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**THE BLACK SEA ENVIRONMENTAL REGIME:  
CHALLENGES & OPPORTUNITIES**

**A THESIS SUBMITTED TO  
THE GRADUATE SCHOOL OF SOCIAL SCIENCES  
OF  
MIDDLE EAST TECHNICAL UNIVERSITY**

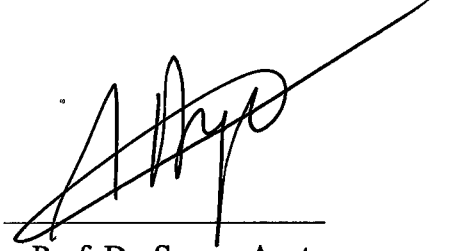
**BY**

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**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
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IN  
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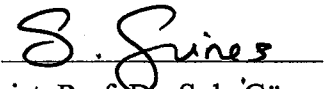
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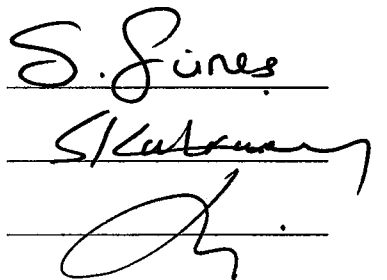
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## **ABSTRACT**

### **THE BLACK SEA ENVIRONMENTAL REGIME: CHALLENGES AND OPPORTUNITIES**

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This thesis aims to analyze the Black Sea environmental regime, which consists of three main parts. The first part of the study, after a general introduction to the environmental aspect of international politics, puts forward the regime formation in the field of environment and the development of global and regional environmental policy and law for the protection of coastal and marine environments. The second part firstly describes the peculiar characteristics and the environmental problems of the Black Sea. Secondly, it analyzes the disintegrative and integrative motives behind the establishment of the regime. Lastly, the legal, institutional and financial framework of the regime together with the role of international donors in the Region are put forward. The third part identifies the challenges affecting the functioning of the regime as well as the opportunities for the future of the Black Sea.

The main concern of this study is to have an insight of the Black Sea environmental regime to see whether the regime has been functioning sustainably to enable the protection of the Black Sea and the recovery of its ecosystem.

Keywords: environmental regimes, Black Sea, Bucharest Convention, European Union, Danube river.

## **ÖZ**

### **KARADENİZ ÇEVRE REJİMİ: ZORLUKLAR VE FIRSATLAR**

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Üç ana bölümden oluşan bu tez, Karadeniz çevre rejimini incelemektedir. Birinci bölümde, uluslararası politikanın çevresel boyutu hakkında genel bir giriş yapıldıktan sonra, çevre alanında rejimlerin oluşumu ve kıyı ve deniz çevresinin korunmasına yönelik küresel ve bölgesel politika ve hukukun gelişimi ortaya konulmaktadır. İkinci bölümde, öncelikli olarak Karadeniz'in özellikleri ve çevre problemleri tanımlanmaktadır. İkinci olarak, rejim oluşumunu engelleyen nedenler ile oluşumunu sağlayıcı etkenler analiz edilmektedir. Son olarak rejimin yasal, kurumsal ve mali çerçevesi donörlerin bölgedeki girişimleri ile birlikte incelenmektedir. Üçüncü bölüm rejimin faaliyet göstermesini etkileyen zorluklar ile Karadeniz'in geleceği için fırsatları ortaya koymaktadır.

Bu çalışmanın temel amacı, Karadeniz çevre rejiminin Karadeniz'in korunması ve ekosisteminin iyileştirilmesini sağlamak üzere sürdürülebilir olup olmadığını kavramaktır.

Anahtar Kelimeler: çevre rejimleri, Karadeniz, Bükreş Sözleşmesi, Avrupa Birliği, Tuna Nehri.

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## **LIST OF ABBREVIATIONS**

|                          |                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------|
| <b>AG on CBD</b>         | <b>Advisory Group on the Conservation of Biological Diversity</b>                                        |
| <b>AG on ESAS</b>        | <b>Advisory Group on the Environmental Safety Aspects of Shipping</b>                                    |
| <b>AG on FOMLR</b>       | <b>Advisory Group on Environmental Aspects of Fisheries and Other Marine Living Resources Management</b> |
| <b>AG on ICZM</b>        | <b>Advisory Group on the Development of Common Methodologies for ICZM</b>                                |
| <b>AG on LBS</b>         | <b>Advisory Group on Control of Pollution from Land Based Sources</b>                                    |
| <b>AG on PMA</b>         | <b>Advisory Group on Pollution Monitoring and Assessment</b>                                             |
| <b>AIOC</b>              | <b>Azerbaijan International Operating Company</b>                                                        |
| <b>AMBO</b>              | <b>Albania-Macedonia-Bulgaria Oil Pipeline</b>                                                           |
| <b>BSEC</b>              | <b>Black Sea Economic Cooperation</b>                                                                    |
| <b>BSEP</b>              | <b>Black Sea Environmental Programme</b>                                                                 |
| <b>BSERP</b>             | <b>Black Sea Ecosystem Recovery Project</b>                                                              |
| <b>BSIMAP</b>            | <b>Black Sea Integrated Monitoring and Assessment System</b>                                             |
| <b>BTC</b>               | <b>Baku-Tbilisi-Ceyhan Oil Pipeline</b>                                                                  |
| <b>CFC</b>               | <b>Chlorofluorocarbon</b>                                                                                |
| <b>CPC</b>               | <b>Caspian Pipeline Consortium Project</b>                                                               |
| <b>CSD</b>               | <b>Commission on Sustainable Development</b>                                                             |
| <b>DABLAS Task Force</b> | <b>Danube - Black Sea Task Force</b>                                                                     |
| <b>EAP</b>               | <b>Environmental Action Program</b>                                                                      |
| <b>EC</b>                | <b>European Community</b>                                                                                |
| <b>EIA</b>               | <b>Environmental Impact Assessment</b>                                                                   |
| <b>EU</b>                | <b>European Union</b>                                                                                    |
| <b>FRG</b>               | <b>Federal Republic of Germany</b>                                                                       |
| <b>GDP</b>               | <b>Gross Domestic Product</b>                                                                            |

|                     |                                                                                                                    |
|---------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>GEF</b>          | <b>Global Environmental Facility</b>                                                                               |
| <b>GIS</b>          | <b>Geographic Information Systems</b>                                                                              |
| <b>GPA</b>          | <b>Global Programme of Action for the Protection of the Marine Environment from Land based Activities</b>          |
| <b>EEZ</b>          | <b>Exclusive Economic Zone</b>                                                                                     |
| <b>ICPDR</b>        | <b>International Commission for the Protection of the Danube River</b>                                             |
| <b>ICZM</b>         | <b>Integrated Coastal Zone Management</b>                                                                          |
| <b>IFIs</b>         | <b>International Financial Institutions</b>                                                                        |
| <b>IGO</b>          | <b>Intergovernmental Organization</b>                                                                              |
| <b>IMF</b>          | <b>International Monetary Union</b>                                                                                |
| <b>IMO</b>          | <b>International Maritime Organization</b>                                                                         |
| <b>IO</b>           | <b>International Organization</b>                                                                                  |
| <b>ISPA</b>         | <b>Instrument for Structural Policies for Pre-accession</b>                                                        |
| <b>JPMG</b>         | <b>Joint Project Management Group</b>                                                                              |
| <b>MAP</b>          | <b>Mediterranean Action Plan</b>                                                                                   |
| <b>MoU</b>          | <b>Memorandum of Understanding</b>                                                                                 |
| <b>NATO</b>         | <b>North Atlantic Treaty Organization</b>                                                                          |
| <b>NGO</b>          | <b>Non-governmental Organization</b>                                                                               |
| <b>NIS</b>          | <b>Newly Independent States</b>                                                                                    |
| <b>OECD</b>         | <b>Organization for Economic Cooperation and Development</b>                                                       |
| <b>PCU</b>          | <b>Project Coordination Unit</b>                                                                                   |
| <b>PIU</b>          | <b>Project Implementation Unit</b>                                                                                 |
| <b>RAC</b>          | <b>Regional Activity Center</b>                                                                                    |
| <b>RAC on CBD</b>   | <b>Regional Activity Center on Conservation of Biological Diversity</b>                                            |
| <b>RAC on ESAS</b>  | <b>Regional Activity Center on Environmental Safety Aspects of Shipping</b>                                        |
| <b>RAC on FOMLR</b> | <b>Regional Activity Center on Environmental Aspects of Fisheries and Other Marine Living Resources Management</b> |
| <b>RAC on ICZM</b>  | <b>Regional Activity Center on Development of Common Methodologies for ICZM</b>                                    |
| <b>RAC on LBS</b>   | <b>Regional Activity Center on Control of Pollution from Land</b>                                                  |

#### **Based Sources**

|                   |                                                                        |
|-------------------|------------------------------------------------------------------------|
| <b>RAC on PMA</b> | <b>Regional Activity Center on Pollution Monitoring and Assessment</b> |
| <b>SEA</b>        | <b>Single European Act</b>                                             |
| <b>TDA</b>        | <b>Transboundary Diagnostic Analysis</b>                               |
| <b>UK</b>         | <b>United Kingdom</b>                                                  |
| <b>UN</b>         | <b>United Nations</b>                                                  |
| <b>UNCLOS</b>     | <b>United Nations Convention on Law of the Sea, 1982</b>               |
| <b>UNDP</b>       | <b>United Nations Development Programme</b>                            |
| <b>UNEP</b>       | <b>United Nations Environment Programme</b>                            |
| <b>USA</b>        | <b>United States of America</b>                                        |
| <b>USD</b>        | <b>United States Dollar</b>                                            |
| <b>USSR</b>       | <b>Union of Soviet Socialist Republics</b>                             |
| <b>WB</b>         | <b>World Bank</b>                                                      |
| <b>WFD</b>        | <b>Water Framework Directive</b>                                       |

## **INTRODUCTION**

Environmental problems constitute a distinctive category of issues in international system in which there is absence of a world government and presence of more than 180 nation-states, each claiming sovereignty over the resources and the activities within their territories, thereby having the exclusive authority within their territorial boundaries.

As cross-border industrial pollution, degradation of shared rivers, pollution of adjacent rivers have become apparent and number and scope of transboundary environmental problems have increased and globalized more than ever, territorial boundaries of the states are eroded by those problems. No nation can go alone in a world where pollutants, whether acid rain or greenhouse gases, recognize no frontiers. This amounts to a great change for the nation-state system since its emergence. No nation can shield itself from diverse impacts of environmental degradation in other territories. States, which are economically the largest, technologically the most advanced and militarily the most powerful, cannot isolate themselves from many environmental problems. There are environmental problems to which all nations contribute and by which all will be affected. Unilateral actions of the nation-states cannot address increasing number of transboundary environmental problems.

Since there is not a global authority to manage the interdependent ecosystem, nation-states had involved in cooperative activities to manage their environment before 1970s, whose scope was however limited. It was after early 1970s, in which a global gathering was held to take the attention of the governments and other stakeholders to the seriousness of the environmental degradation in the world, the environment has become the subject of international politics and an important issue to be dealt in cooperation and collaboration with all states.

Since 1970s, regimes have come out as descriptive devices for explanation of international collaboration in solving global environmental problems in an international system of sovereign states with defined boundaries. Regimes have addressed ecological interdependence versus state sovereignty dilemma and are used to explain the cooperative efforts between nation-states. They are established to address common environmental problems and to manage the ecosystem, which cannot be addressed by unilateral action. Following 1970s, cooperation in the field of environment has accelerated, which has led to establishment of a large number of environmental regimes.

Marine environments are interdependent ecosystems whose environmental problems' management necessitates cooperation as well. One of the prioritized area in the field of environment was to control marine pollution for which international law was evolved before 1970s. However it was after the incorporation of the issue of environment into the United Nation (UN) system, the marine environment has started to be managed in a coordinated manner at international level. The initiation of Regional Seas Program of United Nations Environment Program (UNEP) in 1974 with the aim of managing the marine environments in a regional scale, and accelerated studies of International Maritime Organization (IMO) with the aim of regulating the marine pollution at international level, have lead to development of international environmental policy and law and establishment of regimes for managing marine environments.

Today, marine environments together with adjacent coasts are managed at international as well as regional levels under regimes, one of which is the Black Sea environmental regime aiming to protect the Black Sea marine and coastal environment and enable its recovery. The coastal states of the Black Sea cooperated with a view to eliminate the environmental problems of the Sea, which is not possible to do with unilateral action.

This thesis will analyze the Black Sea environmental regime, which deserves particular attention when the seriousness of its environmental problems, which are exacerbated with its unique peculiarities, are taken into account. The environmental

problems in the Black Sea was at such levels that it was regarded as one of the dirtiest seas in the world. The sixteen years lag between the initiation of the first regional seas regime in Mediterranean, established in 1976 for managing its marine environment, and the establishment of the Black Sea environmental regime, made the Black Sea much more vulnerable to pollution. More than ten years has passed since the establishment of the regime, which is considered to be sufficient to assess it.

The first chapter of the thesis gives the general framework on the issue of environment in international politics. The development of the international environmental politics is given in a historical framework. The regimes and the motives behind the establishment of environmental regimes are analyzed through several regime theories. The development of international environmental policy and law for the protection of marine and coastal environment together with the regional patterns are put forward.

The second chapter examines the framework of the regime in general with detailed analysis of its components. Firstly, after putting forward the geographical and physical characteristics of the Black Sea, environmental problems of the Sea are defined. Secondly, the chapter searches for the disintegrative factors that hampered the establishment of a regime in the Black Sea till early 1990s and then assesses the integrative forces, which led to its establishment after a long delay. Thirdly, the legal instruments including the Convention and its Protocols, which formed the basis of the regime, together with the policy tools including the action plan that set the Black Sea States to action, are examined. The Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention)<sup>1</sup> together with its Protocols as the first track of the regime, and the Ministerial Declaration on the Protection of the Black Sea (Odessa Declaration)<sup>2</sup> together with the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea (BS-SAP)<sup>3</sup> as the second track of the regime, are analyzed in detail. Then, financial and technical support of international

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<sup>1</sup> hereinafter referred to as "Bucharest Convention".

<sup>2</sup> hereinafter referred to as "Odessa Declaration".

<sup>3</sup> hereinafter referred to as "BS-SAP".

donors in particular the active involvement of Global Environmental Facility (GEF), which led to formation of the basis of the regime so as to enable its further development, and the mechanism, established for the functioning of donor support under the Black Sea environmental regime, are examined. The institutional design for the management of the regime is put forward. Lastly, the financial framework of the regime is drawn. All of these analyses are made to give the background information about the Black Sea environmental regime, which will form the basis in the assessment of its challenges and opportunities.

The third chapter firstly analyzes the challenges affecting the full functioning of the regime. The first challenge is considered as the financial problems of the regime, which constraints implementation of the Convention and its Protocol and realization of the policy actions, defined by BS-SAP at the national and regional levels. The other challenge is related with the functioning of the institutional mechanism including the Secretariat and the Activity Centers. Another group of challenges is considered as the weak political support given by the Black Sea States to the regime. Unavailability of data and information, presence of a poor a reporting mechanism, language of correspondence and poor communication are the other group of challenges affecting the functioning of the regime, which in turn hampers elimination of the environmental problems of the Black Sea. Lastly, less flexible rules of the regime are considered as a limiting factor for its effective functioning. Ability of the rules to cope with rapid changes, rules of decision-making, presence of reservations in the treaties and arrangements for non-compliance have considered to have impact on the flexibility of the regime.

Secondly, the third chapter puts forward the opportunities for the future of the Black Sea, which can enable to handle the challenges of the regime. The cooperation established between Danube countries and Black Sea States is regarded as an opportunity in the alleviation of several environmental problems of the Black Sea, which cannot be overcome without cooperation with Danube countries. The response of the regime to the developments in the international environmental policy, adoption of new legal instruments and participation of the Black Sea States to the global environmental agreements are regarded as the opportunities for the regime. The

continuing support of GEF and increasing role of European Union (EU) in the Black Sea are considered as crucial opportunities in enabling the functioning of the regime, which in turn will be addressing the environmental problems of the Black Sea.



## **CHAPTER 1**

### **THE ISSUE OF ENVIRONMENT IN INTERNATIONAL POLITICS AND THE POLICY-MAKING IN MARINE AND COASTAL ENVIRONMENT**

#### **1.1 Protection and Preservation of the Environment at International Level**

Today environment is one of the significant issues of international politics due to increase in the number and scope of environmental problems, rise in the scientific understanding of the global environmental issues and evolvement of environmental movements in variety of countries. However, the management of environment is very complicated and complex due to the increasing number of actors involved in the process, the specific features of the environment and the character of international legal order.

The nation-states are the primary actors in the management of environmental issues, thereby shaping the international environmental politics. Only states can negotiate agreements, can be parties to them as well as responsible from implementation and enforcement of those defined rules and norms. They can have a lead role for the establishment of new environmental regimes as well as can impede the cooperative actions.<sup>4</sup> Together with the nation-states, international organizations (IOs) and nongovernmental organizations (NGOs) have been playing important role in issues related to environmental problems, which have grown after the Second World War.<sup>5</sup> These actors are shaping the global environmental politics along with the nation-states. IOs can set agenda for global action, influence negotiations and state policies,

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<sup>4</sup> Gareth Porter and Janet W. Brown, *Global Environmental Politics* (USA: Westview Press, 1996), p.32.

<sup>5</sup> John McCormick, "The Role of Environmental NGOs in International Regimes", Norman. J. Vig and Regina .S. Axelrod (eds.), *The Global Environment: Institutions, Law and Policy*, (USA: Congressional Quarterly, 1999), p.55.

and develop code of conducts.<sup>6</sup> NGOs can mobilize public and affect decision-making, lobby international negotiations, monitor implementation of conventions, influence global agenda and propose texts of conventions. Even though NGOs are not involved at the decision-making process, they can influence outcomes of the global bargaining as well.<sup>7</sup> There are also multilateral financial institutions and multinational companies, which affect the global environmental politics. Multilateral financial institutions through their lending policies can contribute to realization of environmentally sound projects.<sup>8</sup>

Apart from these actors, members of the epistemic community also play a significant role. Biologists, chemists, doctors, ecologists, economists, sociologists and lawyers are involved in elaboration and implementation of environmental policy and law.<sup>9</sup> In this respect, there exists a large number of actors with an increasing role in shaping the management of environment at international level.

The other feature, which affects the management of the environment, is the dynamic character of the problems and the lack of scientific certainty. Even today, ecological processes are not known in detail and with definite scientific knowledge. There is a great difficulty in identification of the environmental problems, responsible actors and the degree of their relevance as well as the costs of alternative policy responses. Due to the complexity of natural systems, scientists have great difficulty in sorting out which actions account for which outcomes. A range of human activity might contribute to a certain environmental problem. Due to the uncertainty and dynamism present in the environmental issues, environmental agreements are arranged in a flexible manner in order to adapt itself to these changes. The rigid and detailed sets of rules are not preferred in the environmental policy-making, instead multilateral rule-making frameworks are made as flexible as possible to be able to respond to these changes.

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<sup>6</sup> Porter and Brown, *Global Environmental Politics*, p.41.

<sup>7</sup> Ibid., p.54.

<sup>8</sup> Ibid., p.60.

<sup>9</sup> Alexandre Kiss and Dinah Shelton, *International Environmental Law*, (Graham and Trotman, 1991), p.4.

Interdependency of the ecosystem is the other feature of environment. Neither the oceans, nor the atmosphere have boundaries. This ecological interdependence poses a fundamental challenge to the existing international legal order with more than 180 nation-states each claiming sovereignty over its territory and natural resources and, is free to act within its national jurisdiction. However, the components of environment including land, air and water are interdependent.<sup>10</sup> It is not possible to divide the oceans or the atmosphere into boundaries. In this regard, the management of environment necessitates an integrated and collaborative approach.<sup>11</sup>

The contribution of countries to a specific problem and benefits to be obtained by a regulation changes from one country to another. The country that has the highest level of contribution to the problem might be the one who will not be benefiting from the policy responses, therefore will be reluctant to participate in a cooperative action. On the other hand, the country that does not contribute to the problem might be the one who will benefit more from the cooperative policy actions for the solution of that particular environmental problem.<sup>12</sup>

Global environmental problems such as ozone depletion, acid rain, climate change, loss of biodiversity and desertification affect all the human kind. The global character of the environmental problems increases the interdependency, thereby necessitates cooperation between all nation-states, since no nation can escape from adverse impacts of environmental problems regardless of its economic or military capacities. Since there is no supranational authority to manage global environmental problems, cooperation among nation-states appears as the key solution in a world of sovereign nation states.

The roots of international cooperative efforts in the field of environment dates back to 1880s. It was after the establishment of UN in 1945, the cooperation at international level was accelerated by adoption of several multilateral environmental

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<sup>10</sup> Kiss and Shelton, *International Environmental Law*, p.4.

<sup>11</sup> Porter and Brown, *Global Environmental Politics*, p.7.

<sup>12</sup> Andrew Hurrell and Benedict Kingsbury, *The International Politics of the Environment: Actors, Interests and Institutions*, (Oxford: Clarendon Press, 1992), pp.13-14.

treaties. However, they were limited both in scope and number and mainly focused on narrowly defined ecological problems such as prevention of certain types of pollution, in particular maritime pollution and conservation of specific species. Even though UN was established with a broader mission than that of League of Nations, the Charter of the UN does not contain any article on human environment. There were no major international organizations specifically dealing with environmental issues and environment was only a supplementary issue dealt by some Intergovernmental Organizations (IGOs) of those times besides their central mission on transport, labor, weather, health, resources, energy and science. The public concern and interest about environmental degradation and demand for international cooperation hadn't grown at desired levels during those years.

The period before early 1970s were the beginning of emergence of environmental NGOs in Europe and North America. The environmental problems were within state borders rather than across the states so that the solutions for environmental problems were confined to states. Generally speaking, the environment was neither one of the central issue area in international politics, nor an area for a broader co-operation in international system. In other words, environmental issues were fragmented, sectoral, limited and decentralized.<sup>13</sup>

The surge for environmental concern to be solved at international level rather than national first came from the developed world. On a proposal from Sweden, the UN Conference on Human Environment (Stockholm Conference)<sup>14</sup>, held in Stockholm between 5-16 June 1972, marked the beginning of a new era in terms of legitimization of the environment in the international politics.<sup>15</sup> The Conference led to a shift in the view of an unlimited earth, which is created for man's exclusive use to a view of the earth as a domain of life, in which mankind is temporary.<sup>16</sup> It raised

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<sup>13</sup> Marvin S. Soroos, "Global Institutions and the Environment: An Evolutionary Perspective", Norman J. Vig and Regina S. Axelrod (eds.), *The Global Environment: Institutions, Law and Policy*, (USA: Congressional Quarterly, 1999), p.30.

<sup>14</sup> hereinafter referred to as "Stockholm Conference".

<sup>15</sup> Lynton K. Caldwell, *International Environmental Policy: From the Twentieth to the Twenty-First Century*, (London: Duke University Press, 1996), p.78.

<sup>16</sup> Ibid., p.48.

the issue of environment as a study area in international relations as well as opened the way for broader cooperation at the international level in solving environmental problems. The Stockholm Conference is the first global gathering with the participation of 114 governments, more than 400 NGOs and IGOs that addressed specifically the environmental problems with a view to solve them through cooperation and agreement at the international level.<sup>17</sup>

The Stockholm Conference was initially designed to focus on environmental concerns of developed countries, into which later the development concerns of the developing world was also integrated. The Conference revealed that the developing countries had a different set of priorities. Instead of accepting to prioritize protection of the environment, they emphasized economic development and alleviation of poverty. The environmental agenda raised by the developed world was seen as a new way of colonialism, in other words, an obstacle on the road to their development. The developing world was not willing to involve in an engagement that would not take into account their development concerns. The other diverging view that came out in the Conference was in their definition of the sources of environmental problems. While the developed world perceived the high population growth in the developing world as the driving force for looming environmental crisis, the developing world complained about the consumption based lifestyles of the developed ones, which was considered as the main cause for today's environmental problems.<sup>18</sup>

Despite its failure in terms of responding to the environmental problems of developed world and the demands of the developing world, the Stockholm Conference was a success for its effect of placing the environment as a whole on the UN's agenda and into the international environmental politics. In this regard, the Conference is considered as a watershed in the history of international environmental politics. It provided a forum for the countries to debate over "environment" and helped the development of international environmental policy and law.<sup>19</sup>

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<sup>17</sup> Lorraine Elliott, *The Global Politics of the Environment*, (London: Macmillan Press, 1998), p.12.

<sup>18</sup> Soroos, "Global Institutions and the Environment", p.32.

