990s. Transnationalization and Europeanization have become the main trends of spatial planning in the EU states, while Russia has continued relying on the former Soviet practices to improve the ecological conditions of the national part of the Baltic Sea catchment area.

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