<sup>19</sup> Elliott, *The Global Politics of the Environment*, p.13.

Furthermore, it changed the previous perception of environmental issues and restrictive concepts of national sovereignty.<sup>20</sup>

Even though the Stockholm Conference didn't end up with binding treaties, three soft law instruments including the "Action Plan for the Human Environment" setting forth 109 recommendations, the Declaration of the UN Conference on the Human Environment (Stockholm Declaration)<sup>21</sup> with 26 Guiding Principles and a Resolution on Institutional and Financial Arrangements was adopted.<sup>22</sup> These instruments are significant as today they are regarded as the most important sources of soft international environmental law. One of the other output of the Conference is the creation of UNEP in the same year as the focal point for UN programs in the field of environment with a view to coordinate environmental activities and programs.<sup>23</sup> Today, UNEP has a wide-ranging and important role in the environmental policy-making at the global level and is contributing to the development of international environmental law. It was because the developed world was cautious about substantial funding and developing world was not willing to accept an institution that will hamper their development, UNEP is established as a coordinator programme instead of being a UN specialized agency.<sup>24</sup>

Unfortunately, the increasing concern for environment, which was at its peak in the early 1970s, entered into a declining period in the late 1970s at when the environmental problems tried to be tackled in a fragmented and uncoordinated way within the UN system. Despite developing world's insistence on linking the two overarching priorities, the environment and development, they were dealt within different tracks.<sup>25</sup>

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<sup>20</sup> Caldwell, *International Environmental Policy*, p.63, 78.

<sup>21</sup> hereinafter referred to as "Stockholm Declaration".

<sup>22</sup> Soroos, "Global Institutions and the Environment", p.31.

<sup>23</sup> Caldwell, *International Environmental Policy*, p.78.

<sup>24</sup> Soroos, "Global Institutions and the Environment", p.31.

<sup>25</sup> Ibid., p.33.

The ten-year review of the Stockholm Conference didn't come up with promising results about the actions taken by the states. In order to look for possible ways for the international community to take bigger steps towards environmental protection, the World Commission on Environment and Development was established in 1983, which published the Brundtland Report "Our Common Future", one of the most significant documents related to environmental issues yet published.<sup>26</sup> The Brundtland Report for the first time called for "sustainable development"<sup>27</sup> upon which the second important global gathering, UN Conference on Environment and Development (Rio Conference)<sup>28</sup>, was based. The Brundtland Report is notable for recognizing the poverty and underdevelopment in developing countries, in which it was argued that environmental protection can be possible if the poverty through sustainable economic growth and the gap between rich and poor countries in consumption of earth's limited resources are reduced.<sup>29</sup>

However, even though states were not successful in addressing environmental problems after Stockholm Conference, scientific knowledge about environmental degradation developed in post-Stockholm period. The awareness of the public on environmental issues and the number, activities and expertise of NGOs increased. A number of international environmental conferences were convened. Additional environmental projects were carried out by the several UN specialized agencies. Furthermore, a solid body of international multilateral agreements was adopted.<sup>30</sup>

In late 1980s, the environmental problems were no more defined as national with the problems of depletion of stratospheric ozone layer, climate change, rapid shrinkage of tropical rain forests, loss of biological diversity, desertification and decline of

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<sup>26</sup> Lee-Anne Broadhead, *International Environmental Politics: The Limits of Green Diplomacy*, (USA: Lynne Rienner Publishers, 2002), pp.40-41.

<sup>27</sup> Sustainable Development is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Sustainable development is based on three pillars one of which is economic development, the other is social development and the last pillar is environmental protection.

<sup>28</sup> hereinafter referred to as "Rio Conference".

<sup>29</sup> World Commission on Environment and Development, *Our Common Future*, (New York: Oxford University Press, 1987).

<sup>30</sup> Elliott, *The Global Politics of the Environment*, pp.14-16.

marine fisheries, all of which are characterized as global. It was recognized that they must be solved at the global level through cooperation.<sup>31</sup> UN, by its a number of resolutions, expressed the global impact of environmental degradation that was exacerbated due to the unsustainable patterns of production and consumption particularly in developed world and the high population growth in the developing ones.<sup>32</sup>

The Rio Conference, which was convened in Rio de Janeiro between 3-14 June 1992, is considered as a landmark in the international environmental policy. The Conference led to a shift in understanding of the environment. It was emphasized that economical development, social development and environmental protection are in relation with each other and while addressing one the other should be taken into account. It is a theological shift in perception of the environment from protection oriented approach to sustainable development approach under which framework environmental protection will be treated. The Conference is also called as Earth Summit due to the broad participation from 178 governments as well as NGOs who involved in the process from the start. The role of NGOs in their efforts on greening the major global economic institutions like International Monetary Union (IMF) and World Bank (WB) deserves particular attention, which are criticized for not integrating environmental concerns into their polices and loan programs and for providing credits, which in turn have a catastrophic damage on environment.<sup>33</sup>

The Conference ended up with two significant binding global treaties including UN Framework Convention on Climate Change and Convention on Biological Diversity together with three soft law instruments including the Rio Declaration on Environment and Development (Rio Declaration)<sup>34</sup> with 27 principles, the Forest Principles and a forty chapters long action program called Agenda 21.<sup>35</sup> Instead of

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<sup>31</sup> Soroos, "Global Institutions and the Environment", p.33.

<sup>32</sup> Elliott, *The Global Politics of the Environment*, pp.16-17.

<sup>33</sup> Soroos, "Global Institutions and the Environment", p.34.

<sup>34</sup> hereinafter referred to as "Rio Declaration".

<sup>35</sup> Caldwell, *International Environmental Policy*, p.105.

making UNEP responsible for the implementation of Agenda 21, the Rio Conference created the Commission on Sustainable Development (CSD) for this specific task. GEF<sup>36</sup>, which was established very before the Rio Conference for dispersing funding for environmental projects in developing countries, complemented the outputs of the Conference in terms of converting the commitments laid down by Agenda 21 into action. In line with rising Rio topics, GEF funds were initially targeted four focal areas including biodiversity, climate change, international waters, and ozone layer depletion<sup>37</sup>, into which recently land degradation and persistent organic pollutants are incorporated.<sup>38</sup>

Due to increasing number of globalized environmental problems, in particular global climate change and ozone layer depletion, the Rio Conference led to a shift in the understanding of the states from their traditional interpretation of inviolable sovereignty to the permeability of jurisdictional boundaries. For the effective implementation of Agenda 21, the need for action at all levels of government was emphasized in safeguarding the earth.<sup>39</sup> In the Conference, states committed to implement the actions defined under Agenda 21.

However, the special session of the UN General Assembly, convened in 1997 to assess the progress in implementing the Agenda 21 within 5 years period, revealed

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<sup>36</sup> GEF was decided to be established in an IMF-WB meeting in 1989 for a three-year testing period between 1991-1994 with the aim of decreasing the impact of global environmental problems of climate change, loss of biological diversity, ozone depletion and pollution of international waters on developing countries. GEF is said to be managed by economy focused WB, development focused United Nations Development Programme (UNDP) and environment focused UNEP. The very first member states of GEF were the sixteen Organization for Economic Cooperation and Development (OECD) countries plus nine developing countries including USA, Germany, Austria, Belgium, Brazil, China, Denmark, Indonesia, Morocco, Finland, France, India, the Netherlands, United Kingdom (UK), Spain, Sweden, Switzerland, Italy, Japan, Canada, Mexico, Egypt, Norway, Pakistan and Turkey. At the end of its testing period, GEF was criticized by NGOs due to several reasons among which the considerable impact of WB on the policies of GEF deserves particular attention. GEF is considered to be under the control of WB, thereby reflecting the policies of WB in particular USA and other developed countries. As a fund for environmental projects, it is expected in GEF that UNEP has the greatest role in the elaboration of its policies. However, WB, in other words the developed countries, seems to dominate the GEF policies. To respond to this criticism, even though GEF was reorganized to lower the impact of WB on GEF, it can be said that it couldn't have been achieved at all. For the role of WB in GEF and more see, Bülent Duru "Dünya Bankası, GEF ve Küresel Çevre Sorunları", *Ankara Üniversitesi Siyasal Bilgiler Fakültesi Dergisi*, Vol.58, No.2, Nisan-Haziran 2003.

<sup>37</sup> Soroos, "Global Institutions and the Environment", p.34.

<sup>38</sup> As a reflection of the outputs of the 2002 World Summit on Sustainable Development, these two new focal areas are integrated into the GEF's funding scope. For further information see <http://www.gefweb.org/>.

<sup>39</sup> Caldwell, *International Environmental Policy*, p.107.

that the countries were far behind meeting the goals set out in 1992 and a clear definition of sustainable development could not have been achieved yet.

To hold a ten-year review of the Rio Conference, the World Summit on Sustainable Development was held in Johannesburg between 26 August - 4 September 2002. The Summit gathered 191 governments, IGOs, NGOs, private sector, civil society, academia and scientific community who reaffirmed sustainable development.<sup>40</sup> The Summit resulted in adoption of two main documents one of which is the Johannesburg Plan of Implementation formed from eleven sections and 170 items and the other is the Johannesburg Declaration on Sustainable Development.<sup>41</sup>

Instead of defining new forms of action, the Summit endorsed the Agenda 21 and set time bounded targets for the actions defined in Agenda 21 by the Johannesburg Plan of Implementation.<sup>42</sup> The Summit endorsed the idea of enabling the practical implementation of the principles of sustainable development.<sup>43</sup>

The Summit was based on five global priority issues of water, energy, health, agriculture and biodiversity, which are decided to be the emerging global issues to be addressed following the Conference. For this reason, these five emerging global priority issues are set out in the Johannesburg Plan of Implementation.<sup>44</sup>

Instead of establishing a new financial instrument and a new organization for coordinating the activities for achieving sustainable development, with an enhanced role CSD was held responsible for the implementation of Agenda 21. Regarding the financial mechanisms, the concept of partnerships among governments, business and civil society was given a large boost by the Summit and the Johannesburg Plan of

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<sup>40</sup> International Institute for Sustainable Development, *Earth Negotiations Bulletin*, Vol.22, No.51, 6 September 2002, p.1, Source: <http://www.iisd.ca/linkages/2002/wssd/>.

<sup>41</sup> Ellik Adler, *A World of Neighbours: UNEP's Regional Seas Programme*, (Nairobi: UNEP Publications, 2003), p.16.

<sup>42</sup> International Institute for Sustainable Development, *Earth Negotiations Bulletin*, p.1

<sup>43</sup> Adler, *A World of Neighbours*, p.18.

<sup>44</sup> Ibid., p.14.

Implementation. Over 220 partnerships were identified in the advance of the Summit and around 60 partnerships were announced during the Summit by a variety of countries.<sup>45</sup>

The Summit was focused on social and development agenda, in particular poverty eradication, sanitation and health rather than environment, which reflects a shift of the focus since Rio, in which environment was a predominant theme. Unlike Agenda 21, the Johannesburg Plan of Implementation recognizes poverty as a running theme. In that sense, the Summit broadened and strengthened the understanding of sustainable development. The three pillars of sustainable development were more integrated instead of allowing the domination of one theme over the others, which can be traced as an indication of the degree of evolution of sustainable development since Rio.<sup>46</sup>

The environmental problems have become widespread and global more than ever. The human exploitation of earth's resources is intensified after the half of the last century as a result of explosive growth of economic activity in the developed world that ended up with high levels of production and over-consumption, and high population growth in the developing ones, which serves as a multiplier of economic activity. The concept of sustainable development emerged as a new mechanism with a view to reconcile the economic and social developments and environmental protection. The emergence of this concept roots lies on the different level of economic development of the countries. Today, environment cannot be treated separately than the international political economy if global environmental problems are to be solved for which cooperation is necessary.

## **1.2 International Cooperation: Regimes in the Field of Environment**

In a world of more than 180 sovereign states, the environment that does not recognize any boundary creates a legacy problem for the nation-state as the state

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<sup>45</sup> For more information see <http://www.johannesburgsummit.org/>.

<sup>46</sup> International Institute for Sustainable Development, *Earth Negotiations Bulletin*, pp.16-17.

cannot have overall control on its environment and its problems. However, since neither a world government nor replacement of nation-state seems possible, the problem has become how states can manage environmental interdependence, which formed the basis for emergence of international environmental regimes.<sup>47</sup>

International regimes are defined as a form of collective action that constraints behavior of nation-states to achieve desired outcomes through shared principles, norms, rules and decision-making procedures in a given issue area. The most widely cited usage of the regimes is that of the political scientist, Stephen D. Krasner according to whom international regimes are “principles, norms, rules and decision-making procedures around which actor expectations converge in a given issue-area”. Keohane and Nye define regimes as “sets of governing arrangements”.<sup>48</sup> They differ than agreements, as agreements are *ad hoc* arrangements, however, regimes are established to facilitate these arrangements, and are more than temporary arrangements.<sup>49</sup>

The concept of international regimes is said to be a composite of four analytical components covering principles, norms, rules and decision-making procedures. Principles are defined as beliefs, fact, causation and rectitude; norms are standards of behavior defined in terms of rights and obligations; rules are specific prescriptions or proscriptions for actions, and decision-making procedures are prevailing practices for making and implementing collective choice.<sup>50</sup> Principles and norms differ than rules and decision-making procedures as the former are the basic defining features of a regime. Since regimes are dynamic structures and can change by time, change of a regime, in other words a change to a new regime or disappearance of that regime, occurs when norms and principles are changed, whereas change within the regime means to be a change in the decision-making procedures and rules. The notion that

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<sup>47</sup> Martin List and Volker Rittberger, “Regime Theory and International Environmental Management” Andrew Hurrell and Benedict Kingsbury (eds.), *The International Politics of the Environment: Actors, Interests and Institutions*, (Oxford: Clarendon Press, 1992), p.87.

<sup>48</sup> Stephen D. Krasner, “Structural Causes and Regime Consequences: Regimes as Intervening Variables”, *International Organization*, Vol.36, No.2, Spring 1982, p.2.

<sup>49</sup> *Ibid.*, pp.2-3.

<sup>50</sup> *Ibid.*, p.2.

still prevails in the regime literature is that the greater the coherence among the four components, the stronger the regime will be. When they become incoherent, the regime is said to be weakened.<sup>51</sup>

In the international relations theory, regimes have been analyzed from structural and utilitarian perspectives. Therefore, in the explanation of the conditions under which cooperative regimes come into being, it is difficult to talk over a specific regime theory. Instead, there exist a number of regime theories in the study of international relations.<sup>52</sup> The structural arguments are provided within the realist, Marxist and structural traditions whereas the utilitarian ones are the reflection of the one form of liberal thinking.<sup>53</sup>

From a realist perspective, the theory of hegemonic stability suggests that formation of international regimes depends on the hegemony. In lack of a world government, the hegemonic power acts as the functional equivalent of the central government at the global level. The hegemonic leader is necessary and a sufficient condition for cooperation and continued hegemony is required for continuation of the regime once the regime is established. When there is declining hegemony, there will be weakening of the regime. The theory of hegemonic stability was initially applied to world political economy. However, after the decline of United States of America (USA) power in the world economy, scholars attempted to analyze other factors in regime formation. Even though a hegemonic power is not the sole reason behind the establishment of regimes, it is an important factor in pushing the countries towards a cooperative effort. For instance, USA played a key role in persuading the reluctant countries in participation of a regime to protect the ozone layer.<sup>54</sup>

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<sup>51</sup> Ibid., pp.3-5.

<sup>52</sup> John Vogler, *The Global Commons: Environmental and Technological Governance*, (New York: John Wiley & Sons, 2000), p.23.

<sup>53</sup> Ibid., p.185.

<sup>54</sup> Detlef Sprinz and Tapani Vaahtoranta, "The Interest-based Explanation of International Environmental Policy", *International Organization*, Vol.48, No.1, Winter 1994, p.83.

However in many of the regimes' formation processes, instead of a hegemonic power, IOs or NGOs has played the key role. It was the International Union for the Conservation of Nature, who initiated the regime for regulating the endangered species of fauna and flora.<sup>55</sup> In same token, UNEP played a key role in making ozone depletion a top issue by funding research of the issue as well as sponsoring the international meetings.<sup>56</sup> Likewise, it was after the establishment of UNEP, Mediterranean Action Plan (MAP) has come into being. The emergence of other regional seas programmes that aimed at protection of marine environment also depends on the role that UNEP played in their formation.<sup>57</sup>

According to utilitarian model, which is best provided by Keohane in explaining the continuation of economic regimes after the hegemony, establishment of regimes and their continuation do not necessitate a hegemon. Keohane, by taking into account the key conditions put forward by Ronald Coase, defines under which conditions regimes are established. If a legal framework establishing liability for actions supported by governments; perfect information, and zero transactions costs are met in world politics, regimes will be unnecessary. However, since all of these conditions could not be met, due to lack of a superior authority that states are liable, high cost of information as well as difficulty in obtaining information and high transactional costs, countries are inclined to cooperate.<sup>58</sup> Through establishment of regimes, quality of the information is improved as well as transaction costs are minimized and compliance is provided through monitoring.<sup>59</sup>

List and Rittberger put forward two approaches in explaining regime formation, one being the problem-structural approach, the other is the situation-structural approach. The problem-structural approach is based on the analysis of conflicts and their

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<sup>55</sup> Oran R. Young, "The Politics of International Regime Formation: Managing Natural Resources and the Environment", *International Organization*, Vol.43, No.3, Summer 1989, p.354.

<sup>56</sup> Sprinz and Vaahtoranta, "The Interest-based Explanation of International Environmental Policy", p.86.

<sup>57</sup> Young, "The Politics of International Regime Formation", p.355.

<sup>58</sup> Robert O. Keohane, "The Demand for International Regimes", *International Organization*, Vol.36, No.2, Spring 1982, p.154.

<sup>59</sup> Vogler, *The Global Commons*, pp.196-197.

probability of moving towards a regime. They argue that *conflicts about the value* attached to environment do not seem to predominate in the international environmental policy-making towards a regime formation due to two reasons. First of all, even though some countries seem to attach more value to environment and claim to attribute greater weight to it, in many countries economical development is still a priority than environmental protection. Secondly, some countries attach priority to economic development, whereas publicly they do not deny necessity of protecting the environment. Furthermore, while the developed countries seem to pay attention to environment and the developing ones to economic development, today the gap between the developing and developed world is narrowing. Therefore, since significance of environment is understood by all countries, even if degree of development and degree of value attached to environment changes, to List and Rittberger this type of conflict does not lie at the mainstream of environmental regime formation.<sup>60</sup>

However, this analysis does not seem to reflect the reality in explaining regime formation when composition of the parties in the regimes and development locations of those regimes are taken into account. The environmental concern evolved firstly in democratically governed countries and value attached to environment has increased in those countries than that of the rest of the world. Therefore, the value given to environmental problems can be traced as a pushing factor for countries to cooperate.<sup>61</sup> The high concern for environment can be regarded as reflection of the type of political regimes. In democratically governed political regimes, as there is suitable environment for the growth of NGOs and media to criticize the environmental policies and to make pressure on the decision-makers, the possibility in participation of an environmental regime increases. It was in the ozone layer depletion problem, the increasing concern among mass public led to pressure on the decision-makers to protect the ozone layer.<sup>62</sup> Whereas, in the authoritarian political regimes, neither public can exert pressure on their government nor NGOs can grow

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<sup>60</sup> List and Rittberger, "Regime Theory and International Environmental Management", p.92.

<sup>61</sup> Sprinz and Vaahtoranta, "The Interest-based Explanation of International Environmental Policy", p.105.

<sup>62</sup> Ibid., p.83.

up since the government surpass the possible oppositions to be raised by the public. Therefore, the authoritarian governments will be more reluctant to participate in regime development than the governments with democratic political regimes. In that sense, political structure of a state is a determining factor in her position towards an environmental regime.<sup>63</sup>

In case of *conflicts about relatively assessed goods*, List and Rittberger argue that a healthy environment cannot be defined as a relatively assessed good since a value attached to the environment of one country does not depend on the other state's healthy environment. However, when relative gains or losses that appears through a process in which environmental protection enters into the intersection of economic policy, a healthy environment is tended to be regarded as a relatively assessed good. For instance, conflict over exploitation of fish stocks is a matter of international economy rather than protection of biodiversity. Likewise, Sweden's insistence on strict emission standards for the protection of Baltic Sea that created conflict with Finland emerged due to inability of Finland's industries to cope with those standards. Or establishment of treatment plants or catalytic cleaners in stacks for industries for the sake of environment or production of environmentally sound end-products, which end up with loss of market shares due to higher costs, creates extra costs so that environment becomes a relatively assessed good. At this point, it can be considered that economical factors may have an impact on environmental regime formation as a pushing factor.<sup>64</sup>

In the utilization of a common environmental resource, incompatible positions of countries lead to define that resource as an *absolutely assessed good* such as a shared river, which on one hand can be used by the upstream country as a way of elimination of waste, can be used for drinking purposes by the downstream country on the other hand. The shared river becomes a matter of conflict, which might lend itself to a process of regime formation.<sup>65</sup>

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<sup>63</sup> Porter and Brown, *Global Environmental Politics*, p.35.

<sup>64</sup> List and Rittberger, "Regime Theory and International Environmental Management", pp.93-94.

<sup>65</sup> *Ibid.*, p.94.

When the *conflicts are about means towards an agreed end*, the probability of a regime formation is the highest such as in the Baltic marine pollution case. Since all countries are affected by the deterioration of the Sea, cooperation was considered as the only solution.<sup>66</sup>

The situation-structural approach of List and Rittberger analyzes the interests of states within a game-theoretic model under three game approaches including *rambo games*, *dilemma games* and *coordination games*. When at least one of the actor is in a non-cooperative manner such as the one polluting the river for direct discharge purposes, the general framework drawing its position is characterized as *rambo games*. In the *dilemma games*, despite mutual cooperation will end up with desired outcomes and with the optimal solution, the rational-egoistic actor do not tend to participate in a cooperation. The *coordination games* emerges when all actors agree to cooperate for the desired outcomes and realizes that only harmonization is necessary, as in the case of Baltic pollution control. The only solution for the protection of the Baltic Sea seemed to be cooperation rather than unilateral action.<sup>67</sup>

List and Rittberger assumes that game-theoretic analysis can be possible when the number of actors is reduced to two parties; each party is assumed to be unitary with bare number of preference orderings. They analyze the tendency of countries to involve in a regime formation only considering their ecological vulnerability. This type of explanation lies at heart of utilitarian model according to which regimes are established for the management of mutual vulnerability. According to the analysis of List and Rittberger, ecological vulnerability is assessed under three circumstances. The extent of damage caused to itself, extent of damage caused to others and extent of damage caused by others. When no damage is caused to any party including to itself and by any party, there is no need for an environmental action. Even if it just damages herself, it might not be in a position to participate in a regime as it is a case of self-exploitation. When the actor damages the others' environment but not itself as well as not damaged by others, it will be in a position not to participate in a regime.

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<sup>66</sup> Ibid., p.96.

<sup>67</sup> Ibid., pp.98-99.

If the actor is damaged by the others but neither damaged the others nor itself, or, damaged itself and damaged by others but not damaged the others, it will be willing to participate in a regime. In case of damage to others and itself, the actor might be willing to join a regime. When damaged by others and damaged to others, even if it doesn't damage herself, this will lead to a regime formation as well. The highest probability for regime formation will be when the actor will be damaged by others, damage itself and damaged to others.<sup>68</sup> However this type of analysis just focuses on the environmental conditions that do not take into account the role of other factors that have an impact in the regime formation.

Another approach in explaining environmental regime formation focuses on the domestic factors of a nation-state including the country's ecological vulnerability along with the economic costs of pollution abatement. This approach is close to the situation-structural approach in terms of analyzing the role of ecological vulnerability in a country's position towards a regime formation. However, together with the ecological vulnerability, it analyzes the other factors such as economic costs of pollution abatement. According to this approach, the country seeks to avoid from pollution with a view to minimize the detrimental effects of environmental pollution on their own citizens and its ecosystem. It first pays attention to its own territory rather than the whole ecosystem. When the environmental situation of a country is in a worse position or alarming, there is the incentive to reduce the ecological vulnerability of its country. However, it does not work alone. Even though some countries have high degree of ecological vulnerability, they are still not inclined to participate in an international environmental protection effort. This is due to its economic capacity that has a determining role in its position as the environmental policies are not only shaped by the environmental concerns alone, but also by the socioeconomic and institutional factors. Therefore, both the degree of ecological vulnerability and the economic capacity is to be taken into account in determining a country's position in her support for an environmental regime.<sup>69</sup>

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<sup>68</sup> Ibid., pp.100-101.

<sup>69</sup> Sprinz and Vaahtoranta, "The Interest-based Explanation of International Environmental Policy", pp.78-79.

If the country is not affected from the environmental pollution problem within its own territory together with the fact that if the abatement costs are higher, it will be reluctant to participate in an environmental regime. This group of countries is called as *draggers* with their low ecological vulnerability and high abatement costs, which oppose to participate in an environmental regime formation. The countries with low ecological vulnerability together with low abatement costs will be more willing to participate in a regime than that of *draggers* despite their little ecological concerns. The pushing factor for those countries, the *bystanders*, will be their low cost for abatement. The other group of countries with high ecological vulnerability must be pushers for an international effort. However, their high abatement costs will act as a drawback for further movement towards cooperation. This group of countries can be classified as indecisive, *intermediates*, as on one hand they are willing to eliminate their high degree of environmental problems, on the other hand, they are reluctant to shoulder the extra costs for its abatement. The last group of countries is the *pushers* who have high ecological vulnerability with low abatement costs. Therefore, they push for formation of an environmental regime and for adoption of stricter rules and regulations.<sup>70</sup>

Young argues that neither realist nor liberal explanations are enough in explaining the regime formation. Instead, it introduces the model of institutional bargaining identifying the essential features of the process that will result in a regime formation. If the issues at stake lend themselves to contractarian interactions, the institutional bargaining can succeed as in the case of ozone depletion. Since all the countries to a certain degree will be affected from the depletion of stratospheric ozone layer, this led to prompt establishment of an environmental regime for the protection of ozone layer. However, in case of climate change as the beneficiaries from the policy responses and the polluters are different, it was difficult to reach a consensus towards taking more stringent obligations in controlling global warming. Another factor for a success in institutional bargaining is the perception by states of the arrangements as equitable. When the states do not find the arrangements as equitable, those countries will be reluctant to participate. The existence of salient solutions, effective

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<sup>70</sup> Ibid., pp.81-88.

compliance mechanisms, emergence of exogenous shocks and existence of effective leadership along with the above-mentioned two factors increase the probability of success in institutional bargaining towards a regime formation.<sup>71</sup>

However, there are many other factors that shape the position of a country in an international effort. The scientific knowledge about the physical and ecological processes of the earth has been an important factor in motivating cooperation among nations. Without a considerable input of knowledge, the definition of the problem including severity of it, the extent, the sources and types of the pollution, and the means of preventing and controlling the pollution won't be possible. Even if the environmental situation is worse, since the decision-makers would have doubts about whether to take action or not due to lack of scientific knowledge, the probable regime formation can be hampered. Therefore, shared knowledge is a necessary condition for regime formation. As the sufficient information about the ozone depletion was gathered and a consensus reached between the scientists in the early 1980s, the Vienna Convention for the Protection of the Ozone Layer (Vienna Convention)<sup>72</sup> could be adopted in 1985. In the following years, there was a growing scientific understanding of the causes, extent and consequences of ozone depletion that paved the way for the adoption of stricter regulations with Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol)<sup>73</sup> in 1987, which contains specific and more stringent obligations than that of the Vienna Convention. The Montreal Protocol aimed at reduction of the production and consumption of five chlorofluorocarbons (CFCs) by 50 percent within a defined time frame instead of a loose framework for action, which has already been established by the Vienna Convention that emphasizes only cooperation in research and exchange of scientific information.<sup>74</sup> Likewise, the improved knowledge on the environmental effects of sulfur and nitrogen oxides and volatile organic compounds led to adoption of the Convention on Long-range Transboundary Air Pollution (LRTAP Convention)<sup>75</sup> in

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<sup>71</sup> Young, "The Politics of International Regime Formation", pp.359-374.

<sup>72</sup> hereinafter referred to as "Vienna Convention".

<sup>73</sup> hereinafter referred to as "Montreal Protocol".

<sup>74</sup> Detlef and Vaahtoranta, "The Interest-based Explanation of International Environmental Policy", p.83.

1979 with a view to solve the transboundary acid problem in a coordinated manner through emission reductions.<sup>76</sup>

The other dimension of knowledge is the role of knowledge based experts in the regime formation as Peter Haas called them as “epistemic community” of experts who drive forward cooperation on environmental problems once the scientific knowledge is transferred to the decision makers in transforming their perceptions. It was the role played by the epistemic communities in the climate change regime, who have been very significant in making global warming as an issue during the late 1980s. The explanation of regime formation by epistemic communities is the most well known form of cognitive model. According to Haas, due to different strengths of epistemic community in the countries and due to the relations between the epistemic community and the governments, some governments are more inclined to involve in regime formation than others. The countries, which pay attention to knowledge provided by epistemic community, are more likely to involve in a regime formation. The more power the epistemic community have in the decision-making process, the more active they are at their national administrations, therefore the more likely the government will be in a position to involve in the process of regime formation. These scientific experts act as lobbying groups in their countries to support international efforts. As long as epistemic community reflects their environmental view at the high ranking governmental level, they can direct their states towards support for an international action and persuade their governments to support the measures. Haas argues that due to influence of epistemic community on the decision-makers in interpreting the scientific knowledge and proposing appropriate policies, many of the governments were responsive to a cooperation in order to solve the problem of ozone depletion.<sup>77</sup> In same line of thinking, Haas emphasizes the significant role of scientists from disciplines of engineering, physics, oceanography, microbiology and urban planning in the formation of the Mediterranean environmental regime. After a consensual knowledge had emerged,

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<sup>75</sup> hereinafter referred to as “LRTAP Convention”.

<sup>76</sup> Ibid., p.96.

<sup>77</sup> Ibid., p.80.

epistemic communities reflected their environmental outlook to the decision-makers in the Mediterranean countries. Despite the difference in degree of the development in the Mediterranean countries and in the value attach to environment, they started to become one of the complying countries due to the role played by epistemic communities. The countries like Algeria and Egypt who were at the beginning reluctant to take sophisticated action for controlling the pollution in the Mediterranean, later, with the consolidation of the power of epistemic community at the decision-making level, accepted to control new sources of pollution in the Mediterranean despite high short term costs.<sup>78</sup>

List and Rittberger consider the scientific development aid as significant as the role played by the epistemic community in regime formation.<sup>79</sup> In MAP, it was by UNEP funding, training, research activities, publication of research findings, organization of meetings and discussion of techniques could be done and monitoring equipment could be provided.<sup>80</sup>

The technological development can be regarded as another factor for promoting a regime in two ways. First of all, as in the case of ozone depletion, the technological development in substituting the CFCs with other compounds, which are both technologically feasible and economically acceptable, led many countries to change their positions from intermediates to pushers like USA and Federal Republic of Germany (FRG).<sup>81</sup> In the case of sulfur emissions, the FRG and Sweden, who were not interested in reducing their ecological vulnerability at the beginning, became pushers after new technologies evolved.<sup>82</sup> Secondly, in order to increase the demand for her pollution abatement technology and for the substitute compounds, that country can push for an international environmental regime.

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<sup>78</sup> Peter M. Haas, "Do Regimes Matter? Epistemic Communities and Mediterranean Pollution Control", *International Organization*, Vol.43, No.3, Summer 1989, p.398.

<sup>79</sup> List and Rittberger, "Regime Theory and International Environmental Management", p.104.

<sup>80</sup> Haas, "Do Regimes Matter?", p.386.

<sup>81</sup> Detlef and Vaahutoranta, "The Interest-based Explanation of International Environmental Policy", p.93.

<sup>82</sup> *Ibid.*, p.102.

At this point, the role of industry is as significant as the factors mentioned so far. Either in the ozone depletion or in the acid rain problem, the regime that will be formed to solve these specific problems aimed at reduction of consumption of CFCs and sulfur emissions respectively. However, if the industries are unable to substitute those compounds with environmentally sound and economically feasible ones, they will be lobbying their countries not to involve in an international environmental cooperation. In USA, industry representatives opposed to controls for CFCs at the beginning. However, after they found out the substitute for CFCs, the industry lobby group supported USA's position for a global limit on CFC production and called for worldwide limit on chemicals. Following this, USA became one of the pusher countries for stricter rules for the protection of ozone layer.<sup>83</sup> Furthermore, when unilateral abatement activities of a state will put its industries at a comparative disadvantage in international markets, the state will push the others for stricter international regimes, as the industries of that state will be exerting pressure on their governments to avoid from this position.<sup>84</sup> For instance in the Mediterranean regime, without the converge regulations in the Mediterranean, if only France builds wastewater treatment plants for its coastal industries, the French industry will have to pay additional production costs to be able to meet the environmental standards in its coastal areas, which will not be met by the Spanish and Italian competitors as well as reduce the comparative advantage of the French industry.<sup>85</sup> Therefore, French industry will be pushing its government to involve in a regime for protecting the Mediterranean environment.

The relationship between environmental policy objectives and other foreign policy goals is an important factor in the formation of a regime as well. The international environmental negotiations can be affected by the climate of international relations. In the 1970s, the détente allowed the international concern shift from the Cold War to the environmental concerns, as environment became a top issue during 1970s.<sup>86</sup>

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<sup>83</sup> Ibid., p.95.

<sup>84</sup> Ibid., p.79.

<sup>85</sup> Haas, "Do Regimes Matter?", p.378.

<sup>86</sup> Hurrell and Kingsbury, *The International Politics of the Environment*, p.21.

The Union of Soviet Socialist Republics (USSR) involved in the negotiations on transboundary acidification in Europe and interested in conclusion of sulfur regulations in a period of détente as well as pushed the East Central European Countries to sign the Sulfur Protocol.<sup>87</sup>

### **1.3 International Policy and Law on the Protection of Marine and Coastal Environment**

#### **1.3.1 Global Developments**

The development of international policy and law is two-fold. On one hand, there are developments that are taking place at global level, which shape the environmental policy and law in general. These developments that take place in the form of Conferences held at global level shape variety of environmental issues ranging from reduction of air pollution, climate change to conservation of biodiversity and protection of marine environment. These Conferences draws the general policy framework and forms the basis of future work. On the other hand, there are international regulations developed with a view to convert the policy outputs of these Conferences into action, which deals with specific environmental issues in detail.

##### **1.3.1.1 Development of Global Policies**

The seas and oceans of the world have been used by mankind for several purposes including for navigation, exploitation of their marine living resources, extraction of mineral wealth and for disposal area for the wastes of mankind.<sup>88</sup> The very first principles for the use of the oceans of the world, which later turn to a customary law and applied for three centuries, appeared at the beginning of the seventeenth century. It was based on the *freedom of seas* doctrine according to which oceans were delimited as narrow territorial sea under sovereign jurisdiction with an extensive high sea area. This version of delimitation was favorable for the maritime powers of that

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<sup>87</sup> Sprinz and Vaahtoranta, "The Interest-based Explanation of International Environmental Policy", p.102.

<sup>88</sup> Patricia W. Birnie and Alan E. Boyle, *International Law and the Environment*, (New York: Oxford University Press, 1994), p.251.

time notably for Great Britain. By the middle of the twentieth century, rights over the high seas commons covered four freedoms: to navigate, fish, lay cables and pipelines, and overfly. The resource extraction from the high seas was based on the first come first served basis.<sup>89</sup> In line with the existing oceans regime, the oceans of the world were polluted as a result of maritime activities and due to use of them as a common sink for free disposal of wastes.<sup>90</sup>

Before 1950s, some rules of international customary rules existed that deal with the pollution in the oceans. However no serious attempts was made till to this period.<sup>91</sup> In the early 1920s, a convention on pollution from ships was drafted, however not opened for signature. The only sources of international law regarding the marine environment during this period was related to regulation of the marine living resources like seals, fisheries and whaling, in which the states were concerned for economic purposes rather than environmental protection.<sup>92</sup>

The very first international agreement that deal with the pollution in the oceans is the International Convention for the Prevention of the Pollution of the Sea by Oil of 1954 (1954 OILPOL Convention)<sup>93</sup>, which was however narrow in scope, just dealing with the pollution that occurs by the oil discharged from ships and not entirely prohibiting the discharge of it.<sup>94</sup>

On the other hand, as a result of the national movements towards extending their national jurisdictions in order to benefit from the mineral resources and fish stocks, the *freedom of seas* regime was attempted to be codified with UN Conferences on Law of the Sea held in 1958 and 1960.<sup>95</sup> However the Conventions came out from

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<sup>89</sup> Vogler, *The Global Commons*, p.44.

<sup>90</sup> Ibid., p.45.

<sup>91</sup> Edward D. Brown, *The International Law of the Sea: Volume I Introductory Manual*, (Great Britain: Dartmouth Publishing, 1994), p.336.

<sup>92</sup> Birnie and Boyle, *International Law and the Environment*, p.251.

<sup>93</sup> hereinafter referred to as "1954 OILPOL Convention".

<sup>94</sup> Birnie and Boyle, *International Law and the Environment*, p.254.

<sup>95</sup> Vogler, *The Global Commons*, p.45.

1958 Geneva Conference neither defined the pollution nor introduced a comprehensive framework for prevention of the marine pollution and protection of the marine environment. With a narrow scope, states were held responsible from preventing the oil pollution from ships, from pipelines and from sea-bed operations and pollution from radioactive wastes by dumping.<sup>96</sup>

After 1960s, the awareness on the issue of marine pollution increased with the disaster like events such as Torrey Canyon oil spill of 1967, which resulted in contamination of large areas of coastline by oil. As the 1954 OILPOL Convention was not enough in tackling with the Torrey Canyon disaster, this led to the development of new conventions with a more comprehensive approach. Furthermore, the release of mercury emissions from a factory in Minimata in Japan that resulted in poisoning of fishes revealed that not only oil pollution from ships, but also all sources of marine pollution including the land-based sources must be controlled in a more efficient manner.<sup>97</sup> All of these events led to increase of awareness on marine pollution and accelerated the evolution of environmental policy and law in this field.

However, it was with the Stockholm Conference, the international concern for marine pollution was generated, which can be traced as a watershed in this regard. The outputs of the Conference, the Stockholm Declaration and the Action Plan on the Human Environment, formed the basis of future action, law and policy regarding protection of the marine environment. The establishment of UNEP can be considered as the most significant output of the Conference in terms of addressing marine pollution.

Out of 26 principles, at least four principles of the Stockholm Declaration contributed to the development of new legal instruments for future as well as formation of general rules of customary law.<sup>98</sup> Stockholm Declaration urges states to halt the discharge of toxic substances or other harmful substances into the

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<sup>96</sup> Birnie and Boyle, *International Law and the Environment*, p.254.

<sup>97</sup> Ibid., p.251.

<sup>98</sup> Brown, *The International Law of the Sea*, p.337.

environment<sup>99</sup>, which formed the basis for the treaty rules governing dumping and ship-based pollution. States are called to take all possible steps to prevent the pollution of seas<sup>100</sup>. Principle 21 of the Declaration deserves particular attention according to which states have the right to exploit their resources but at the same time they are responsible from their activities not to cause damage beyond the limits of national jurisdiction. Furthermore, states are invited to cooperate with a view to develop law for liability and damage,<sup>101</sup> which laid down the basis for further development of a number of legal instruments related to liability in future.<sup>102</sup>

On the other hand, out of 109 recommendations of the Action Plan for the Human Environment adopted at the Stockholm Conference, nine recommendations specifically deals with the marine pollution<sup>103</sup>, which formed the basis for further action. The Plan not only urge states to accept and implement the existing legal instruments for the control of marine pollution,<sup>104</sup> but also proposed to elaborate new conventions on dumping and the pollution from ships.<sup>105</sup> The Action Plan also emphasizes the role of nations in controlling all sources of marine pollution in particular the land-based sources<sup>106</sup> and the significance of research and monitoring at the national and international level.<sup>107</sup> The recommendations of the Action Plan contributed to development of several articles of 1982 UN Convention on Law of the Sea (1982 UNCLOS) and UNEP's Regional Seas Programmes.<sup>108</sup>

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<sup>99</sup> Principle 6.

<sup>100</sup> Principle 7.

<sup>101</sup> Principle 22.

<sup>102</sup> Brown, *The International Law of the Sea*, pp.337-338.

<sup>103</sup> In the Action Plan for the Human Environment, the recommendations between 86-94 deal with the marine pollution.

<sup>104</sup> Recommendation 86 (a).

<sup>105</sup> Recommendation 86 (c), (e).

<sup>106</sup> Recommendation 92 (b).

<sup>107</sup> Recommendation 87; For more information see Action Plan for the Human Environment, Stockholm, 1972, Source: <http://www.unep.org/Documents/Default.asp?DocumentID=97&ArticleID=1504>

<sup>108</sup> Birnie and Boyle, *International Law and the Environment*, p.252.

The establishment of UNEP can be considered as a turning point in the protection of marine and coastal environment in the sense that UNEP choose the oceans as its prior task, which led to the initiation of Regional Seas Programmes with a view to protect marine environments at regional scale. It is with this programme a standard for the protection of regional seas is devised and a regional focus for controlling marine pollution is introduced.<sup>109</sup>

Another turning point in the management of the oceans is the adoption of the 1982 UNCLOS that does not only provide general principles and umbrella framework for the legal regime of marine pollution, but also sets up a comprehensive new legal regime for the seas and the oceans by codifying the older one. The earlier oceans regime based on *freedom of seas* doctrine was reformed with the 1982 UNCLOS. First of all, high seas are enclosed with the extension of the state jurisdiction to a new exclusive economic zone (EEZ), which extends to 200 nautical miles from territorial sea baseline. All parts of the sea that are not included in the EEZ, in the territorial sea, in the archipelagic waters or in the internal waters of a state area is defined as high seas.<sup>110</sup>

Within the 1982 UNCLOS, a separate part, Part XII: Protection and Preservation of the Marine Environment, is devoted to the marine pollution with which a number of novelties to the international law of the sea were introduced for the protection of the marine environment. It has become the duty of the states to protect and preserve the marine environment.<sup>111</sup> States are urged not only to prevent the marine pollution but also to reduce and control it.<sup>112</sup> 1982 UNCLOS offers states to go beyond the territorial sea by extending pollution control jurisdiction to EEZ.<sup>113</sup> Extension of states' sovereign rights with regard to the protection and preservation of the marine environment to EEZ can be considered as one of the major innovations of 1982

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<sup>109</sup> Peter M. Haas, "Save the Seas: UNEP Regional Seas Programme and the Coordination of Regional Pollution Control Efforts", *International Ocean Yearbook*, Vol.19, 1991, p.190.

<sup>110</sup> Birnie and Boyle, *International Law and the Environment*, p.272.

<sup>111</sup> Article 192.

<sup>112</sup> Article 194.

<sup>113</sup> UNEP, *Handbook of Environmental Law*, (New York: UNEP Publications, 1996), pp.296-297.

UNCLOS. The protection of the marine environment is extended to the high seas that are beyond the national jurisdiction of states as well.<sup>114</sup> Furthermore, the powers of port states in controlling the marine environment is extended as well as the flag state's obligations towards protecting the environment is redefined and strengthened.

The definition of environment is extended to cover ecosystems and habitats, and marine living resources.<sup>115</sup> The Convention goes one step further by defining all sources of marine pollution, which includes the pollution from land-based sources,<sup>116</sup> from sea-bed operations,<sup>117</sup> from activities in the area,<sup>118</sup> by dumping<sup>119</sup> from vessels,<sup>120</sup> from atmosphere.<sup>121</sup> States are urged to adopt laws and regulations to prevent, reduce and control the marine environment from these sources of pollution.<sup>122</sup>

1982 UNCLOS, as a convention, binds only the States, which has become Party to it. However, since its many articles have become part of customary law due to widely application of many of its articles, today those are binding the non-parties as well.<sup>123</sup>

Another landmark in the development of international environmental law on marine environment is the Rio Conference, which altered the earlier understanding and introduced new concepts into the international environmental policy in this field. The Conference propelled the concept of sustainable development to the forefront of international concern. Agenda 21, which is a programme of work for the period

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<sup>114</sup> Birnie and Boyle, *International Law and the Environment*, p.253.

<sup>115</sup> Article 194.

<sup>116</sup> Article 207.

<sup>117</sup> Article 208.

<sup>118</sup> Article 209.

<sup>119</sup> Article 210.

<sup>120</sup> Article 211.

<sup>121</sup> Article 212.

<sup>122</sup> Article 194.

<sup>123</sup> Birnie and Boyle, *International Law and the Environment*, p.255.

1993-2000 that sets forth rights and obligations of States. It provides the international basis of action to be pursued for the protection and sustainable development of the marine and coastal environment and its resources.

Chapter 17 entitled as “Protection of Oceans, All Kinds of Seas Including Enclosed and Semi-Enclosed Seas, Coastal Areas and the Protection, Rational Use and Development of their Living Resources” is of crucial since it provided a programme of action for achieving sustainable development of oceans, coastal areas and seas.

Chapter 17 is formed from programme areas of,

- ❑ integrated management and sustainable development of coastal areas, including EEZs,
- ❑ marine environmental protection,
- ❑ sustainable use and conservation of marine living resources of the high seas,
- ❑ sustainable use and conservation of marine living resources under national jurisdiction,
- ❑ addressing critical uncertainties for the management of the marine environment and climate change,
- ❑ strengthening international, including regional, cooperation and coordination,
- ❑ sustainable development of small islands.

For each set of programme area, the *basis for action* of that particular programme area together with the *objectives* of that programme area is put forward. Then it sets the *activities* to be implemented by the states after which the *means of implementation* of these activities are enumerated.

Prior to the Agenda 21, protection of marine environment and conservation of marine living resources were considered as parts of marine environments. However with the Agenda 21, definition of marine environment is extended to cover the coastal areas.<sup>124</sup> In this respect, one of the innovations of the Agenda 21 is introduction of

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<sup>124</sup> Alexandre Kiss and Dinah Shelton, *International Environmental Law: 1994 Supplement*, (New York: Transnational Publishers, 1994), p.70.

integrated coastal zone management (ICZM)<sup>125</sup>, which is a proposed form of management process for sustainable development of coastal zones by coordinating the social, ecological and economic problems, with the favourable conditions and priorities for the development of the tourism, fisheries and aquaculture, and marine transport in a coastal zone. In other words, it is the process for the achievement of sustainable development in coastal zones. With the adoption of Agenda 21, states are committed to establish an integrated policy and decision-making process, to apply precautionary and anticipatory approach, to adopt precautionary measures, environmental impact assessment (EIA), to promote application of environmental accounting and to enable involvement of concerned parties including public in the management of coastal zones. In the Chapter 17 of Agenda 21, states are encouraged to apply ICZM.<sup>126</sup>

Agenda 21 sets forth the activities to be implemented at the local, national, sub-regional, regional and global levels for integrated management and sustainable development of coastal areas, protection of marine environment as well as sustainable use and conservation of marine living resources with a preventive, precautionary and anticipatory approach.<sup>127</sup> In general, adoption of Agenda 21 seemed to have a catalytic effect in the development of international environmental policy and law regarding marine environment since it was the decade after the Rio Conference, adoption or entering into force of some 20 instruments and initiatives

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<sup>125</sup> ICZM is a development management process realised at the state level with participation of all stakeholders, which is implemented by establishing the organisational legal framework and procedures, required for the integration of development plans in coastal zones with the problems of environmental protection and resources conservation. ICZM is a dynamic management process that proceeds through a number of stages of initiation, planning, implementation, and monitoring and evaluation.

- Initiation Stage: It involves the analysis the triggering factors with the involvement of relevant stakeholders and ends up with the decision to start ICZM.

- Planning: It involves the development of policies, goals, actions and a strategy and ends up with the decision to adopt ICZM program by the decision-makers.

- Implementation: It involves the execution of the approved plans.

- Monitoring and Evaluation: The monitoring program starts as soon as the ICZM program is operational and evaluation is made as soon as the data is gathered to be used to analyze to what extent the actions defined in ICZM program addresses or solves problems that were identified by its objectives.

<sup>126</sup> For ICZM in Agenda 21 and ICZM in post-Rio period see Şule Güneş, Nilgün Görür and Arzu Nuray, "Rio Sonrası Entegre Kıyı Alanları Yönetimi: Türkiye Deneyimi", Erdal Özhan (ed.), *Türkiye'nin Kıyı ve Deniz Alanları II. Ulusal Konferansı, Türkiye Kıyıları 98 Konferansı Bildiriler Kitabı*, (Ankara: Kıyı Alanları Yönetimi Türkiye Milli Komitesi, 1998), pp.24-28.

<sup>127</sup> Brown, *The International Law of the Sea*, pp.338-341.

related directly or indirectly to the marine environment or marine biodiversity took place.<sup>128</sup>

Complementary to the Agenda 21, Rio Declaration has also contributed to the global environmental policy regarding marine environment. The Declaration encourages application of precautionary approach<sup>129</sup> and polluter pays principle<sup>130</sup> in the protection of the environment. The States are urged to undertake EIA<sup>131</sup> and to develop further international law for the liability and compensation,<sup>132</sup> all of which formed the basis of further international environmental law and regulations.

Like the other global conferences in which the global policy is shaped, World Summit on Sustainable Development of 2002 has contributed to the international environmental law regarding marine environment. Instead of introducing new approaches to international environmental policy and new actions in dealing with the marine and coastal environment, it endorsed the existing legal tools adopted and actions defined so far. Section IV of the Johannesburg Plan of Implementation, “Protecting and Managing the Natural Resource Base of Economic and Social Development” covers a range of water-related issues including the protection of the marine environment in which particular attention is given to pressures on marine and coastal ecosystems from fisheries, biodiversity loss and pollution.<sup>133</sup> The Plan invites countries to ratify and implement the 1982 UNCLOS,<sup>134</sup> promote implementation of Chapter 17 of Agenda 21<sup>135</sup> and ratify and implement the existing UN agreements.<sup>136</sup>

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<sup>128</sup> Adler, *A World of Neighbours*, p.15.

<sup>129</sup> Principle 15.

<sup>130</sup> Principle 16.

<sup>131</sup> Principle 17.

<sup>132</sup> Principle 13; UNEP, *Handbook of Environmental Law*, p.92.

<sup>133</sup> Adler, *A World of Neighbours*, p.16.

<sup>134</sup> Section IV, Item 30 (a).

<sup>135</sup> Section IV, Item 30 (b).

<sup>136</sup> Section IV, see Çevre ve Orman Bakanlığı and UNDP, *Dünya Sürdürülebilir Kalkınma Zirvesi Johannesburg Uygulama Planı*, (Ankara: Ulusal Çevre ve Kalkınma Programı, 2004), pp.30-31.

By this way, it can be considered for the Johannesburg Plan of Implementation that it attempts to give effect to the existing international legal standards and regulations.

### 1.3.1.2 International Regulations

In line with the developments in the environmental policy making at global level, under the auspices of IMO<sup>137</sup> a solid body of international environmental law regarding marine environment has been developed. The focus of IMO in early 1970s was to regulate ship-based pollution, which was later shifted to cover other sources of marine pollution also.

The ship-based pollution occurs either accidentally or operationally.<sup>138</sup> In dealing with operational ship-based marine pollution, the International Convention on Prevention of Pollution from Ships (1973/78 MARPOL Convention<sup>139</sup>)<sup>140</sup> was adopted in 1973 with a view to eliminate weaknesses of the earlier regulation in controlling ship-based pollution. 1954 OILPOL Convention was the first agreement at the international level in regulating oil pollution from ships. Even though the approach of 1973/78 MARPOL Convention is that of one introduced by 1954 OILPOL Convention, it diverges from 1954 OILPOL Convention in the sense that 1973/78 MARPOL Convention does not only regulate the discharge of oil but other types of ship-based pollution including noxious liquids substances in bulk, garbage

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<sup>137</sup> IMO was established under the auspices of UN as a specialized agency in 1948 in an international conference in Geneva with the adoption of its convention, which entered into force in 1958. The purposes of the IMO are "to provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships". For more information about IMO see <http://www.imo.org/home.asp>.

<sup>138</sup> Birnie and Boyle, *International Law and the Environment*, p.263.

<sup>139</sup> The 1973 MAPROL Convention required ratification by 15 States, with a combined merchant fleet of not less than 50 percent of world shipping by gross tonnage, to enter into force. However, by 1976, only three States including Jordan, Kenya and Tunisia ratified the Convention whose shipping flat amounted to less than one percent of the world's merchant shipping fleet. Therefore, in order to achieve the entry into force of 1973 MARPOL Convention, the relevant provisions were changed with the 1978 MARPOL Protocol. The 1978 MARPOL Protocol by absorbing the 1973 MAPOL Convention is called as the International Convention for the Prevention of Marine Pollution from Ships, 1973 as modified by the Protocol of 1978 relating thereto (1973/78 MARPOL Convention). For more information see [http://www.imo.org/Conventions/contents.asp?doc\\_id=678&topic\\_id=258](http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258).

<sup>140</sup> hereinafter referred to as "1973/78 MARPOL Convention".

and litter, sewage and harmful substances in freight and packaged forms with a more effective enforcement and compliance mechanism of certification, inspection and reporting.<sup>141</sup> The 1973/78 MARPOL Convention designated special areas<sup>142</sup> in which the Convention is more strictly applied;<sup>143</sup> compelled states to provide oil reception facilities and determined three types of jurisdiction for enforcement including flag state jurisdiction with a comprehensive responsibility; coastal state jurisdiction and port state jurisdiction.<sup>144</sup> Today, 1973/78 MARPOL Convention is accepted as a customary law due to its wider application with a large number of states.

The other source of ship-based pollution, pollution from dumping<sup>145</sup>, has become the subject of an other international regulation in 1972 by the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972 London Dumping Convention)<sup>146</sup> of which was to a large extent modeled on regional Oslo Convention governing dumping activities in the Northeast Atlantic. The 1972 London Dumping Convention prohibits the dumping of wastes under specified circumstances. While highly hazardous substances listed in Annex I (black list) and high-level radioactive wastes are prohibited to be dumped, the substances including medium and low level radioactive wastes listed in Annex II (grey list) requires a special permit to be taken from the national authority. The dumping of all other wastes requires a general permit. Both special and general permits are issued by the national authority after careful consideration of the factors such as composition and characteristics of the substance, the dumping site and the method set forth in Annex III.<sup>147</sup>

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<sup>141</sup> Birnie and Boyle, *International Law and the Environment*, pp.266-268.

<sup>142</sup> Baltic Sea, Black Sea, Mediterranean, North Sea, Red Sea, the Wider Caribbean Sea, Persian Gulf, Gulf of Aden and the Antarctic ocean.

<sup>143</sup> OECD Development Assistance Committee, *Guidelines on Aid and Environment: Guidelines for Aid Agencies on Global and Regional Aspects of the Development and Protection of the Marine and Coastal Environment*, (Paris: OECD Publications, 1996), p.41.

<sup>144</sup> Birnie and Boyle, *International Law and the Environment*, p.270.

<sup>145</sup> The global waste stream dumped into the sea includes the radioactive wastes, industrial waste, sewage sludge and dredged spoils as well as incineration at sea.

<sup>146</sup> hereinafter referred to as "1972 London Dumping Convention"

<sup>147</sup> Brown, *The International Law of the Sea*, pp.366-367.

However, the 1972 London Dumping Convention was reversed with the adoption of a new Protocol<sup>148</sup> in 1996. The Protocol is designed in such a way that all dumping including incineration at sea is prohibited except the matters listed in the Annex of the Protocol. The Protocol defines what is permitted to be dumped. For the matters to be dumped, the applicants for permits are obliged to formulate strategies, to carry out a waste prevention audit and to consider waste management options, in particular environmentally sound alternatives such as re-use, recycling. The Protocol prohibits export of wastes or other matters to other countries for dumping or incineration at sea. The aim of the new Protocol is to reduce the matters to be dumped and to promote reuse, recycling and use of environmentally friendly alternative materials. It incorporated “precautionary approach” and “polluter pays principle” of the Rio approach. After the Protocol enters into force, it will supersede the 1972 London Dumping Convention.<sup>149</sup>

Another regulation in controlling operational ship-based pollution is the International Convention on Oil Pollution Preparedness, Response and Co-operation (1990 OPRC)<sup>150</sup>, which was adopted in 1990. However, this Convention does not only deal with operational, but also with accidental ship-based pollution. The 1990 OPRC obliges countries to prepare oil pollution emergency plans for tankers and other ships, national contingency plan and operational focal points for oil spill management, national and regional systems for preparation and response to oil pollution incidents and oil spill combating equipments.<sup>151</sup>

In 2000, the approach applied in the 1990 OPRC was extended to the hazardous and noxious substances with the adoption of the Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances (2000 HNS Protocol)<sup>152</sup> as an annex to the 1990 OPRC.<sup>153</sup>

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<sup>148</sup> 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter was adopted at London on 7 November 1996.

<sup>149</sup> [http://www.imo.org/Conventions/contents.asp?topic\\_id=258&doc\\_id=681#7](http://www.imo.org/Conventions/contents.asp?topic_id=258&doc_id=681#7).

<sup>150</sup> hereinafter referred to as “1990 OPRC”.

<sup>151</sup> OECD Development Assistance Committee, *Guidelines on Aid and Environment*, p.42.

<sup>152</sup> hereinafter referred to as “2000 HNS Protocol”.

However, international regulation on accidental ship-based pollution regulates marine casualties not only at the outset of the accident. The regulations address minimization of the risks by providing maritime safety in the form of better safety standards. This precautionary and preventive approach for the purpose of minimizing the risk of maritime accidents has become subject of a large number of legal instruments, which have been codified since 1970s by IMO among which the International Convention for the Safety of Life at Sea (1974 SOLAS)<sup>154</sup> and International Convention on Load Lines (1966 LL)<sup>155</sup> deserves particular attention.

Another dimension of accidental ship-based pollution is liability and compensation for damage. Following the Torrey Canyon disaster of 1967, a need for a regime of civil liability for such accidents emerged, which paved the way for the adoption of 1969 International Convention on Civil Liability for Oil Pollution Damage (1969 CLC)<sup>156</sup> together with the 1971 International Convention on the Establishment Fund for Compensation for Oil Pollution Damage (1971 FUND)<sup>157</sup>. The former provided the establishment of international rules and procedures related to liability and compensation for pollution damage. In other words, it is the materialization of polluters pays principle. As a supplementary to the 1969 CLC in terms of adequately compensating the oil pollution damage where the 1969 CLC is either inadequate in compensating the damage or no liability for damage arises from the Convention or shipowner is incapable of meeting his obligation, an international fund was established under the 1971 FUND.<sup>158</sup>

The development of a civil liability regime for the pollution damage caused by substances other than oil, namely hazardous and noxious substances, was set forth as an action by the Agenda 21 in which States are encouraged to support the ongoing

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<sup>153</sup> [http://www.imo.org/Conventions/contents.asp?topic\\_id=258&doc\\_id=683](http://www.imo.org/Conventions/contents.asp?topic_id=258&doc_id=683).

<sup>154</sup> hereinafter referred to as "1974 SOLAS".

<sup>155</sup> hereinafter referred to as "1966 LL".

<sup>156</sup> hereinafter referred to as "1969 CLC".

<sup>157</sup> hereinafter referred to as "1971 FUND".

<sup>158</sup> Brown, *The International Law of the Sea*, pp.387-391.

activities of IMO in this field.<sup>159</sup> In line with this policy action, under the auspices of IMO, a civil liability regime for hazardous and noxious substances was established with the adoption of the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (1996 HNS)<sup>160</sup> in 1996.<sup>161</sup>

One of the other ship-based pollution, which has recently become the subject of international law, is the ballast waters of ships, which introduce invasive marine species into the marine environment. Today, GEF defines invasive marine species as one of the four greatest threats<sup>162</sup> to the world's oceans. The significance of the problem appears from the fact that unlike the other forms of marine pollution from which the environment can be recovered, the impacts of these organisms can be sometimes irrecoverable. Ballast waters are used by ships to ensure stability and structural integrity of the ships when ships do not carry any cargo. During voyage of ships, many organisms are carried out in ballast waters and when these waters are emptied, if favorable conditions are provided, they survive in their new environment. However, since these organisms are exotic, they negatively affect the ecosystem. This issue has been on the agenda of the international environmental community since the beginning of 1990s. The response against this threat first came from the Rio Conference that warned the countries and the relevant UN agencies to take action to address the transfer of harmful organisms by ships.<sup>163</sup> Since then, the international environmental community has been working on this issue under the auspices of IMO who has made several studies. The findings of IMO revealed that many of the areas have been devastating and the bio-invasion is continuing to increase at an alarming rate. IMO prepared Guidelines with a view to decrease the negative impacts of ballast exchange to marine ecosystems. However, these guidelines are not legally binding. As the ship traffic is increasing, which in turn increases the amount of

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<sup>159</sup> Section 17, Item 17.30.

<sup>160</sup> hereinafter referred to as "1996 HNS".

<sup>161</sup> [http://www.imo.org/Conventions/mainframe.asp?topic\\_id=256&doc\\_id=665](http://www.imo.org/Conventions/mainframe.asp?topic_id=256&doc_id=665).

<sup>162</sup> The other three are land-based sources of marine pollution, overexploitation of living marine resources and physical alteration/destruction of marine habitat.

<sup>163</sup> Section 17, Item 17.30.

ballast water exchanged thereby threatening the ecosystems, a need for a legally binding regime regulating exchange of ballast waters has emerged. The Johannesburg Plan of Implementation went one step further than the Agenda 21 and urged IMO to finalize a treaty concerning the ballast water management as soon as possible,<sup>164</sup> which paved the way for the adoption of the International Convention for the Control and Management of Ships' Ballast Water and Sediments in 2004.<sup>165</sup>

International community, under the auspices of IMO, initially focused on ship-based pollution generated either operationally or accidentally, even if it accounts for 10% and dumping which accounts for 10%. Even though 70% of marine pollution comes from land-based sources<sup>166</sup>, a legally binding international instrument couldn't have been adopted so far. 1982 UNCLOS provides only a general framework for states to prevent, reduce and control land-based pollution<sup>167</sup> and states are urged to establish global and regional rules and standards<sup>168</sup> due to lack of a global binding instrument. The first initiative towards achieving global standards for controlling land-based sources of pollution is the Montreal Guidelines for the Protection of the Marine Environment against Pollution from Land-based Sources (Montreal Guidelines)<sup>169</sup> adopted by UNEP in 1985. The Montreal Guidelines includes a list of suggestions, which are to be consulted in a project dealing with pollution from land-based sources.<sup>170</sup> Even though the Guidelines assisted Governments in the development of their national legislation and regional and multilateral agreements, the recommendations are far from being binding.<sup>171</sup> Chapter 17 of Agenda 21 also addresses the lack of a legally binding global instrument for controlling land-based

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<sup>164</sup> Section IV, Item, 34 (b); Çevre ve Orman Bakanlığı and UNDP, *Dünya Sürdürülebilir Kalkınma Zirvesi Johannesburg Uygulama Planı*, p.35.

<sup>165</sup> For further information see [http://www.imo.org/Environment/mainframe.asp?topic\\_id=548](http://www.imo.org/Environment/mainframe.asp?topic_id=548).

<sup>166</sup> Agenda 21, Section 17, Programme Area B, para.17.18, Rio de Janeiro, 1992, Source : <http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm>

<sup>167</sup> Article 207 (1).

<sup>168</sup> Article 207 (4).

<sup>169</sup> hereinafter referred to as "Montreal Guidelines".

<sup>170</sup> OECD Development Assistance Committee, *Guidelines on Aid and Environment*, p.31.

<sup>171</sup> Brown, *The International Law of the Sea*, p.349.

sources of marine pollution. Being aware of this deficiency, Agenda 21, after specifying actions for states in controlling land-based sources of pollution, calls them to take action in appropriate levels.<sup>172</sup> It also makes reference to Montreal Guidelines and while urge countries to update, strengthen and extend the Guidelines,<sup>173</sup> calls UNEP to convene an intergovernmental meeting to deal with land-based sources of marine pollution.<sup>174</sup> As a response to this, Washington Declaration was adopted in 1995 together with the Global Programme of Action for the Protection of the Marine Environment from Land based Activities (GPA) in an intergovernmental conference that is only focused on controlling land-based activities.<sup>175</sup> GPA is not a legally binding instrument, but a source of practical guidance, which includes actions to be taken at the national, regional and international levels to address the problem of land-based sources of pollution. The Johannesburg Plan of Implementation, instead of introducing new approaches or inviting states to adopt a legally binding document, it calls states to advance the implementation of already existing tools such as the Montreal Guidelines and the GPA and encourages them to make progress in protecting the environment from land-based sources.<sup>176</sup>

The only global convention that deals with marine pollution from land-based sources is the Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (Basel Convention)<sup>177</sup>, which is not however, particularly focused on marine pollution.<sup>178</sup> The Convention aims to reduce transboundary movement of hazardous wastes by promoting environmentally sound and efficient management of such wastes, to minimize their generation and to dispose them as close as possible to its source.<sup>179</sup>

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<sup>172</sup> Section 17, Item 17.24.

<sup>173</sup> Section 17, Item 17.25.

<sup>174</sup> Section 17, Item 17.26.

<sup>175</sup> For more information see <http://www.gpa.unep.org/>.

<sup>176</sup> Section IV, Item 33.

<sup>177</sup> hereinafter referred to as "Basel Convention".

<sup>178</sup> Brown, *The International Law of the Sea*, p.344.

<sup>179</sup> UNEP, *Register of International Treaties and Other Agreements in the Field of the Environment 1996*, (New York: UNEP Publications, 1997), p.359.

Apart from the international agreements that deals with marine environment, within the framework of coastal and marine environment interaction, there exists complementary international regulations that contributes to the protection of marine as well as coastal environments one of which is the Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (RAMSAR Convention)<sup>180</sup> of 1971. This Convention is the oldest international treaty, which has for the first time introduced the concept of ecosystem into the international environmental policy.<sup>181</sup> The Convention establishes a list of protected areas of wetlands that have an international importance in which states are obliged to designate at least one wetland to become a Contracting Party to the Convention.<sup>182</sup> After designation of wetlands as internationally important, ecological status of the wetlands should be monitored by the Contracting Parties who are also obliged to implement the planning of the wetlands for their wise use.<sup>183</sup> One of the most promising obligation is that if the Contracting Party deletes or restricts the boundaries of a designated area, the Party is obliged to create additional reserves.<sup>184</sup> In terms of marine and coastal environment, RAMSAR Convention enables designation of internationally important wetlands in coastal areas, thereby providing protection of the coastal and marine ecosystem in that particular part.

The other international agreement that is based on the ecosystem approach is the Convention on Biological Diversity of 1992 whose scope is much more comprehensive than the RAMSAR Convention. While RAMSAR Convention focuses only on wetlands, the Convention on Biological Diversity addresses all components of biological diversity with the aim of conserving and promoting sustainable utilization of them.<sup>185</sup>

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<sup>180</sup> hereinafter referred to as "RAMSAR Convention".

<sup>181</sup> Lakshman D. Guruswamy and Brent R. Hendricks, *International Environmental Law in a Nutshell*, (Minnesota: West Publications, 1997), pp.116-117.

<sup>182</sup> Article 2 (4).

<sup>183</sup> Article 3 (1).

<sup>184</sup> Article, 4 (2).

<sup>185</sup> UNEP, *Register of International Treaties and Other Agreements in the Field of the Environment 1996*, p.108.

### 1.3.2 Regional Patterns

Apart from the international regulations dealing with marine pollution, since 1970s marine environments have been protected under regional regimes. It was after the establishment of UNEP to "serve as a focal point for environmental action and co-ordination within the UN system", the Governing Council chose "Oceans" as one of the priority areas, which led to the initiation of the "Regional Seas Programme" of UNEP in 1974 as a global programme implemented at the regional level. Since then UNEP has followed a regional approach for the control of marine pollution and the management of marine and coastal resources.<sup>186</sup>

However, prior to this, the first regional seas treaty, Helsinki Convention, that deal with sources of marine pollution including pollution from ships, airborne and land-based sources of pollution and dumping at sea, was adopted in 1974 directly by the governments surrounding the Baltic Sea. This treaty contributed to formulation of UNEP's first regional seas treaty, the 1976 Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention)<sup>187</sup>, subsequent regional seas treaties and marine pollution provisions of 1982 UNCLOS. It can be said that the Helsinki Convention marked the beginning of application of regional approach in the protection of marine environment and was a significant milestone that set a new framework for the protection of marine environment.<sup>188</sup>

The 1982 UNCLOS attaches importance to regional arrangements for the prevention, reduction and control of the marine pollution as well. The emphasis of 1982 UNCLOS on regional cooperation might be an indication of the fact that the legal regime established by 1982 UNCLOS is not a single regime, but one with its regional variations. For control of all sources of marine pollution, regional cooperation is encouraged if control measures will be more effective at the regional level rather than at the global; if characteristics of the sea allows only regional application and if

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<sup>186</sup> UNEP, *Regional Seas Programme: Reports and Studies*, No.135, 1991, p.1, Source: <http://www.unep.ch/seas/Archive/rsrs135.html#BlackSea>

<sup>187</sup> hereinafter referred to as "Barcelona Convention".

<sup>188</sup> Birnie and Boyle, *International Law and the Environment*, p.261.

cooperation for monitoring, supervision and enforcement is facilitated through regional cooperation.<sup>189</sup>

Several benefits can be achieved from protection of marine environments at regional scale one of which is the elimination of unilateralism in responding to common problems, which can be better handled by regional cooperation. The other benefit is that it is better and easier to organize technical matters such as monitoring of the pollution, scientific research and dissemination of information at the regional level than at the global level. Regionalism is the appropriate way of meeting the goals of sustainability and integrated ecosystem management.<sup>190</sup>

Finally, regional arrangements are important means of implementing the framework provision of 1982 UNCLOS.<sup>191</sup> 1982 UNCLOS provides only general principles for the protection of marine environment, which necessitates establishment of specialized treaties directly dealing with specific provisions for particular sources of pollution and for particular geographical areas to give effect to the main Convention. In other words, as 1982 UNCLOS draws the general framework, the main principles indicated in the Convention can only be specified through regional applications. In this regard, regional applications gives effect to 1982 UNCLOS.<sup>192</sup> While encouraging regionalism, the Convention emphasizes that the regional rules shouldn't be less effective than that of the international ones and the regional treaties shouldn't be behind the international rules.<sup>193</sup>

Agenda 21 endorsed a regional approach for the management of marine and coastal environment. The Johannesburg Plan of Implementation confirms the significance of coordination and cooperation at regional level for the sustainable development of

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<sup>189</sup> Ibid., pp.258-259.

<sup>190</sup> Alan Boyle, "Globalism and Regionalism in the Protection of the Marine Environment", Davor Vidas (ed.), *Protecting the Polar Marine Environment: Law and Policy for Pollution Prevention*, (Cambridge: Cambridge University Press, 2000), pp.21-22.

<sup>191</sup> Ibid., p.22.

<sup>192</sup> Birnie and Boyle, *International Law and the Environment*, p.259.

<sup>193</sup> Ibid.

oceans and pays particular attention to regional cooperation including UNEP Regional Seas Programme.<sup>194</sup>

In literature, the formal definition of delimitation of an ocean regional area is made according to physical and geographical character of the marine environments such as enclosed or semi-enclosed sea. The other description of a regional marine environment is functional that concentrates on the patterns of use, resource exploitation, fisheries and navigation. Another description is political based on the decision of a group of states in which some sort of geographical proximity exists.<sup>195</sup>

Although 1982 UNCLOS does not explicitly define the term “region”, the enclosed or semi-enclosed seas are defined in the Article 122 as “a gulf, basin or sea surrounded by two or more states and connected to another sea or the ocean by a narrow inlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal states”, which can be attributed to the formal definition of a region. The coastal states are under the duty to cooperate according to the Article 123 of 1982 UNCLOS according to which it is the duty of states bordering an enclosed and semi-enclosed sea to cooperate with each other in the fulfillment of their obligations arising from 1982 UNCLOS including scientific as well as environmental issues.<sup>196</sup>

The Barcelona Convention is considered to meet all the requirements of Article 122 of 1982 UNCLOS. However today many regional seas of UNEP are eclectic in composition with the mixture of functional, formal and political elements. Regional seas are enclosed or semi-enclosed seas, marine and coastal regions with well-defined common problems as well as open seas if the political conditions are suitable for collaboration.<sup>197</sup>

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<sup>194</sup> Section IV, Item 30.

<sup>195</sup> Boyle, “Globalism and Regionalism in the Protection of the Marine Environment”, p.16.

<sup>196</sup> Şule Güneş, “Transforming Problems into Opportunities in the Oceans-the Aegean Sea”, Erdal Özhan (ed.), *Proceedings of the Fifth International Conference on the Mediterranean Coastal Environment MEDCOAST 01*, Vol.1, (Ankara: MEDCOAST, 2001), p.101.

<sup>197</sup> Boyle, “Globalism and Regionalism in the Protection of the Marine Environment”, p.17.

Today, most of the marine environments are under a regional regime either under the UNEP Regional Seas Programme or under direct multilateral intergovernmental cooperation. The Regional Seas Programme covers thirteen regions, with over 140 coastal states and territories including Mediterranean (1975), Red Sea and Gulf of Aden (1976), Kuwait (1978), West and Central Africa (1981), Caribbean (1981), East Asian Seas (1981), South-east Pacific (1981), South Pacific (1982), Eastern Africa (1985), Black Sea (1992), Northwest Pacific (1994), South Asian Seas (1995), North-East Pacific (2001) together with another Regional Seas Programme in development for Upper South-West Atlantic.<sup>198</sup> UNEP is involved in the five other programmes as a partner including the Arctic, North-East Atlantic, Baltic Sea, Caspian Sea and Antarctic.<sup>199</sup>

The backbone of each regional seas programme is action plan that is adopted at inter-governmental meetings and formulated according to the needs of the regions as the problems, ecological characteristics of the environment and priorities and capabilities of the participating countries change from region to region. All action plans are structured in a similar manner, which concern both the consequences and the causes of environmental degradation and designed for rehabilitation and improvement of the marine and coastal environment of that specific region in the short term and protection and management for sustainable development in the longer term.<sup>200</sup>

Action plans are considered to be comprehensive, which are comprised of five interdependent components including environmental assessment, management, legislation, and institutional and financial arrangements. The Environmental Assessment component focuses on assessment and evaluation of the causes of environmental problems and their magnitude, amounts and effects through research and monitoring of the quality of the marine environment, studies of coastal and marine activities with a view to provide information to decision-makers on the effectiveness of

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<sup>198</sup> UNEP, *Regional Seas: Joining Hands Around the Seas*, Source: <http://www.unep.ch/seas/main/hoverv.html>.

<sup>199</sup> Adler, *A World of Neighbours*, p.4.

<sup>200</sup> UNEP, *Regional Seas*.

the activities and the legal and administrative measures so as to direct them towards taking more effective measures.<sup>201</sup>

The Environmental Management includes a number of activities related to several aspects of environmental management such as ecosystem management, control of wastes from industrial, agricultural and domestic sources, formulation of contingency plans, training on EIA and management of coastal lagoons.<sup>202</sup>

The Environmental legislation is the heart of action plans as the action plans must be based on legal mutual commitments of the participating governments in the form of conventions, protocols and similar instruments, which gives effect to the action plans.<sup>203</sup> The conventions and the action plans are often adopted at the same time or within a year or two years after. It is the environmental legislation through which states are committed to act collectively or individually towards shared regional goals, in particular to protect, preserve the marine and coastal environment. The legal commitments are in the form of framework conventions supplemented with at least two protocols dealing with specific problems of the region. They address sources of marine pollution such as land-based pollution, pollution from dumping, pollution by ships, pollution emergencies or protection of species or specially protected areas of ecologically sensitive. The geographical coverage of the conventions includes territorial sea and EEZ of the parties. The geographical coverage can be enlarged to include internal waters up to the fresh water limit as well as specific selected coastal areas to meet the purposes of the protocols on control of pollution from land-based sources or protection of endangered species and ecologically sensitive areas. The convention and the protocols are formulated in such a way that no conflict with the provision of the 1982 UNCLOS or any other international agreements will emerge. Cross-reference is made to the international agreements on subjects covered by the

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<sup>201</sup> Ibid.

<sup>202</sup> Haas, "Save the Seas", pp.194-195.

<sup>203</sup> Ibid., p.195

regional seas conventions such as the 1973/78 MARPOL Convention or 1972 London Dumping Convention.<sup>204</sup>

Institutional arrangements component seeks to indicate frequency of the intergovernmental meetings that enables reviewing of the progress regularly, setting new objectives, determining new activities and approving of the budget and the activities, and organization in the form of a secretariat that is established to coordinate the activities at the regional level.<sup>205</sup>

The financial arrangements means to be the allocation of some source of money in the trust funds administered by secretariats for coordination or implementation of activities at the regional level as well as at the national level. At the early stages, UNEP together with the relevant UN agencies, generally provides the "seed financing" or catalytic financing in order to initiate development and implementation of the programme. Then, after the participating Governments are able to assume full responsibility for budgetary requirements, special trust funds are set up at the later stages by participating governments' annual contributions together with the contributions from international financial institutions, aid agencies and other voluntary contributions from the governments.<sup>206</sup>

There are several factors that contribute to the success of regional seas programmes one of which is the preparatory process of action plans. As this stage determines the actions to be implemented in the further stages of the programme, it must be as realistic as possible. During the determination of prior and appropriate actions, specific socio-economic and political situation in a given region, priorities in environmental protection as defined by the Governments of the region, capabilities and needs of the national institutions and results of past and ongoing activities must be taken into account. Furthermore, the preparatory process needs to be as inclusive as possible with the involvement of UN agencies and other appropriate

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<sup>204</sup> OECD Development Assistance Committee, *Guidelines on Aid and Environment*, p.46.

<sup>205</sup> UNEP, *Regional Seas Programme*, p.4.

<sup>206</sup> Haas, "Save the Seas", p.196.

organizations. The active participation of these partners is also important during the implementation of action plans. The strong political commitments of the countries will be complementary to the success of action plans.<sup>207</sup> For this purpose, in the preparation of action plans, UNEP consults closely with all stakeholders of the region including the region's governments, regional organizations, interested international organizations, and regional experts to determine the scope and substance of a suitable action plan.<sup>208</sup> Another important feature of regional seas programmes is that they are attempted to be designed flexible so as to respond to evolution and changes in the international environmental agenda.<sup>209</sup>

In order to provide implementation of an action plan, a number of projects run in parallel at regional level with national applications. To be able to coordinate the activities in a specific issue area, a system of activity centers are devised at the regional level to be coordinated by national institutions. Overall implementation of an action plan and activities of activity centers are then coordinated by regional coordinating units to ensure integrated and well-arranged execution from within the region of projects under an action plan.

The initial focus of the Regional Seas Programmes was marine pollution prevention.<sup>210</sup> The marine pollution monitoring, assessment and control complemented with information exchange, training, technical assistance and regional projects were the main activities under Action Plans.<sup>211</sup> However, it was understood that social and economical development concerns should be integrated into mainstream of environmental protection. Furthermore, Agenda 21 put forward the idea of integrating the protection of marine and coastal environment, which necessitated management of marine environment and adjacent land areas as a single

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<sup>207</sup> Ibid.

<sup>208</sup> Adler, *A World of Neighbours*, p.13

<sup>209</sup> Ibid.

<sup>210</sup> Boyle, "Globalism and Regionalism in the Protection of the Marine Environment", p.22.

<sup>211</sup> OECD Development Assistance Committee, *Guidelines on Aid and Environment*, pp.45-46.

entity.<sup>212</sup> This in turn led to a shift in the understanding of action plans of Regional Seas Programmes from pollution control to ecosystem management, sustainable development and integrated coastal zone planning and management<sup>213</sup> Today, Regional Seas Programmes are focused on the implementation of Agenda 21, and its Chapter 17 in particular.<sup>214</sup>

Most recently, UNEP developed "horizontal collaboration" strategy, which aimed at closer cooperation between the Regional Seas Conventions' Secretariats to discuss common concerns, to share experiences and knowledge of the mature Regional Seas Conventions, best practices, and lessons learned to the younger and less developed conventions. UNEP emphasized establishment of stronger linkages between Regional Seas Conventions and global conventions and agencies such as with GPA, Global International Water Assessment, Convention on Biological Diversity and 1982 UNCLOS Secretariats.<sup>215</sup>

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<sup>212</sup> Boyle, "Globalism and Regionalism in the Protection of the Marine Environment", p.22.

<sup>213</sup> OECD Development Assistance Committee, *Guidelines on Aid and Environment*, p.46.

<sup>214</sup> UNEP, *Regional Seas*.

<sup>215</sup> Jorge Illueca, "A Regional Seas Renaissance", *Synergies*, No.1, November 1999, Source: <http://www.unep.ch/seas/main/hjorge.html>

## CHAPTER 2

### REGIONAL COOPERATION FOR THE BLACK SEA MARINE AND COASTAL ENVIRONMENT

#### 2.1 The State of the Black Sea Environment

##### 2.1.1 Geographical and Physical Characteristics of the Black Sea

Black Sea is a semi-enclosed sea<sup>216</sup> whose only connection is provided to the oceans through Turkish Straits.<sup>217</sup> In this regard, it is considered to be the most isolated sea among all the enclosed seas in the world. The Black Sea is in connection with the Mediterranean to the south, which provides its connection to the oceans and with the Sea of Azov to the north.<sup>218</sup> The connection with the Sea of Azov is provided by the Kerch Strait with length of 45 km and width varying between 3.7 and 42 km.<sup>219</sup> The Sea of Azov, surrounded by Ukraine and Russia, is considered as the intrinsic part of the Black Sea and is a small and shallow sea<sup>220</sup> with an average depth of 8 m in an area of 39 000 km<sup>2</sup>.<sup>221</sup> On the other hand, connection with the Mediterranean is provided by the Turkish Straits System.<sup>222</sup>

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<sup>216</sup> *Supra*, p.48; Güneş, "Transforming Problems into Opportunities in the Oceans-the Aegean Sea", p.101.

<sup>217</sup> Gülfem Bakan and Hanife Büyükgüngör, "The Black Sea", *Marine Pollution Bulletin*, Vol.41, No.1-6, 2000, p.24.

<sup>218</sup> Laurence D. Mee and Graham Topping, *Black Sea Pollution Assessment*, Black Sea Environmental Series, Vol.10, (New York: UN Publications, 1998), p.2.

<sup>219</sup> Zaitsev Yu. and V. Mamaev, *Biological Diversity in the Black Sea: A Study of Change and Decline*, Black Sea Environmental Series, Vol.3, (New York: UN Publications, 1997), p.5.

<sup>220</sup> Mee and Topping, *Black Sea Pollution Assessment*, p.2.

<sup>221</sup> Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, p.5.

<sup>222</sup> The Turkish Straits System consists of the Bosphorus Strait, the Marmara Sea and the Dardanelles Strait. See Mee and Topping, *Black Sea Pollution Assessment*, p.2.

The exchange of the Black Sea water is provided only with the Bosphorus Strait, a narrow, elongated and shallow channel with 31 km long and varying width between 0.7 and 3.5 km.<sup>223</sup> Bosphorus has a two layer flow system with which approximately 300 km<sup>3</sup> of sea water flows from the Mediterranean to the Black Sea from the bottom layer and a mixture of seawater plus freshwater of the rivers with twice this volume from the Black Sea to the Mediterranean from the top layer.<sup>224</sup> The evaporation in the Black Sea is lower than the freshwater flowing to the Sea, by which the Black Sea is less salty than the other seas in the world. The salinity of the water flowing to the Black Sea is 22 whereas the salinity of the water flowing from the Black Sea to the Mediterranean is 18. Due to the inflow of this saline water to the Black Sea, salinity of the water mass in the Black Sea is maintained as constant.<sup>225</sup>

The Black Sea is surrounded by six coastal states including Turkey along its southern rim, Georgia along its eastern rim, Russia and Ukraine along its northern rim and Bulgaria and Romania along its western rim.<sup>226</sup> The Ukraine has the longest coastline with 1628 km and followed by Turkey with 1400 km, Russia with 475 km, Georgia with 310 km, Bulgaria with 300 km and Romania with 225 km.<sup>227</sup>

The surface area of the Black Sea is 423 000 km<sup>2</sup> with a total volume of 547 000 km<sup>3</sup> of water and a depth of 2 212 m.<sup>228</sup> The total drainage basin of the Black Sea is 2 000 000 km<sup>2</sup>, which is five times bigger than its area.<sup>229</sup> This area covers 16 countries including the six Black Sea coastal states. Apart from the Black Sea coastal states,

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<sup>223</sup> Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, p.5.

<sup>224</sup> Laurence D. Mee, *How to Save the Black Sea: Your Guide to the Strategic Action Plan*, UK, p.2.

<sup>225</sup> Mee and Topping, *Black Sea Pollution Assessment*, p.2.

<sup>226</sup> Ibid.

<sup>227</sup> Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, p.5.

<sup>228</sup> Ibid.

<sup>229</sup> Şule Güneş, "Karadeniz'de Çevresel İşbirliği, 1992 Bükreş Sözleşmesi", *METU Studies in Development*, Vol.28, No.3-4, 2001, p.316; The total drainage basin of the Black Sea is 2 000 000 km<sup>2</sup> that amounts to 60% of that of Mediterranean whose drainage basin is 3 500 000 km<sup>2</sup>. For detailed comparison between Mediterranean and Black Sea see Jens Sorensen, "A Comparative Analysis and Critical Assessment of the Regimes to Manage the Black Sea and the Mediterranean Sea", Erdal Özhan (ed.), *Proceedings of the Second International Conference on the Mediterranean Coastal Environment MEDCOAST 95*, Vol.1, (Ankara: MEDCOAST, 1995), pp.697-716.

the countries in the drainage basin of the Black Sea are Austria, Bosnia and Herzegovina, Croatia, Czech Republic, Germany, Hungary, Moldova, Slovakia, Slovenia and Yugoslavia.<sup>230</sup> The Black Sea is influenced by these 16 countries and more than 160 million people living in its basin.<sup>231</sup> The freshwater input to the Black Sea comes from the rivers in its drainage basin, which amounts to a total of approximately 470 km<sup>3</sup>.<sup>232</sup> Among all the rivers flowing into the Black Sea, 70% of the freshwater enters from Europe's second, third and fourth biggest rivers, namely Danube, Dnieper and Dniester, respectively, among which the Danube alone pours approximately 350 km<sup>3</sup>.<sup>233</sup>

Table 2.1: Flow of the Rivers in the Black Sea Drainage Basin

| Drainage Basins in the Black Sea         | Rivers                                                           | Drainage Basin (km <sup>2</sup> ) | The Total Average Annual Inflow, (km <sup>3</sup> ) |
|------------------------------------------|------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------|
| Drainage from Bulgaria                   | Duda, Kamchia, Provodiyska, Rezovska, Veleka, Ropotama, Fakiyska | 6 292                             | 1.83                                                |
| Drainage from Caucasus                   | Rioni, Çoruh, Inguri, Kodori, Bzyb, Supsa, Mzymta                | 75 000                            | 43                                                  |
| Drainage from the Crimea                 | Chernaya, Belbec, Al'ma, Kacha                                   | 2 729                             | 0.32                                                |
| Drainage from the North-western Coast    | Danube, Dniester, Dnieper, Southern Bug                          | 1 500 000                         | 389                                                 |
| Drainage from Romania (excluding Danube) |                                                                  | 4 589                             | 0.12                                                |
| Drainage from Turkey                     | Yeşilırmak, Kızılırmak, Sakarya                                  | 259 550                           | 36                                                  |
| TOTAL                                    |                                                                  |                                   | ~470                                                |

Source: Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, pp.9-13.

One of the peculiarity of the Black Sea that deserves particular attention is its two layer structure in a depth of 2 212 m. The lower layer of the Black Sea with a depth of 2000 m is anoxic due to the presence of hydrogen sulphide layer. This layer,

<sup>230</sup> Commission of the European Communities, *Communication from the Commission: Environmental Co-operation in the Danube-Black Sea Region*, COM(2001) 615 final, (Brussels, 2001), p.11.

<sup>231</sup> Bakan and Büyükgüngör, "The Black Sea", p.24.

<sup>232</sup> Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, pp.9-13; The amount of the riverine inflow to the Black Sea is high when compared with the Mediterranean since the amount of riverine inflow in the Black Sea is three times larger than the riverine inflow to the Mediterranean in a volume of 3 750 000 km<sup>3</sup> that is seven times bigger than the Black Sea, thereby making it more susceptible to pollution. See Sorensen, "A Comparative Analysis and Critical Assessment of the Regimes to Manage the Black Sea and the Mediterranean Sea", p.700.

<sup>233</sup> Commission of the European Communities, *Communication from the Commission*, p.5.

which amounts to 90% of the Black Sea water volume, is devoid of marine life.<sup>234</sup> Within this respect, the Black Sea is considered as the world's largest anoxic basin of the global ocean with high levels of hydrogen sulphide. It is only the upper layer of 100- 200 m depth, which contains oxygen, allows the marine life in the Sea.<sup>235</sup> Fortunately, the hydrogen sulphide layer was relatively stable over for centuries in the Black Sea.<sup>236</sup> However, by 1970s this 10% of the volume of the Sea has been under severe stress as a result of the introduction of excess nutrient loads. The excess nutrient loads do not only lead to formation of hydrogen sulphide rich bottom layers, but also affects the upper layer of the Black Sea, constituting a threat to the marine life of the Sea.<sup>237</sup>

Being an isolated sea, having high amount of fresh water input from its drainage basin into a small volume and salty water flow from Bosphorus as well as having anoxic conditions accounting for nine tenth of it, the Black Sea can be considered to have a very unique ecosystem, which makes it so much vulnerable to pollution.

### **2.1.2 The Environmental Problems Encountered in the Black Sea**

It was by the early 1990s, environmental degradation of the Black Sea had reached such a level that,<sup>238</sup> it was considered as the dirtiest sea in the world and regarded as dying. Indeed, nine-tenth of the Black Sea has been dead for millennia due to the

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<sup>234</sup> Bakan and Büyükgüngör, "The Black Sea", p.24; The cycle in the oceans, the food chain, works in such a way that if enough light and essential nutrient is provided, the tiny plants grow in the surface waters of the sea that is consumed by the animals. Died plants naturally falling to the lower layers of the sea are decomposed by bacteria through oxygen. During this process, the oxygen is provided to the bacteria when the water is mixed enough. The bacteria in the food chain of the Black Sea could not get the necessary oxygen, which in turn leads to the consumption of the oxygen in the sulphate in the bottom layers. The end result is the generation of the hydrogen sulphide. In the past, bacterial population in the Black Sea got their oxygen by consuming this dissolved sulphate. As a result of this fact, today, entire lower layer of the Black Sea is full of hydrogen sulphide. The vertical mixing in Black Sea, in other words, the mixture of the upper layer and the lower layer is very slow. This contributes to the generation of hydrogen sulphide as well. For more information see Mee, *How to Save the Black Sea*, p.2.

<sup>235</sup> Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, pp.14-15.

<sup>236</sup> Frank J. Gable, "The Black Sea: An Environmental and Ecological Profile", Elisabeth Mann Borgese, Aldo Chircop, Moira McConnell and Joseph R. Morgan (eds.), *Ocean Yearbook 14*, (Chicago: The University of Chicago Press), 2000, p.425.

<sup>237</sup> Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, p.16.

<sup>238</sup> Martin W. Sampson, "Black Sea Environmental Cooperation: States and the Most Seriously Degraded Regional Sea", *Boğaziçi Journal*, Vol.9, No.1, 1995, p.53.

presence of hydrogen sulphide, which has made that part of the Sea devoid of marine life.<sup>239</sup>

It was after the anthropogenic actions that took place within the drainage basin of the Black Sea, environmental degradation in the Sea has reached to alarming levels. Black Sea marine and coastal environment was degraded as a result of increasing agricultural activities that ended up with discharge of fertilizers, direct discharges of untreated sewage, increasing industrial pollution, shipping related activities and fishing activities.<sup>240</sup> Combined with the peculiar characteristics of the Sea, the Black Sea has become one of the most vulnerable marine environments in the world.

In terms of environmental challenges, land-based sources of pollution have considerably significant negative impact on the Black Sea environment, which is the main cause for several of its environmental problems including eutrophication, oil pollution and water contamination. One of the major problem related with land based activities in terms of its coverage and impacts on the Black Sea ecosystem can be considered as eutrophication, which is formed due to excessive loads of nutrients via the rivers and directly from land-based sources of domestic, industrial and agricultural sources. Eutrophication is over-enrichment of the water bodies with organic matter, especially algae.<sup>241</sup> The eutrophication has negative consequences for biodiversity, which causes to extinction of species in water bodies and surrounding wetlands and forests, and also for human health in the region.<sup>242</sup> This has been an issue for the Black Sea since late 1960s in which green revolution happened, leading to over consumption of fertilizers.<sup>243</sup>

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<sup>239</sup> Gable, "The Black Sea", p.425, 432; Neal Acherson, *Black Sea*, (UK: Hill and Wang, 1995), p.257.

<sup>240</sup> Sampson, "Black Sea Environmental Cooperation", pp.53-54; Gable, "The Black Sea", pp.432-433.

<sup>241</sup> The algae grow in all surface waters when enough light and essential nutrients including nitrogen and phosphorous is provided. When the nutrient level is too high, algae production increases. During the degradation of algae, the oxygen is consumed. When the degraded algae is high, then the oxygen consumption level increases reaching to undesired levels seriously disrupting the food chain at the sea. For further information see Commission of the European Communities, *Communication from the Commission*, p.7; Mee, *How to Save the Black Sea*, p. 3

<sup>242</sup> Commission of the European Communities, *Communication from the Commission*, p.3, 7.

<sup>243</sup> Yu P. Zaitsev, "Eutrophication of the Black Sea and Its Major Consequences", Laurence D. Mee and Graham Topping (eds.), *Black Sea Pollution Assessment*, Black Sea Environmental Series, Vol.10, (New York: UN Publications, 1998), p.66.

Table 2.2: Nutrient Concentration in Romanian Marine Coastal Waters, ( $\mu\text{g.l}^{-1}$ )

| Year      | Phosphates | Nitrates |
|-----------|------------|----------|
| 1960-1970 | 10.5       | 22.5     |
| 1971-1975 | 177.5      | -        |
| 1976-1980 | 197.9      | 188.8    |
| 1981-1985 | 138.8      | 93.7     |
| 1986-1988 | 262.0      | 112.2    |

Source: Zaitsev, "Eutrophication of the Black Sea and Its Major Consequences", p.60.

When the Romanian waters are taken as a reference, it can be clearly realized that nutrient amount in the northwestern part of the Black Sea was considerably increased between 1960-1990. Nitrogen levels increased 250% in Danube, 750% in Dniester and 160% in Dnieper between 1970-1990. In terms of phosphorus, 380% increase in Danube, 710% increase in Dniester and 510% increase in Dnieper was observed, all of which have directly affected the northwestern shelf of the Black Sea.<sup>244</sup> Today, this part of the Black Sea is the largest heavily eutrophic marine zone, called as a "dead zone", which was however considered as the principal and nursery and production area in terms of biodiversity, biomass and biological productivity until mid-1960s.<sup>245</sup>

According to the findings of Transboundary Diagnostic Analysis (TDA)<sup>246</sup>, overall inputs within the Black Sea drainage basin amounts to 647 000 tons of nitrogen and 50 500 tons of phosphorus annually. The nutrients come to the Black Sea environment from 16 countries in the drainage basin of the Black Sea among which half of these nutrients are discharged to the rivers from agriculture, one quarter from industry and a similar proportion from domestic sources.<sup>247</sup>

<sup>244</sup> Sampson, "Black Sea Environmental Cooperation", p.53.

<sup>245</sup> Zaitsev, "Eutrophication of the Black Sea and Its Major Consequences", pp.58-60.

<sup>246</sup> TDA, which was prepared by a group of leading specialist in 1996, analyzes the environmental problems of the Black Sea. It can be considered as the most reliable document in terms of putting forward the root causes of the environmental degradation in the Black Sea. Since TDA, a comprehensive study couldn't have been made so far.

<sup>247</sup> Commission of the European Communities, *Communication from the Commission*, p.9.

Table 2.3: Phosphorus and Nitrogen Contribution of the Black Sea States, (%)

| Country    | Bulgaria | Georgia | Romania | Russia | Turkey | Ukraine | Non-coastal Countries |
|------------|----------|---------|---------|--------|--------|---------|-----------------------|
| Nitrogen   | 14       | <1      | 27      | 10     | 6      | 12      | 30                    |
| Phosphorus | 5        | 1       | 23      | 13     | 12     | 20      | 26                    |

Source: Commission of the European Communities, *Communication from the Commission*, p.13.

TDA indicates that 70% of the nutrients are coming from the six Black Sea coastal states and the remaining 30% comes from countries other than the coastal ones, which are located in the wide water drainage basin of the Black Sea, in particular in Danube. The nutrient contribution of the countries in the drainage basin of the Black Sea is as follows:

Table 2.4: The Division Between The Countries of Basin in their Contribution to the Total Loads of Nutrients to the Danube, (%)

| Country            | Nitrogen  | Phosphorus |
|--------------------|-----------|------------|
| Austria            | 13,9-14,4 | 7,7        |
| Bulgaria           | 4-4,1     | 8,1        |
| Bosnia Herzegovina | 6,4-6,5   | 4,6        |
| Croatia            | 4,1       | 4,5        |
| Czech Republic     | 2,8       | 2,2        |
| Germany            | 12,3-13   | 7,6        |
| Hungary            | 5,6       | 7,7        |
| Moldova            | 1,4-1,5   | 2,9        |
| Romania            | 21,3-22   | 26,0       |
| Slovakia           | 5,4-5,5   | 3,5        |
| Slovenia           | 3,5-3,6   | 2,7        |
| Ukraine            | 5-5,1     | 8,1        |
| Yugoslavia         | 12,8-13,1 | 14,4       |

Source: Commission of the European Communities, *Communication from the Commission*, p.11.

Table 2.4 shows that the largest contributors for nitrogen, with more than 10%, are Austria, Yugoslavia and Germany that are the countries in the Black Sea drainage basin. The highest contribution to the Danube, which in turn to Black Sea, comes from Romania with its nitrogen percentage share that amounts to more than 20. On the other hand, the largest contributors for phosphorus are Romania and Yugoslavia with their percentage share more than 10.<sup>248</sup>

<sup>248</sup> Ibid., p.11.

Even though there is evidence of some recovery in the Black Sea ecosystem,<sup>249</sup> it is widely considered however that nutrient discharges are likely to rise again with consequent damage to the Black Sea, unless action is taken to implement nutrient discharge control measures as part of the economic development strategies.<sup>250</sup>

The insufficiently treated sewage from domestic and industrial discharges from the Black Sea coastal states is contributing to the eutrophication in the Black Sea, which poses a threat to ecosystem as well as to public health.<sup>251</sup> Due to hardly sustaining economies of the Black Sea, heavy investments for the construction of wastewater treatment plants couldn't have been realized by the Black Sea coastal states, in particular those with economies in transition for treating domestic wastewater. 49 number of hot spots, which needs urgent and particular action<sup>252</sup>, addressing the largest domestic and industrial waste water sources, were identified in the Black Sea, according to which for Bulgaria 9, for Georgia 6, for Romania 6, for Russia 8, for Turkey 10 and for Ukraine 10 hot spots were identified that necessitates heavy investments in building wastewater treatment plants.<sup>253</sup> Even though some countries like Bulgaria and Romania have already invested for the construction of new wastewater treatment plants, in general the Black Sea coastal states either have no treatment plans or the existing ones are insufficient in addressing the insufficiently treated problem.<sup>254</sup>

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<sup>249</sup> Even though load of nutrients entering the Black Sea from the Danube has fallen in recent years as a result of the measures taken by the upper Danube countries, particularly by Germany and Austria, collapse of the economies of lower Danubian and former Soviet countries, and implementation of a ban in polyphosphate detergents in some countries, total nitrogen levels are still at least four times as high as those observed during the 1960s, while current phosphate levels appear to be roughly the same as in the 1960s. See Commission of the European Communities, *Communication from the Commission*, p.13.

<sup>250</sup> UNDP, *RER/01/G33/A/1G/31: Control of Eutrophication, Hazardous Substances and Related Measures for Rehabilitating the Black Sea Ecosystem: Project Document for Phase II*, (unpublished, 2004), p.5.

<sup>251</sup> Mee, *How to Save the Black Sea*, p.3.

<sup>252</sup> Black Sea Commission, *State of the Environment of the Black Sea: Pressures and Trends 1996-2000*, (Istanbul, 2002), p.20.

<sup>253</sup> UNDP, *RER/01/G33/A/1G/31: Control of Eutrophication, Hazardous Substances and Related Measures for Rehabilitating the Black Sea Ecosystem: Project Document for Phase I*, (unpublished, 2001), p.8.

<sup>254</sup> Commission of the European Communities, *Communication from the Commission*, p.13.

Inputs of other harmful substances, in particular oil, constitutes a threat to the Black Sea ecosystem as well, which enters to the Black Sea environment from vessels either accidentally or operationally and also from land based sources.

Table 2.5: Oil Pollution of the Black Sea, (tons/year)

| Country  | Domestic | Industrial | Land-based | Rivers |
|----------|----------|------------|------------|--------|
| Bulgaria | 5 649    | 3          | -          | 1 000  |
| Georgia  | -        | 78         | -          | -      |
| Romania  | 3 144    | 4 052      | -          | -      |
| Russia   | -        | 52         | 4 200      | 165    |
| Turkey   | 7        | 753        | -          | -      |
| Ukraine  | 21 215   | 10 441     | 5 169      | 1 473  |
| TOTAL    | 30 015   | 15 379     | 9 369      | 2 638  |

Source: BSEP, *1996 Annual Report*, (Istanbul: UNDP Publications, 1997), p.2.

The total oil pollution in the Black Sea is estimated to be at 110 840 tons per year of which 48% is transported by the Danube river that accounts for 53 436 tons and the rest from land-based sources. The total discharges of the Black Sea coastal states amounts to 57 404 tons annually. The accidental oil spills are relatively small that amounts to 136 tons per year.<sup>255</sup> Approximately 95 000 tons of unrecoverable oil is discharged to the Black Sea environment.<sup>256</sup>

Due to the emerging pressures as a result of the use of the Black Sea as a maritime transport route with the newly opened Caspian oil fields,<sup>257</sup> the oil pollution will seem to pose a much more grave threat for the Black Sea in near future.

The loss of biodiversity, which was originally very rich, is considered as one of the major environmental challenges in the Black Sea. The biodiversity of the Black Sea has been under threat as a result of the marked changes in the environment of the Black Sea, of overfishing and overhunting activities. Since 1950-1960, there had been significant changes in the Black Sea population, species and the ecosystem as a whole.<sup>258</sup> The northwestern shelf of the Black Sea, which had a very unique system

<sup>255</sup> BSEP, *1996 Annual Report*, p.2.

<sup>256</sup> Mee, *How to Save the Black Sea*, p.4.

<sup>257</sup> *Infra*, pp.64-70.

<sup>258</sup> Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, p.76, 144.

of red algae with a very rich biodiversity, has now changed to a seasonally anoxic “dead zone”. This has impacted the entire Black Sea ecosystem, turning it to an unstable one.<sup>259</sup> In line with these developments, reductions in the population of the marine species of the Black Sea had observed. In 1966, the dolphins number declined from one million to under three hundred thousand as a result of hunting.<sup>260</sup> The monk seals, which are the universally protected species, had a special place in Black Sea.<sup>261</sup> Unfortunately, today it is very late to save the monks seals in the Black Sea as a result of the pollution in the Sea.<sup>262</sup> Today, many species of the plants and animals in the Black Sea are waiting to be considered for protection.

The irrational exploitation of fish stocks in the Black Sea forms a challenge for the Black Sea biodiversity as well as economy. Black Sea was originally a fish rich region whose significant portion of fish resources was collapsed during 1980s. During 1960s, there existed 26 commercial fish species. However, as a result of the expansion of the fish industry and widely application of the high technology fish finding techniques together with the pollution of water mainly by nutrients as well as increase in turbidity, the diversity of commercially exploitable fish of the Black Sea was reduced from some 26 species to 6 species.<sup>263</sup> One of the other devastating effect on the Black Sea fisheries came from the exotic species. The Black Sea is considered as one of the most invaded by exotic species of plants and invertebrate animals, which are introduced to the marine environment of the Black Sea accidentally with ships’ ballast waters, ballast sediments and fouling. 68% of the Black Sea exotics are originated from North Atlantic Ocean, among which the Comb jelly *Mnemiopsis leidyi* is the most striking one in terms of having a negative influence on the Black Sea ecosystem, and 21% are from the Pacific Ocean. *Mnemiopsis leidyi* were accidentally introduced to the Black Sea in the early 1980s. Between 1989-1990, this species, flourished in the eutrophic Black Sea ecosystem, reached to a total biomass

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<sup>259</sup> Commission of the European Communities, *Communication from the Commission*, p.14.

<sup>260</sup> Mee, *How to Save the Black Sea*, p.14

<sup>261</sup> Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, p.144.

<sup>262</sup> Mee, *How to Save the Black Sea*, p.14

<sup>263</sup> Commission of the European Communities, *Communication from the Commission*, p.14.

about one billion tons that was more than the world annual fish harvest.<sup>264</sup> The introduction of this exotic species to the Black Sea environment is considered as the most devastating biological explosions ever recorded by science.<sup>265</sup> In the late 1980s-early 1990s the invasion of *Mnemiopsis leidyi* was at such a level that due to lack of its predator, it dominated the entire Black Sea ecosystem and contributed to collapse of the Black Sea fisheries.<sup>266</sup> Due to these reasons, total commercial fish catch of the Black Sea decreased from one million metric tons to one hundred thousand metric tons in between 1982-1992. For instance, anchovy, which provided 320 000 tons of fish in 1984, has fallen to 15 000 tons. Today, the fish catch from all species is less than one seventh of what it was ten years ago, and some species are almost certainly extinct.<sup>267</sup> The scientists calculate that normally the Black Sea can sustain at least 350 000 tons per year. Today, even though anchovy is recovered, other fish species are seriously depleted because of the *Mnemiopsis leidyi*.<sup>268</sup> Due to this impact on the Black Sea ecosystem, which was exacerbated with its isolation from the oceans, the Black Sea has been considered to be one of the very vulnerable marine areas to exotic species in the world.<sup>269</sup>

### 2.1.3 Ship-based Pollution as a Future Overwhelming Problem

It was after the end of Cold War, which ended up with the collapse of USSR, the Caspian oil emerged as an opportunity for the international energy markets as an significant option as the region was closed to international markets under the control

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<sup>264</sup> Mee, Laurence D., "Can the Marine and Coastal Environment of the Black Sea be Protected?", Tunç Aybak (ed.), *Dynamics of Cooperation and Conflict*, (London: L.B. Tauris & Co, 2001), p.136.

<sup>265</sup> Acherson, *Black Sea*, p.262.

<sup>266</sup> Mee, *How to Save the Black Sea*, p.4.

<sup>267</sup> Acherson, *Black Sea*, p.259.

<sup>268</sup> Mee, *How to Save the Black Sea*, p.13

<sup>269</sup> Yu P. Zaitsev, "Invasive Species in the Black Sea", Roman Bashtanny, Leonard Webster and Steve Raaymakers (eds.) *1<sup>st</sup> Black Sea Conference on Ballast Water Control and Management, Odessa, Ukraine, 10-12 October 2001: Conference Report*, GloBallast Monograph Series No.3, (London: IMO, 2002), pp.1-2.

of USSR for several decades.<sup>270</sup> The Caspian oil has gained great importance especially for European markets.

Table 2.6: Estimates of Exploitable Oil Resources of the Caspian Region, (billion barrels)

| Oil in the Caspian Region | Proven Oil  | Possible Oil | TOTAL   |
|---------------------------|-------------|--------------|---------|
| Azerbaijan                | 3.6 – 12.5  | 27           | 31-40   |
| Kazakhstan                | 10.0 – 17.6 | 85           | 95-103  |
| Turkmenistan              | 1.7         | 32           | 34      |
| Uzbekistan                | 0.3         | 1            | 1       |
| Russia*                   | 0.3         | 5            | 5       |
| Iran*                     | 0.1         | 12           | 12      |
| TOTAL                     | 16.0 – 32.5 | 163          | 179-195 |

\*Only the reserves in Caspian region are included.

Source: A. Necdet Pamir, *Bakü – Ceyhan Boru Hattı: Ortaasya ve Kafkasya'da Bitmeyen Oyun*, (Ankara: ASAM Yayınları, 1999), p.95.

Estimates of proved crude oil reserves of the Caspian Sea Region vary widely by source.<sup>271</sup> Proven oil reserves in the Caspian oil ranges between 16-32.5 billion barrels, which is estimated to be 1.3% to 2.7% of the world's proven oil reserves.<sup>272</sup> According to the estimation made by USA Energy Information Administration, the oil reserves of the Caspian Region is expected to be ranging between 179-195 billion barrels with the extraction of the possible oil reserves in future.<sup>273</sup> However, the Caspian Region's significance does not only come from the amount of the existing and potential oil reserves. Since independence, as the domestic consumption in the Caspian Region has decreased, the Region has become significant due to the high potential of its exportable oil.<sup>274</sup>

Over the past decade, the issue of transportation of oil from the Caspian Region has been on the agenda of international community with the discussions for possible transportation route options through Russia, Georgia, Turkey, China, Afghanistan

<sup>270</sup> Terry D. Adams, "The Realities of Caspian Oil Development and Their Impact on the Black Sea Region", *Halki International Seminar: 31 August – 5 September 2001*, (Cambridge Energy Research Associates: Brussels, 2001), p.1.

<sup>271</sup> <http://www.eia.doe.gov/emeu/cabs/caspian.html>, August 2003.

<sup>272</sup> Pamir, *Bakü – Ceyhan Boru Hattı*, p.95.

<sup>273</sup> Ibid.

<sup>274</sup> <http://www.eia.doe.gov/emeu/cabs/caspian.html>.

and Iran, all of which push for one or another pipeline route.<sup>275</sup> As most of the oil produced in the Caspian Region is exported to Europe, the Black Sea has been at the heart of the discussions not as an energy-rich, but as an energy transit region with its location on the route between the Caspian Sea and the world's one of the largest energy import markets, Europe.<sup>276</sup> A large number of export routes have been proposed for the forthcoming production from the Caspian Region,<sup>277</sup> all of which pass westwards through the Black Sea and the Turkish Straits en route to the Mediterranean Sea and world markets. There is a growing concern that projected Caspian Sea export volumes will constitute a threat to the Black Sea as a transit region. The transportation of the Caspian oil with large tankers via Black Sea increases the possibility of occurrence of ship-based pollution.<sup>278</sup> In that sense, the Caspian oil appears as a c remarkable future challenge for the Black Sea environment. Therefore, the Caspian oil transportation routes to international markets are highly crucial from environmental protection point of view.

Among the countries in the Caspian Region,<sup>279</sup> Kazakhstan and Azerbaijan have gained particular significance due to the amount of oil reserves and the increasing oil production. Azerbaijan's oil is currently carried to international markets, in particular to Western Europe via two export routes one of which is the Baku-Novorossiisk and the other is the Baku-Supsa pipeline. The former can be called as the "early northern route", which has been sending the Azeri oil from Baku to the Russian Black Sea coast of Novorossiisk since 1997. The latter export line "western route" carries Azeri "early oil" to Georgia's Black Sea coast of Supsa. After the oil loaded in these ports, it is carried by tankers via Black Sea passing through the Turkish Straits. By 2005, with the completion of the "western route" pipeline, which will be carrying oil from Azerbaijan's port of Baku through Georgia Tbilisi- and then across Turkey to Ceyhan

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<sup>275</sup> Ronald Soligo, "The Economics of Transport Routes for Caspian Oil", *Conference on The Impact of Caspian Oil and Gas Development on Turkey and Challenges Facing the Turkish Straits*, 9 November 2001, Istanbul.

<sup>276</sup> Friedemann Müller, "Meeting Challenges Energetically: Networking Oil and Gas in the Black Sea Region", *Southeast European and Black Sea Studies*, Vol.2, No.2, (London: Frank Cass, 2002), p.153.

<sup>277</sup> For transportation routes for Caspian oil see Appendix A.

<sup>278</sup> Soligo, "The Economics of Transport Routes for Caspian Oil".

<sup>279</sup> Caspian Region includes Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan as well as parts of Russia and Iran.

(BTC), this route will become the main export route for the transportation of the Azeri oil.<sup>280</sup> Kazak oil is exported in three directions including to northward via the Russian pipeline system and rail network, to westward via the Caspian Pipeline Consortium (CPC) Project and to southward via swaps with Iran. Currently, CPC project carries the Kazak oil to European markets by which the oil is transported from Russian Black Sea port of Novorossiisk then taken by tankers via Black Sea. Other major oil export pipeline of Kazakhstan to northward linking to the Russian distribution system will become relatively less significant since most of the Kazak oil will be transported via CPC in near future.<sup>281</sup>

In addition to the existing transportation routes, the Black Sea coastal states including Romania, Bulgaria and Ukraine proposed alternative routes to become a transit country for the Caspian as well as Russian oils, which are also considered to by-pass the Turkish Straits. Romania proposed Constanta-Omisalj-Trieste Pipeline, which connects the Romanian Black Sea port of Constanta with the Croatian Adriatic port of Omisalj, and then to the Italian city of Trieste.<sup>282</sup> Bulgaria proposed the Albania-Macedonia-Bulgaria Oil Pipeline (AMBO) pipeline project as a "Bosporus bypass" oil route, which connects the Bulgarian Black Sea port of Burgas with the Albanian Adriatic port of Vlore. Burgas-Alexandroupolis Pipeline was the other proposal of Bulgaria linking the Bulgarian Black Sea port of Burgas with Alexandroupolis on the Mediterranean coast of Greece.<sup>283</sup> Ukraine would like to be a corridor for the oil from the Caspian Sea region through the Odessa-Brody pipeline project, which extends from Ukraine's Black Sea port of Odessa northward to the city of Brody.<sup>284</sup> By these alternatives, the oil will be exported from the Caspian Region by tankers via the Black Sea while bypassing the Turkish Straits.

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<sup>280</sup> <http://www.eia.doe.gov/emeu/cabs/azerbjan.html>, June 2003.

<sup>281</sup> <http://www.eia.doe.gov/emeu/cabs/kazak.html>, July 2003.

<sup>282</sup> <http://www.eia.doe.gov/emeu/cabs/seeurope.html>, March 2004.

<sup>283</sup> Ibid.

<sup>284</sup> It was initially aimed to carry the oil from the Caspian Sea region to Europe with the capacity ranging between 30-40 million tons. However, Russia has suggested to use this pipeline in reverse, to move oil from Russia southwards to tankers in the Black Sea and shipped onwards to world markets. Whether this pipeline will be reversed or not has not been clarified yet. The Ukrainian government opened a tender in 2003 to investigate the possibility of reversing the pipeline. See <http://www.eia.doe.gov/emeu/cabs/ukraine.html>, September 2003.

The existing transportation routes including Baku-Novorossiisk and Baku-Supsa of Azerbaijan and CPC of Kazakhstan has already increased the tanker traffic in the Black Sea as well as in the Turkish Straits. After the oil is loaded in the ports of the Black Sea, then they are shipped to international markets by tankers via the Black Sea and the Turkish Straits, which in turn increases the number of tankers in the Black Sea Region and in the Turkish Straits. The increase in the number of tankers passing via the Turkish Straits can be considered as an indication of the strain formed by functioning of the new pipelines to carry the Caspian oil to international markets.

Table 2.7: Total Figures for the Turkish Straits, 1995-2002

| Year | Bosphorus Strait |       | Dardanelles Strait |       |
|------|------------------|-------|--------------------|-------|
|      | Tankers          | TOTAL | Tankers            | TOTAL |
| 1995 | -                | 46954 | -                  | 35459 |
| 1996 | 4248             | 49952 | 5658               | 36198 |
| 1997 | 4303             | 50942 | 5658               | 36198 |
| 1998 | 5142*            | 49304 | 6546*              | 38777 |
| 1999 | 4452             | 47906 | 5445               | 40582 |
| 2000 | 4937             | 48079 | 5543               | 41561 |
| 2001 | 6516             | 42637 | 7079               | 39249 |
| 2002 | 9427             | 47283 | 7637               | 42669 |

\*This value includes all vessels carrying dangerous cargoes.

Source: <http://www.turkishpilots.org/>

According to Table 2.7, while the number of tankers in the Bosphorus Strait was 4248 in 1996, it is more than doubled by 2002. The increase in the number of vessels between 2000 and 2002 deserves particular attention. It is due to the increase in the amount of oil exports via Black Sea from 1.48 million barrels per day in 2000 to 2 million barrels per day in 2001 as a result of the launching of CPC in 2001 with the initial capacity of 0.56 million barrels per day.<sup>285</sup> It is projected that regional production will amount to approximately 4 million barrels per day by 2010 and 6 million barrels per day by 2020. In line with the increasing production, exports will increase accounting for over 3 million barrels per day by 2010 and 5 million barrels per day by 2020 most of which will be supplied from Kazakhstan<sup>286</sup> and will be exported to mainly Europe via Black Sea. The threat for the Black Sea is that a recent Kazakh-Russian deal to ship more oil to the Russian Black Sea port of Novorossiisk

<sup>285</sup> <http://www.eia.doe.gov/emeu/cabs/choke.html#BOSPORUS>.

<sup>286</sup> Soligo, "The Economics of Transport Routes for Caspian Oil".

guarantees that more oil will continue to flow through the Black Sea.<sup>287</sup> Furthermore, with the full functioning of CPC, 1.34 million barrels per day oil will be carried through CPC ending up in Novorossiisk.

Table 2.8: Black Sea Oil Flows

|                         | 1998 | 1999 | 2000 | 2005     |        | 2010     |        |
|-------------------------|------|------|------|----------|--------|----------|--------|
|                         |      |      |      | Fast BTC | No BTC | Fast BTC | No BTC |
| million tons per year   | 64   | 68   | 74   | 90       | 94     | 108      | 154    |
| million barrels per day | 1.28 | 1.36 | 1.48 | 1.8      | 1.88   | 2.16     | 3.08   |

Source: Adams, "The Realities of Caspian Oil Development and Their Impact on the Black Sea Region", p.16.

In the transportation of the Azeri oil, fortunately BTC has been considered to be the main pipeline to carry the Azeri oil to international markets.<sup>288</sup> It is estimated that if Baku-Novorossiisk was chosen as the transportation route for the Azeri oil,<sup>289</sup> it might bring additional 0.72 million barrels per day of oil per year passing via Black Sea.<sup>290</sup> According to Table 2.8, even with full functioning of BTC, 2.16 million barrels per day oil will be carried via the Black Sea by 2010.

On the other hand, even though by-pass routes such as Burgas-Alexandroupolis, Burgas-Vlore and Constanza-Trieste, if functions, are considered to decrease the vessel density in the Turkish Straits in future, thereby eliminating the environmental risks in the Turkish Straits and the City of İstanbul, the oil will continue to be transported to these ports via Black Sea. This will lead to an increase in the vessel traffic in the Black Sea, thereby increasing the possible environmental threats. Firstly, as the oil, after shipped in the Russian or Georgian Black Sea coast, will be carried to the ports of Constanta and/or Odessa and/or Burgas by tankers via the Black Sea, the number of tankers will increase in the Sea. Therefore, as a result of

<sup>287</sup> [http://www.cia.doc.gov/emcu/cabs/turkenv.html#MARINE\\_POLLUTION](http://www.cia.doc.gov/emcu/cabs/turkenv.html#MARINE_POLLUTION).

<sup>288</sup> Ibid.

<sup>289</sup> For the transportation of the Azeri oil, three main alternatives were proposed, one of which was the Baku-Novorossiisk, the other Baku-Supsa and another one was the BTC pipeline. In order to reduce the amount of oil shipped to Black Sea ports of Novorossiisk or Supsa, which in turn reduces the environmental risks that can be posed to Turkish Straits and the city of İstanbul by ship traffic, Turkey has championed BTC.

<sup>290</sup> Emily J. Hicks, *Environmental Constraints on Development of Caspian Oil and Gas Resources: The Bosphorus and the Caspian Sea*, 4 January 1999, Source: <http://www.wws.princeton.edu/~wws401c/1998/emily.html>.

the increase in the number of vessels in the Black Sea, environmental risks will increase. Secondly, the loading and unloading volume of oil at these ports will pose a threat for the marine life in the Black Sea. The more the loading/unloading, the more the environmental threat. In this regard, as long as the oil is transported via Black Sea whether the pipelines by-pass Turkish Straits or not, the Caspian oil will continue to be a challenge for the Black Sea environment.

Even though BTC is chosen as the main transportation route for the Azeri oil by which the threat that can be posed to the Black Sea is reduced to a certain degree and even if there exists by-pass routes for decreasing the vessel density in the Turkish Straits, as the Caspian oil production will continue to increase, the ship based pollution will likely to increase in the Black Sea in return in near future.

## **2.2 Regime Formation in the Black Sea**

Several factors lie behind establishment of environmental regimes such as influence of hegemonic power, presence of NGOs and industry, role of international organizations, values attached to environment by States, development of scientific knowledge on environmental problems, role of epistemic communities in the decision-making process and development of technology. The international climate can have an impact on the regime formation as well. All these factors can have integrative as well as disintegrative impact on regime formation. When integrative factors outweigh disintegrative ones, the possibility for regime formation increases.

Since till early 1990s the disintegrative factors were much more effective on the Black Sea region than that of the integrative ones, an environmental regime for the Black Sea couldn't have been established. However, following the elimination of the disintegrative forces, a regime for the Black Sea could have been emerged in 1992.

The international environmental negotiations can be affected by the climate of international relations, which was the case in the Black Sea. The most remarkable disintegrative force in the Black Sea can be considered as the international system shaped by the Cold War, which divided the world, in return the Black Sea into two

camps, one being the Western capitalist camp to which Turkey belonged and the other was the Socialist camp covering USSR, Romania and Bulgaria. Under this circumstance, the Black Sea had remained a divided sea in which the interaction between the two camps in the region was at minimum level. The Cold War hampered not only environmental but also all types of cooperation in the region between the two blocks to a considerable degree. The degree of division in the Black Sea was at such a level that, it was not until the end of Cold War, a regional cooperation in the Black Sea was achieved in any issue area. It was only after the end of the War, the region was opened up for regional cooperation almost in every field ranging from energy, trade and transportation to environment one which is the Black Sea Economic Cooperation (BSEC).<sup>291</sup> In this context, the relationship between foreign policy goals and environmental policy objectives lies at the heart of regime formation in the Black Sea.

The international system of Cold War was a divided world between two competing camps headed by two superpowers, one headed by USA and the other by USSR with their respective allies in which they denounced the other side for causing conflict.<sup>292</sup> USA and USSR were the main actors that shaped the international system nearly half a century till to late 1980s. USSR dedicated her efforts to balance the USA or to be superior than that of it and vice versa. The international system of two-blocs coalition was reflected in the Black Sea by a sharp dividing line in the region.<sup>293</sup> On one hand there was USSR, which had control over Romania and Bulgaria with its

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<sup>291</sup> BSEC was originally established as a forum on 25 June 1992 in İstanbul with the adoption of the "Summit Declaration on Black Sea Economic Cooperation" by Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Turkey, and Ukraine with the aim of turning the region into one of peace, stability and prosperity. Regional economic cooperation is chosen as the mechanism to achieve this aim. In order to consolidate the international legal personality of the BSEC and to integrate the Black Sea area to the world economy, its Charter was adopted on 15 June 1998. Then, it turned to a regional intergovernmental organization by May 1, 1999. The highest decision-making body is the Council of the Ministers of Foreign Affairs. Today, under this regional intergovernmental cooperation, the Member States cooperate in areas of trade and economic development, banking and finance, communications, energy, transport, agriculture and agro-industry, health care and pharmaceuticals, environmental protection, tourism, science and technology, exchange of statistical data and economic information, collaboration between customs and other border authorities, human contacts, combating organized crime, illicit trafficking of drugs, weapons and radioactive materials, all acts of terrorism and illegal migration. See Güneş, "Karadeniz'de Çevresel İşbirliği", pp.315-316; Tunç Aybak, *Dynamics of Cooperation and Conflict*, (London: L.B. Tauris & Co., 2001), p.4.

<sup>292</sup> Joseph Smith, *The Cold War: 1945-1991*, (Oxford: Blackwell Publishers, 1998), p.19.

<sup>293</sup> During the Cold War, the Black Sea coastal states were Bulgaria, Romania, USSR and Turkey. Georgia and Ukraine was part of USSR.

own system of political, economic and military alliance, on the other hand Turkey as an ally of USA under its containment policy<sup>294</sup> backed by the Truman Doctrine and Marshall Plan.<sup>295</sup>

During the Cold War, the countries within the influence of the Cold War politics defined their foreign policies according to the circumstances created by the Cold War according to which the security issues became high politics of international system whereas the other issues including environment were considered as low politics that can be important when they seem to affect the security of the nation-states.<sup>296</sup> Accordingly, in the Black Sea region, the relations between the Eastern bloc headed by USSR, and Turkey, the representative of the Western bloc in the region, was shaped by the threat perception of each other. According to the reflections of the dynamics of the international system to their political, military and economic positions, Turkey and USSR cooperated at minimum level and in an unsustainable pattern.<sup>297</sup>

USSR's main motivation was to counterbalance the position of USA in the world as well as in the region. To proceed with her foreign policy of having a strong political standing at the international arena, USSR devoted herself to be a militarily powerful and economically strong country in the world. In this context, as the foreign policy of USSR was strongly pursued from the Cold War perspective, other issues including environment became a prior issue-area when it was used as a tool for the promotion of foreign policy goals of USSR in line with the requirements of the Cold War.<sup>298</sup> As a reflection of this situation, USSR was involved in a regime with the allies of the

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<sup>294</sup> The term "containment" was firstly announced as containment of Russian expansive tendencies by George Kennan in 1947, diplomat serving at the American Embassy in Moscow at that time. The term is used to describe the American policy in dealing with USSR during the Cold War.

<sup>295</sup> Smith, *The Cold War*, pp.13-19.

<sup>296</sup> Robert G. Darst, "The Internalization of Environmental Protection in the USSR and Its Successor States", Miranda A. Scherus and Elizabeth Economy (eds.), *The Internationalization of Environmental Protection*, (UK: Cambridge University Press, 1997), pp.99-100.

<sup>297</sup> For detailed analysis of USSR-Turkish relations see Erel Tellal, "SSCB'yle İlişkiler", Baskın Oran (ed.), *Türk Dış Politikası: Kurtuluş Savaşından Bugüne Olgular, Belgeler, Yorumlar: 1919-1980*, Vol.1, (İstanbul: İletişim Yayınları, 2002), pp.499-521, 769-783.

<sup>298</sup> Darst, "The Internalization of Environmental Protection in the USSR and Its Successor States", p.103.

Western camp that aimed at clearing up of Baltic Sea, being the first international agreement concerning the protection of a regional sea. USSR became one of the Contracting Party to the Helsinki Convention together with Denmark, Sweden, Finland, Poland, German Democratic Republic and the Federal Republic of Germany.<sup>299</sup> The main motivation of USSR in her participation to an environmental regime with the allies of Western camp was economical. The economies of the USSR and Eastern Europe had fallen behind those of West, which motivated Brezhnev, the General Secretary of the Central Committee of the Communist Party between 1964-1982, to move forward protecting the Baltic Sea.<sup>300</sup> Economic deterioration was considered as the main reason for growing unrest among the satellite countries of USSR. It was considered to be due to this reason, the reform movement in Czechoslovakia in 1968 and the outbreak of the riots in Poland in 1970 took place.<sup>301</sup> As the economic problems in the Eastern block plus Brezhnev's emphasis on military procurement and heavy industrial development necessitated additional investment capital from West, close contact with West became necessary for USSR. Therefore, Brezhnev decided to increase her economic contacts with the countries of the West through selective relaxation of the Cold War tensions. The emergence of environmental protection in the international relations in early 1970s paved the way for Brezhnev to express his cooperativeness by engaging international environmental cooperation that posed a small threat to the security of USSR. Within this foreign policy formulation, the Baltic Sea was perceived as an opportunity for Brezhnev to improve her relations with the West.<sup>302</sup>

Generally speaking during the Cold War, the environmental co-operation of USSR with West varied from case to case. For the protection of the environment, USSR

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<sup>299</sup> On 24 March 1974, the Baltic Sea States signed the Convention on the Protection of the Marine Environment of the Baltic Sea Area, known as the 1974 Helsinki Convention, which was the first international agreement to cover all sources of pollution from land, sea or air at a regional scale. In 1992, a new Convention on the Protection of the Marine Environment of the Baltic Sea Area was signed by all the countries bordering on the Baltic Sea including Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, Sweden and European Community. For more information see, <http://www.helcom.fi/>.

<sup>300</sup> Darst, "The Internalization of Environmental Protection in the USSR and Its Successor States", pp.105-106.

<sup>301</sup> Smith, *The Cold War*, p.103.

<sup>302</sup> Darst, "The Internalization of Environmental Protection in the USSR and Its Successor States", p.105.

cooperated with West to promote other high priority policies in the political and economic fields to be able to keep on as a super power in the bipolar world.

Following Brezhnev, the new General Secretary Gorbachev<sup>303</sup>, like Brezhnev, sought to use environmental cooperativeness to advance its overall foreign policy even though the foreign and domestic policy of Gorbachev differed from that of Brezhnev's. The determinism of Gorbachev to international environmental cooperation and greening of the Soviet foreign policy was dictated less by environmental concerns than by broader political considerations. It aimed at discrediting the Brezhnev's regime and hiding the weakening of USSR's international position.<sup>304</sup> However, as Black Sea didn't provide such an opportunity for USSR, he didn't incline to cooperate with Turkey for protection of the Black Sea.

Like USSR, Turkish foreign policy was shaped by the international system of Cold War, which was in turn reflected to her cooperation with USSR in the protection of the Black Sea. Even though perceived from the Cold War perspective, Turkey's foreign policy differed from that of USSR's. Turkey's foreign policy had a two-fold approach. On one hand Turkey attempted to cooperate with USSR to obtain financial support to overcome the economic constraints and to use her cooperation with USSR as a mean to activate USA's financial support.<sup>305</sup> On the other hand, Turkish foreign policy was based on the threat perception from USSR under the Cold War, which was originated from Stalin's requests in 1945 for the integration of Eastern part of Turkey to USSR and for having at least equal control over the Turkish Straits. Even though Turkey's economic relations with USSR had increased from 1953 onwards, Turkey's membership of North Atlantic Treaty Organization (NATO)<sup>306</sup> paved the way for the involvement of USA in the Turkish territories through its naval, air and intelligence basis as part of the containment of USSR under the Cold War climate.<sup>307</sup>

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<sup>303</sup> Gorbachev was the General Secretary of the Soviet Communist Party between 1985-1991.

<sup>304</sup> Darst, "The Internalization of Environmental Protection in the USSR and Its Successor States", p.109.

<sup>305</sup> Tellal, "SSCB'yle İlişkiler", pp.499-521.

<sup>306</sup> The motive behind the establishment of NATO was Western fears of communist aggression, which was believed to be counterbalanced by Western military alliance.

<sup>307</sup> Tellal, "SSCB'yle İlişkiler", p.514.

Generally speaking, due to Turkey's suspicion about USSR, Turkey was wariness in her foreign policy towards him. In case of a cooperation in the Black Sea, Turkey would be the only non-communist country in the region. Therefore, it was easier for Turkey not to cooperate, but to continue cool diplomatic relations with USSR under the Cold War without undertaking any commitments for environmental protection even if it was conceived as low politics.<sup>308</sup>

In this regard, the cooperation between USSR and Turkey was limited in scope, in particular for economical purposes. Due to the international climate, a sustainable relation between these two countries, in other words with two blocs represented in the region, couldn't have been established till early 1990s. It can be concluded that, foreign policy of these countries shaped by the Cold War was the dominant factor in their relations in all fields including in the field of environment. Environment between the two blocs in the region had never been a cooperation issue area. The Convention Concerning Fishing in the Black Sea was adopted between Bulgaria, Romania and USSR in which Turkey remained outside.<sup>309</sup> Accordingly, it was during the elaboration of the MAP in early 1970s, owing to the concern that Bulgaria, Romania and USSR might hamper the implementation of MAP, the Black Sea was not included into the geographic coverage of the Barcelona Convention.<sup>310</sup>

The IOs or NGOs can have a lead role in the regime formation process.<sup>311</sup> The role of UNEP in the emergence of regimes for the protection of regional seas deserves particular attention in that sense. It is due to the lead role played by UNEP today nearly all regional seas are protected under regimes.<sup>312</sup> More specifically, in the evolution of MAP, UNEP took the lead for establishment of an environmental regime in the Mediterranean for the protection of its marine and coastal

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<sup>308</sup> Sampson, "Black Sea Environmental Cooperation", p.58.

<sup>309</sup> Mee, "Can the Marine and Coastal Environment of the Black Sea be Protected?", p.138.

<sup>310</sup> Haas, "Do Regimes Matter?", p.387.

<sup>311</sup> Young, "The Politics of International Regime Formation", p.354.

<sup>312</sup> *Supra*, p.49; Sprinz and Vaahoranta, "The Interest-based Explanation of International Environmental Policy", p.86; Young, "The Politics of International Regime Formation", p.355.

environment.<sup>313</sup> However, due to the constraints created by Cold War, even though UNEP has such a role in the evolution of regional marine regimes, it couldn't act as a pusher, in other words as an integrative factor for motivating the countries surrounding the Black Sea. It was only after late 1980s in which the favourable international conditions emerged, UNEP explored preparation of an action plan for the regions that hasn't been covered under the Regional Seas Programmes, which includes the preparation of an action plan for the Black Sea.<sup>314</sup>

Due to the poor degree of value attached to environment in the countries surrounding the Black Sea, when compared with the other issues, the regime formation in the Black Sea was hindered. The countries where the degree of value attached to environment high tend to push the others to establish environmental regimes. However, Even though USSR was one of the industrialized countries in the world, it very much lagged behind the other industrialized countries in terms of environmental protection.<sup>315</sup> Environmental protection was not a prior policy at the national agenda of USSR. High political priority was not attached to environmental protection than that of military security and economic issues. The agenda of USSR was very much focused on strengthening the military power and making the USSR an economically strong country in the world. On the other hand, Turkey as an OECD county, which are called to be industrialized, has attempted to integrate the policies of OECD at the environment-development axis into the mainstream of its national polices. However, due to her very low Gross Domestic Product (GDP) among the OECD countries, Turkey couldn't establish the issue linkage between environment and development at the implementation level.<sup>316</sup> Even though the national environmental law evolved with the evolvment of the international environmental law in early 1970s,

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<sup>313</sup> Adalberto Vallega, "The Mediterranean After the 1995 Convention. The Historical Sense of a Turnaround Point", Erdal Özhan (ed.), *Proceedings of the Second International Conference on the Mediterranean Coastal Environment MEDCOAST 95*, Vol.1, (Ankara: MEDCOAST, 1995), p.722.

<sup>314</sup> Caldwell, *International Environmental Policy*, p.193.

<sup>315</sup> Darst, "The Internalization of Environmental Protection in the USSR and Its Successor States", p.97.

<sup>316</sup> Can Hamamcı, "Yerleşme ve Çevre Sorunları", Ahmet Şahinöz (ed.), *Türkiye Ekonomisi: Sektörel Analiz*, (Ankara: Turhan Kitabevi, 1998), p.477.

development has always been a priority than the environment.<sup>317</sup> In other words, Turkey was very much busy with economical development till early 1990s.

The degree of value attached to environment can be affected by presence of public, which can have a positive impact in terms of pushing the governments to take action towards protecting the environment. The democratic systems have to take into account the public opinion for their electorate. The increasing environmental awareness of the public in these countries in turn may lead to adoption of strict environmental regulations. This was the case in the West in 1970s. As a result of environmental movements during this period, environmental regulations were adopted by the Western governments and a large number of environmental regimes were established within the Western bloc.<sup>318</sup> However, in USSR due to the extremely hierarchical structure and totalitarian character of the Soviet political system, internal efforts to address the environmental problems were sharply constrained. There was a strong state-controlled structure with a weak fragmented society.<sup>319</sup> The system excluded popular participation and state-controlled system didn't allow evolution of NGOs, instead, suppressed citizens. Likewise, even though the awareness on environmental issues in Turkey evolved with the increasing awareness at the international level in early 1970s and even though there were environmental NGOs in Turkey as a democratic country, the existing environmental groups or NGOs were

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<sup>317</sup> In Turkey, initially, environment was conceived from health perspective. A separate chapter that was concerned for environment was included into the Third Five Year Development Plan of 1973-1977 in which, however, it was mentioned that the environmental policies shouldn't hamper the industrialization and development of Turkey. (Ruşen Keleş and Can Hamamcı, *Çevrebilim*, (Ankara: Özkan Matbaacılık, 1993), p.247.) It can be concluded that 1970s was poor in terms of adoption of environmental legislation. The establishment of a separate institution dealing with the protection of environment in late 1970s paved the way for the elaboration of a large number of laws and regulations in the forthcoming years. 1980s were more promising than the 1970s. Quite many laws and regulations were adopted during this period. It was with the Fifth Five-Year Development Plan of 1985-1989, for the first time environment was considered as the resource of economical development as well as the limit of it. However, despite these promising developments, environmental protection couldn't have been done at desired levels and Turkey couldn't have reflected the environmental factors into the mainstream of economical and social decisions. (Hamamcı, "Yerleşme ve Çevre Sorunları", pp.477-479.) Despite an increasing trend over years towards protecting the environment, development concerns hampered Turkey to take stringent steps. Notwithstanding adoption of a large number of environmental regulations and laws in 1980s, it was only after early 1990s, the environmental administrative capacity has been strengthened. Turkey has begun implementing those regulations and has become Party to more than 15 multilateral and over 20 bilateral agreements on a variety of environmental issues. (OECD, *Environmental Performance Review: Turkey*, (Paris: OECD Publications, 1999), p.148).

<sup>318</sup> Desmond Dinan, *Ever Closer Union: An Introduction to European Integration*, (USA: Lynne Rienner Publishers, 1999), p.408.

<sup>319</sup> Darst, "The Internalization of Environmental Protection in the USSR and Its Successor States", p.100.

not strong enough to affect the decision-making in terms of pushing their governments to adopt strict regulations.<sup>320</sup> In this respect, the NGOs, which act as pushers in the regime formation process couldn't be a factor in the Black Sea either due to their absence or their low capacities.

Industries are the main cause for environmental degradation. However, they can be an integrative factor in the regime formation process as well. The unilateral abatement activities of states might put their industries at a comparative disadvantage in international markets. In such cases, the industries of these states can exert pressure on their governments to avoid from this position and push their governments to take the others up to their levels of protection as they do not want to pay additional costs to meet environmental standards.<sup>321</sup> For instance, if only French builds wastewater treatment plants in the coasts of Mediterranean, this will lead French industries to be in disadvantage in comparison to the Spanish and Italian industries, if a common environmental standard hasn't been applied for the Mediterranean.<sup>322</sup> Therefore, French industry push French government to take the other Mediterranean countries to adopt the same environmental standards. However neither in USSR nor in Turkey, the industry couldn't have been an integrative factor. In USSR, the state had the control over everything including industry, there was not competition of self-interested, profit maximizing firms. Therefore, state-owned enterprises didn't have concerns for being in a disadvantage position so that they couldn't be a pushing factor for the initiation of protection efforts.<sup>323</sup> On the other hand, in Turkey even though there was an industry group, the industries in the Black Sea were small sized industries.<sup>324</sup> In this regard, the industry couldn't have played the role that is played by the French industries in the coast of Mediterranean.

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<sup>320</sup> Keleş and Hamamcı, *Çevrebilim*, p.211.

<sup>321</sup> Sibel Sezer, "The Role of International Environmental Institutions in Protecting Regional Seas: A Focus on the Black Sea", Bayram Öztürk and Nesrin Algan (eds.), *Proceedings of the International Symposium on the Problems of Regional Seas*, (İstanbul: TÜDAV, 2001), p.61.

<sup>322</sup> Haas, "Do Regimes Matter?", p.378.

<sup>323</sup> Ibid., p.104; Sezer, "The Role of International Environmental Institutions in Protecting Regional Seas", p.61.

<sup>324</sup> Sezer, "The Role of International Environmental Institutions in Protecting Regional Seas", p.61.

According to the theory of hegemonic stability, formation of international regimes depends on the hegemony, which is considered to be necessary and a sufficient condition for cooperation.<sup>325</sup> Even though hegemons are important for a cooperative effort, it is difficult to talk about a hegemon in the Black Sea in pushing the other for a regime formation. Due to all of the above mentioned factors, none of the countries surrounding the Black Sea could be a hegemon for a regime formation in the Black Sea. USSR, a super power under the Cold War in the field of politics, economics and military, couldn't act as a hegemonic power in the field of environment. Turkey was not a pusher country in initiating a regime for the Black Sea as well. USSR and Turkey involved in environmental regimes for protecting their regional seas like the USSR's involvement in Baltic and Turkey's involvement in Mediterranean. However, these regimes were established due to the presence of pusher countries or the role played by international organizations in those regions. It was the Sweden, Germany and Denmark as advocates of strict environmental measures that pushed the countries surrounding the Baltic Sea including USSR for its protection,<sup>326</sup> that enabled USSR's participation in Baltic cooperation.<sup>327</sup> Likewise, it was due to the role played by UNEP in establishing the regime in the Mediterranean, Turkey participated in Mediterranean cooperation.<sup>328</sup> It can be concluded that there was not a country in the Black Sea to push the others towards protecting the Black Sea environment.

The scientific knowledge about the physical and ecological processes of the earth, the definition of the problem including severity of it, the extent, the sources and types of the pollution has been an important factor in motivating cooperation among nations.<sup>329</sup> Scientific knowledge about the characteristics of Black Sea, its environmental problems and the degree of its deterioration can be an integrative factor in terms of pushing the Black Sea States for a regime formation to protect their

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<sup>325</sup> Sprinz and Vaahtoranta, "The Interest-based Explanation of International Environmental Policy", p.83.

<sup>326</sup> Sezer, "The Role of International Environmental Institutions in Protecting Regional Seas", p.57.

<sup>327</sup> Darst, "The Internalization of Environmental Protection in the USSR and Its Successor States", p.106.

<sup>328</sup> Sampson, "Black Sea Environmental Cooperation", p.57; Haas, "Do Regimes Matter?", p.386.

<sup>329</sup> Detlef and Vaahtoranta, "The Interest-based Explanation of International Environmental Policy", p.83.

Sea. Even though there was scientific knowledge, they couldn't have been exchanged between the countries surrounding the Black Sea due to the secrecy under the Cold War as the knowledge was considered as a state secret.<sup>330</sup> Therefore, due to lack of shared scientific knowledge, a common understanding about the state of the Black Sea environment couldn't have been achieved among the countries surrounding the Black Sea till the end of Cold War.

After the Chernobyl accident, which had a tremendous impact on the environment of USSR as well as on the environments of other countries with a transboundary impact, USSR opened its system under the policy of perestroika. As part of this policy, under the initiative of the USSR, four coastal states of the Black Sea of that time met to discuss the possibility of drafting a convention for the protection of the Black Sea.<sup>331</sup> However, this couldn't have been finalized till the end of the Cold War. It was after the end of the War, the tensions between the countries surrounding the Black Sea was reduced, which led to collaboration of the Black Sea States in many fields from 1991 onwards. In this regard, the most effective integrative factor for the regime formation in the Black Sea can be considered as the international climate.

It was with the end of the Cold War the existing scientific knowledge turned to be an integrative factor in the formation of the Black Sea environmental regime. The environmental problems have been known before early 1990s. Even though there were uncertainties about the scientific information, there were great many indicators about the environmental stress in the Black Sea such as the state of the fisheries, turbidity in the Black Sea water.<sup>332</sup> The disclosure of the existing scientific knowledge after the end of the Cold War and the exchange of this information among the members of the epistemic community of the Black Sea States contributed to the regime formation in the Black Sea. The transmission of this knowledge to decision-makers of the Black Sea States by the epistemic community enabled the

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<sup>330</sup> Sampson, "Black Sea Environmental Cooperation", p.55.

<sup>331</sup> Laurence D. Mee, "Pollution Control and Prevention in the Black Sea", Laurence D. Mee and Graham Topping (eds.), *Black Sea Pollution Assessment*, Black Sea Environmental Series, Vol.10, (New York: UN Publications, 1998), p.303.

<sup>332</sup> Sampson, "Black Sea Environmental Cooperation", pp.55-56.

formation of a political will in the Black Sea States towards formation of a regime in the Black Sea, which led to the adoption of the Bucharest Convention. After the formation of the political will in the Black Sea States to save their seas, Turkey turned to be a pusher country in the region taking the lead in the establishment of the regime in İstanbul and financially supporting the activities of the regime.

The scientific development aid also contributes to regime formation and accelerates the process. For instance, the support of UNEP in the form of funding, training, research activities contributed to the formation of regional regimes for protecting coastal and marine environments.<sup>333</sup> In the Black Sea, the role of GEF is very indicative as it formed the basis of the regime through technical and financial support provided to the regime.<sup>334</sup> It is with the support of GEF, the Black Sea, which was turned from a latecomer to an innovator.<sup>335</sup>

## **2.3 The Black Sea Environmental Regime**

### **2.3.1 Legal Framework**

As in many Regional Seas Programmes, Black Sea co-operation has developed in two tracks, the first track being the Bucharest Convention and the second one is the BS-SAP. The conventions form the basis of the legal framework in which Contracting Parties committed to do action collectively or individually towards shared regional goals. On the other hand, action plans are designed with a view to convert political commitments into actions through a series of policy actions and principles.

#### **2.3.1.1 The Bucharest Convention**

The Bucharest Convention was adopted on 21 April 1992 along with three

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<sup>333</sup> List and Rittberger, "Regime Theory and International Environmental Management", p.104.

<sup>334</sup> *Infra*, pp.102-107.

<sup>335</sup> Sampson, "Black Sea Environmental Cooperation", pp.56-58.

Protocols<sup>336</sup> including “Protocol on the Protection of the Black Sea Marine Environment against Pollution by Dumping” (Dumping Protocol)<sup>337</sup>, “Protocol on Cooperation in Combating Pollution of the Black Sea Marine Environment by Oil and Other Harmful Substances in Emergency Situations” (Emergency Protocol)<sup>338</sup> and “Protocol on Protection of the Black Sea Marine Environment against Pollution from Land-based Sources” (Land-based Protocol)<sup>339</sup> during the “Diplomatic Conference on the Protection of the Black Sea against Pollution” (Diplomatic Conference)<sup>340</sup> held in Bucharest between 21-22 April 1992.<sup>341</sup> This convention-protocol model applied for the Black Sea, is the common approach in the international environmental treaty making, particularly in the Regional Seas Programmes, in which convention is the framework that sets forth the general obligations and covers protocols that deal with the specific obligations.<sup>342</sup>

As the Bucharest Convention is setting forth the general framework, with a view to respond to the changes in the scientific knowledge on environmental problems of the Black Sea or in the international environmental policy, the Convention is open for adoption of new protocols and annexes.<sup>343</sup> This is the general approach in the

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<sup>336</sup> The design of the Protocols of the Bucharest Convention differs from the Protocols of many of the Regional Seas Programmes such as from those of Barcelona Convention. The relationship between the Barcelona Convention and its Protocols is formulated in such a way that if a State would like to become a Contracting Party to the Convention, it has to adopt at least one Protocol. Therefore, the Protocols of the Barcelona Convention are designed as separate legal instruments with its separate Articles defining the protocol area, signature, accession, entry into force and ratification procedure so as to bind only the States that have become a Party. In same token, in order to become a Contracting Party to a Protocol, a State must become a Party to the Barcelona Convention as well (art. 29). (UNEP-MAP Coordination Unit, *Mediterranean Action Plan and Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols*, Informal Document, (Athens: UNEP, 2002)). On the other hand, the three Protocols of the Bucharest Convention, adopted at the time of adoption of the Convention, are considered as integral part of the Convention rather than separate legal instruments. Therefore, a Contracting Party to the Bucharest Convention does not have an option not to become a party to any of its three Protocols that's why the Protocols do not include provisions regarding entry into force, signature, accession or ratification procedure. (Güneş, “Karadeniz’de Çevresel İşbirliği”, p.328).

<sup>337</sup> hereinafter referred to as “Dumping Protocol”.

<sup>338</sup> hereinafter referred to as “Emergency Protocol”.

<sup>339</sup> hereinafter referred to as “Land-based Protocol”.

<sup>340</sup> hereinafter referred to as “Diplomatic Conference”.

<sup>341</sup> Güneş, “Karadeniz’de Çevresel İşbirliği”, p.322; Mee, “Can the Marine and Coastal Environment of the Black Sea be Protected?”, p.139.

<sup>342</sup> Haas, “Save the Seas”, p.195.

<sup>343</sup> Article 5 (3).

international environmental treaty making in order to adapt to dynamic structure of the environment.<sup>344</sup> In addition to the adoption of three Protocols, due to the need for further protection of the Black Sea environment, “Black Sea Biodiversity and Landscape Conservation Protocol” was adopted in June 2002<sup>345</sup> and the “Black Sea Contingency Plan” was adopted as an Annex to the Emergency Protocol in October 2003.<sup>346</sup>

The Bucharest Convention is a framework Convention that covers four Protocols. It is a legal and diplomatic tool for joint action, which is however designed neither to define actions nor to establish any regulatory mechanisms. During the Diplomatic Conference, together with the Bucharest Convention and its three Protocols, five Resolutions were adopted. The first Resolution is related to elaboration of a Protocol concerning transboundary movement of hazardous substances; the second concerns co-operation with the Danube Countries; the third emphasizes co-operation with IGOs, in particular with UNEP, the fourth is about the future institutional arrangements responsible from the implementation of the Bucharest Convention and the last one is about the co-operation with IMO.<sup>347</sup>

The Bucharest Convention was adopted with the participation of Black Sea coastal states, namely Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine as

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<sup>344</sup> Lawrence Susskind and Connine Ozawa, "Negotiating More Effective International Environmental Agreements", Andrew Hurrell and Benedict Kingsbury (eds.), *The International Politics of the Environment: Actors, Interests and Institutions*, (Oxford: Clarendon Press, 1992), pp.144-146.

<sup>345</sup> For the adoption of additional Protocols, a Diplomatic Conference of the Contracting Parties may be convened with the consent of all Contracting Parties (art. 26(1)). If a consensus is reached between the Parties on the Protocol, then the procedure applied for the adoption of the Bucharest Convention is applied for the adoption of additional Protocols (art. 26(2)). The Black Sea Biodiversity and Landscape Conservation Protocol was adopted by Bulgaria, Romania, Turkey and Ukraine. However, since the national requirements for these states are not completed, it hasn't entered into force yet.

<sup>346</sup> Black Sea Commission, *Minutes of the 10<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*, İstanbul, 27-29 October 2003; The adoption of additional Annexes to the Bucharest Convention or to any Protocol can be possible if any Contracting Party through its representative in the Black Sea Commission makes such a proposal. Chairman of the Black Sea Commission has to inform the Depositary on the adoption of the Annex by the Commission after which the Depositary will inform the Contracting Parties in order to receive the notifications of acceptance. The Black Sea Contingency Plan was adopted as an Annex to the Emergency Protocol during the 10<sup>th</sup> Meeting of the Black Sea Commission held between 27-29 October 2003 by Bulgaria, Romania and Turkey. The Annexes enter into force 30 days after the Depositary receives the notifications of acceptance from all Contracting Parties (art. 21(2)). Annexes cannot enter into force if all the Parties notification of acceptance is not received. The same procedure is applied for the adoption of amendments to the Annexes. This process for the entry into force of the Black Sea Contingency has not been completed yet.

<sup>347</sup> Güneş, "Karadeniz'de Çevresel İşbirliği", pp.322-323.

Contracting Parties. Armenia, Greece, Moldova, Yugoslavia, Danube Commission,<sup>348</sup> UNEP and IMO participated to the Diplomatic Conference as observers. The Convention was open for signature by the Black Sea States, which is further subject to ratification, acceptance or approval.<sup>349</sup> However, it is not explicitly clarified in the Convention that whether the coastal states or the states in the drainage basin of the Black Sea are the Black Sea States. Since the Convention is adopted only by the coastal states of the Black Sea, it can be implicitly understood that the coastal states are the Black Sea States that can become a Contracting Party to the Bucharest Convention.

The Convention is open for accession by any non-Black State with the invitation of the Contracting Parties of the Bucharest Convention, if it is interested in achieving the aims of this Convention and in contributing to the protection and preservation of the marine environment of the Black Sea.<sup>350</sup> Any third Party including the Danube countries or the European Community (EC), which can be considered as the most relevant third Parties in terms of achieving the aims of the Bucharest Convention, hasn't applied so far for acceding to the Bucharest Convention with a view to contribute to the efforts of the Black Sea coastal states in improving the environmental conditions of the Sea. Instead, establishment of cooperation with Danube countries, as being contributors to the pollution problem of the Black Sea, has been emphasized in the second Resolution of the Diplomatic Conference.

The Bucharest Convention enters into force 60 days after the date in which the Depositary receives the fourth instrument of ratification, acceptance or approval.<sup>351</sup> The Bucharest Convention was signed in 21 April 1992 and entered into force on 15 January 1994 after the instrument of ratification was received from Bulgaria,

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<sup>348</sup> The Danube Commission has been established to supervise the implementation of the Convention regarding the regime of navigation on the Danube signed in Belgrade on 18 August 1948. It aims to provide free navigation on the Danube in accordance with the interests and sovereign rights of the Danubian States of Austria, Bulgaria, Croatia, Germany, Hungary, Moldova, Slovakia, Romania, Russia, Ukraine and Yugoslavia. For more information see <http://www.danubecom-intern.org/ENGLISH/SUMMARY.htm>.

<sup>349</sup> Article 28 (1), (2).

<sup>350</sup> Article 28 (3).

<sup>351</sup> Article 29.

Romania, Georgia and Russia. However, it has been fully in force since Spring 1994 with the completion of the ratification procedures by Ukraine and Turkey in the same year.<sup>352</sup>

The Bucharest Convention is deposited with the Government of Romania<sup>353</sup> which has wide range of responsibilities related to diplomatic procedures of the Convention. However, the Bucharest Convention does not define the responsibilities of the depositary in a separate article in detail, rather definition of its responsibilities are dispersed to several articles of the Convention. Furthermore, some responsibilities of the Depositary are not defined explicitly. The Depositary has to inform the Contracting Parties of the signature of the Convention and of additional protocols and of the deposit of instruments of ratification, acceptance, approval or accession,<sup>354</sup> of the date on which the Convention and any additional protocols will come into force, and of notifications of withdrawal, of the amendments adopted with respect to the Convention and to any protocol, their acceptance by the Contracting Parties and the date of entry into force of those amendments; of the adoption of new annexes and of the amendment of any annex<sup>355</sup>

The typical treaty format used in the international environmental treaty making is applied to the Bucharest Convention. It starts with a preamble in which cross references are made to the international multilateral environmental agreements of 1972 London Dumping Convention, 1973/78 MARPOL Convention, 1989 Basel Convention and 1990 OPRC.<sup>356</sup> By making references to these agreements, the Bucharest Convention attempts to give effect to them and implicitly makes them applicable in the region, in cases to eliminate the Bucharest Convention's insufficiency in covering all aspects of the pollution in the Black Sea.

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<sup>352</sup> Sampson, "Black Sea Environmental Cooperation", p.60.

<sup>353</sup> Article 28 (4).

<sup>354</sup> Article 28 (4).

<sup>355</sup> Article 22.

<sup>356</sup> OECD Development Assistance Committee, *Guidelines on Aid and Environment*, p.46.

The Convention itself consists of thirty articles, starting with the identification of the geographic coverage of the Convention according to which it is applicable in the Black Sea whose southern limit constituted by the line joining Capes Kelagra and Dalyan.<sup>357</sup> Therefore, the Sea of Azov, the Turkish Straits System and the province of Istanbul are excluded from the geographic coverage of the Convention.

The Bucharest Convention is applicable in the territorial sea as well as in the EEZ of the Contracting Parties.<sup>358</sup> The extension of the application area towards EEZ can be considered as the reflection of 1982 UNCLOS. Even though extension of the Convention to the coastal areas is not explicitly mentioned, the relevant Article allows the extension if it is to meet the purposes of any Protocol.<sup>359</sup> Therefore, implementation area of the Convention may cover coastal areas or internal waters if deemed necessary by any Protocols of the Convention. This is confirmed by another article of the Convention in which the Contracting Parties are obliged to ensure the application of the Convention in the areas where they exercise sovereignty.<sup>360</sup> It can be said that by this way the Convention attempts to acknowledge the customary law that even if the states have the right to exploit their resources, at the same time they are responsible from their activities not to cause damage beyond the limits of their national jurisdiction.

On the other hand, warship, naval auxiliary or other vessels or aircraft owned or operated by a State and used for non-commercial purposes by the Black Sea Governments are exempted from the scope of the Convention. However, even if the Convention is not applicable to these vessels, the Convention urge Black Sea States to take necessary measures for their operation to be in line with the purposes of the Convention.<sup>361</sup>

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<sup>357</sup> Article 1 (1).

<sup>358</sup> Article 1 (2).

<sup>359</sup> Ibid.

<sup>360</sup> Article 5 (1).

<sup>361</sup> Article 4.

The Bucharest Convention defines the key terms to be further used in the agreement including the definitions of pollution, vessel, aircraft, dumping and harmful substance.<sup>362</sup> The “dumping” definition used in the Convention is the one defined in 1972 London Dumping Convention. The definition of the “pollution” in the Convention is based on the one defined in the Barcelona Convention and further formulated in an identical manner by Joint Group of Experts on the Scientific Aspects of Marine Pollution.<sup>363</sup>

As the Bucharest Convention was adopted in 21 April 1992, two months prior to the Rio Conference held between 3-14 June 1992, most of the principles included in the Convention are derived from the rules and approach produced by 1982 UNCLOS and comparable Regional Seas Programmes, in particular the Barcelona Convention.<sup>364</sup> Since the approach of Rio couldn’t have been incorporated into the Convention, the protection oriented approach served as the basis. Therefore, it aimed at protecting the marine environment and the marine living resources of the Black Sea.

In line with this approach, firstly for the protection of the marine environment of the Black Sea, the Convention itself included five out of six types of marine pollution sources defined by 1982 UNCLOS.<sup>365</sup> The Convention defines general obligations for the sources of marine pollution including the pollution i) from land-based sources,<sup>366</sup> ii) from vessels,<sup>367</sup> iii) by dumping,<sup>368</sup> iv) from exploitation of the seabed

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<sup>362</sup> Article 2.

<sup>363</sup> The definition of pollution is as follows: the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazard to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.

<sup>364</sup> Kiss and Shelton, *International Environmental Law: 1994 Supplement*, p.77.

<sup>365</sup> According to 1982 UNCLOS, there exists six sources of marine pollution. These are pollution from land-based sources, from sea-bed activities, from vessels, by dumping, from exploitation of the seabed of the continental shelf and from or through the atmosphere.

<sup>366</sup> Article 7.

<sup>367</sup> Article 8.

<sup>368</sup> Article 10.

of the continental shelf<sup>369</sup> and v) from or through the atmosphere.<sup>370</sup> The only source of marine pollution that is not covered by the Bucharest Convention, even not through a general obligation, is the pollution from sea-bed activities in the international area as there is not such a geographic coverage defined in the Black Sea.<sup>371</sup> Black Sea States are obliged to take all necessary measures to prevent, reduce and control these sources of marine pollution to the Black Sea.<sup>372</sup> On the other hand, for the protection of the marine living resources, the Convention obliges Black Sea States to pay attention for not to give any harm to the marine life and living resources and not to change their habitats while dealing with the sources of marine pollution.<sup>373</sup>

There exists three extra provisions in the Convention, one of which sets forth obligation for the pollution from hazardous substances and matter, specified in the Annex of the Bucharest Convention, which are to be prevented to occur,<sup>374</sup> the other for the pollution resulting from emergency situations for which Black Sea States have to cooperate to prevent, reduce and combat<sup>375</sup> and the last for the pollution by the hazardous wastes in transboundary movement for which States have to cooperate to prevent.<sup>376</sup>

In line with the approach of Regional Seas Programmes in which the institutional settings are designed as one of its component, a Commission on the Protection of the Black Sea Against Pollution (Black Sea Commission)<sup>377</sup> has been designed to be

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<sup>369</sup> Article 11.

<sup>370</sup> Article 12.

<sup>371</sup> Mee, "Pollution Control and Prevention in the Black Sea", p.304.

<sup>372</sup> Article 5 (2).

<sup>373</sup> Article 13.

<sup>374</sup> Article 6.

<sup>375</sup> Article 9.

<sup>376</sup> Article 14.

<sup>377</sup> hereinafter referred to as "Black Sea Commission".

responsible from the implementation of the Bucharest Convention as the main authority in the institutional structure<sup>378</sup> of the Black Sea environmental regime.<sup>379</sup>

The decision-making procedure is based upon the consensus rule. Adoption of the decisions and recommendations of the Black Sea Commission;<sup>380</sup> change in the location of the headquarters of the Black Sea Commission;<sup>381</sup> adoption of amendments to the Bucharest Convention and to any Protocol,<sup>382</sup> and adoption of additional annexes or amendments to the annexes<sup>383</sup> are to be made on the basis of consensus. On the other hand, the financial matters have to be decided on the basis of unanimity.<sup>384</sup>

The Black Sea States are held responsible from implementation of the Convention and they are obliged to adopt rules and regulations on liability for damage in the areas where they exercise sovereignty and to have adequate legal system for provision of compensation in case of damage. States are urged to cooperate in order to harmonize their laws on liability and compensation.<sup>385</sup>

Regional Seas Programmes were firstly focused on the exchange of scientific and technical cooperation as well as monitoring the state of environment.<sup>386</sup> The Bucharest Convention also encourage the Black Sea States to cooperate for this purpose. They are urged to cooperate for conducting jointly scientific research and studies for the assessment of pollution, to establish joint monitoring programmes and a pollution monitoring system, to exchange scientific data and information, and to

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<sup>378</sup> *Infra*, pp.108-109.

<sup>379</sup> Article 17, 18.

<sup>380</sup> Article 17 (5).

<sup>381</sup> Article 17 (6).

<sup>382</sup> Article 20 (4).

<sup>383</sup> Article 21 (2).

<sup>384</sup> Article 23.

<sup>385</sup> Article 16.

<sup>386</sup> OECD Development Assistance Committee, *Guidelines on Aid and Environment*, p.45.

designate a national authority to be responsible from conducting scientific studies and monitoring.<sup>387</sup>

In the fulfillment of the obligations arising from the Bucharest Convention, cooperation with IOs is emphasized in its several provisions. In the preamble the need for close cooperation with competent IOs was indicated. The Contracting Parties are urged to cooperate with IOs in promoting elaboration of measures that will contribute to protection and preservation of marine environment of the Black Sea.<sup>388</sup> They are encouraged to establish joint monitoring programmes in cooperation with IOs.<sup>389</sup> Furthermore, the Black Sea Commission is urged to cooperate with IOs in order to develop appropriate programmes or obtain assistance.<sup>390</sup> Complementary to the emphasis on cooperation with IOs, with the third Resolution, the Contracting Parties invited UNEP in order to support its further activities.

The Bucharest Convention does not allow any Party to make any reservations<sup>391</sup> to the Convention, thereby making all provisions of the Convention and Protocols applicable by all Contracting Parties with the same effect.<sup>392</sup>

The Convention does not define a comprehensive dispute settlement mechanism. Disputes that can arise in the interpretation, application and implementation of the Convention is to be solved either by negotiation or by any other peaceful means chosen by the Contracting Parties.<sup>393</sup> An alternative mechanism is not defined in the Convention. Furthermore, the Convention does not include an article that will enable compliance control. The Contracting Parties are not urged to prepare periodic reports

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<sup>387</sup> Article 15.

<sup>388</sup> Article 5 (5).

<sup>389</sup> Article 15 (4).

<sup>390</sup> Article 18 (6).

<sup>391</sup> Reservation is the unilateral statement made to the treaty by the State during the signature, ratification, acceptance, approval or accession to the treaty in order exclude herself from or to modify the legal effect of the certain provisions of the treaty and can be made if formulated in the treaty. See Article 19-23 in Vienna Convention on the Law of Treaties, Source: UNEP, *Handbook of Environmental Law*, pp.423-425.

<sup>392</sup> Article 27.

<sup>393</sup> Article 25.

regarding the implementation of the Convention. The Black Sea Commission, established to be responsible from review of the progress, can be considered as a compliance mechanism.<sup>394</sup> Article 19 calls for arranging Meetings of Contracting Parties with a view to review the implementation of the Convention, however the intervals of these Meetings are left to the decision of the Black Sea Commission.

#### **2.3.1.2 Protocols to the Bucharest Convention**

One of the Protocol of the Bucharest Convention, which was adopted on the same day of the Bucharest Convention as the integral part of it, is the Dumping Protocol. The Protocol is comprised of nine articles and three Annexes. The approach of the Protocol is based on the 1972 London Dumping Convention, therefore it aimed to prevent, reduce and control the pollution by dumping. The Bucharest Convention urge the Contracting Parties to take all necessary measures for this purpose and not to permit the non-Black Sea States to dump in the areas under their national jurisdiction.<sup>395</sup>

The Black Sea States are responsible from implementation of the Dumping Protocol within their territorial sea and EEZ, for the vessels flying their flag, aircraft registered in their territory, vessels and aircraft loading the matters in their territories to dump; platforms and other man-made structures at sea situated within their territorial sea and EEZ.<sup>396</sup> However, the Protocol is not applicable if the safety of human life or of vessel or aircraft at sea is threatened by complete destruction or total loss, or if there is a danger to human life and dumping is the only solution to avert that danger, and if there is every probability that the damage resulting from such dumping will be less than would otherwise occur.<sup>397</sup>

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<sup>394</sup> Mee, "Pollution Control and Prevention in the Black Sea", p.305.

<sup>395</sup> Article 10.

<sup>396</sup> Article 8.

<sup>397</sup> Article 6.

In line with the approach of 1972 London Dumping Convention, the list system was applied for dumping of each category of substances under three annexes. The dumping of matter listed in Annex I called as black-list covering hazardous substances is prohibited. The dumping will not be prohibited for matters in Annex II called as grey list covering noxious substances and for dredged spoils, if their concentration levels do not exceed environmental background conditions,<sup>398</sup> which has to be determined by the Black Sea Commission within three-years period from the entry into force of the Convention. However, dumping of matter listed in Annex II is allowable only by special permit.<sup>399</sup> Dumping of matters other than the matters defined in two of the lists is allowable only by a general permit to be granted from competent national authorities.<sup>400</sup> The Annex III determines the factors including characteristics and composition of the waste, characteristics of waste constituents with respect to their harmfulness, characteristics of discharge site and receiving marine environment, availability of waste technologies, potential impairment of marine ecosystems and sea-water uses, all of which should be taken into account during issuing permits.<sup>401</sup> The national competent authorities must be authorized by the Contracting Parties to issue permits and keep the records of the nature and quantities of the wastes or other matter permitted to be dumped and of the location, date and method of dumping.<sup>402</sup> They are urged to cooperate in exchanging information regarding the implementation of the Protocol and inform each other if a dumping that is in violation of the Protocol happens or likely to happen.<sup>403</sup>

The Land-based Protocol is the other legal instrument adopted in 1992 as the integral part of the Bucharest Convention, which is comprised of seven articles and three Annexes. It aimed to prevent, reduce and control the pollution caused by discharges from land-based sources on the territories of the Contracting Parties including from

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<sup>398</sup> Article 2.

<sup>399</sup> Article 3.

<sup>400</sup> Article 4.

<sup>401</sup> Article 5.

<sup>402</sup> Article 7 (1).

<sup>403</sup> Article 9.

rivers, canals, coastal establishments, other artificial structures, outfalls and run-off and through the atmosphere.<sup>404</sup> The Protocol is to be implemented in the geographic coverage of the Bucharest Convention and to the waters landward of the baselines from which the breadth of the territorial sea is measured and in the case of fresh-water courses, up to the fresh-water limit.<sup>405</sup> Like the Dumping Protocol, the Land-Based Protocol is comprised of annexes containing so-called black and grey lists. The pollution by substances and matter in Annex I need to be prevented and eliminated by the Contracting Parties whereas the pollution caused by substances in Annex II need to be reduced and where possible eliminated.<sup>406</sup> Annex III describes the restrictions to which discharges of substances and matters listed in Annex II should be subject to. The Protocol urges the Contracting Parties to cooperate with other States in order to deal with land-based pollution in the water courses that are tributaries to the Black Sea,<sup>407</sup> to carry out monitoring activities for the substances and matter listed in Annexes I and II,<sup>408</sup> to cooperate for elaboration of common guidelines, standards or criteria, to adopt common emission standards and timetable, to define pollution prevention criteria, to recommend appropriate measures<sup>409</sup> and to inform each other about the developments in the implementation of the Protocol.<sup>410</sup>

The Emergency Protocol, which is comprised of six articles and an Annex, is the other legal instrument adopted together with the Bucharest Convention in 1992. The Protocol aimed at cooperation between the Contracting Parties to prevent, reduce and combat pollution due to presence of high amount of oil or other harmful substances resulting from emergency situations.<sup>411</sup> The Protocol oblige Contracting Parties to

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<sup>404</sup> Article 1.

<sup>405</sup> Article 3.

<sup>406</sup> Article 4.

<sup>407</sup> Ibid.

<sup>408</sup> Article 5.

<sup>409</sup> Article 6.

<sup>410</sup> Article 7.

<sup>411</sup> Bucharest Convention, Article 9.

provide contingency plans at the national and regional levels,<sup>412</sup> to take measures in order to detect violations in the areas under their jurisdiction and for the vessels flying their flag.<sup>413</sup> They have to promote exchange of information regarding the implementation of the Protocol. The Protocol encourages Contracting Parties to notify the others likely to be affected about the danger<sup>414</sup> and to transmit reports about the incidents occurred or possible to occur.<sup>415</sup>

The Black Sea Biodiversity and Landscape Conservation Protocol adopted in 2002 is based upon 1992 Convention on Biological Diversity,<sup>416</sup> thereby aiming at protection, preservation and sustainable management of the biological diversity in the Black Sea. However, apart from its protection approach towards biological diversity, the Protocol goes one step further by integrating landscape as the component of the Protocol. It also makes cross-reference to the international multilateral agreements that aimed to protect the living resources and habitats such as RAMSAR Convention and 1992 Convention on Biological Diversity by which it gives effect to these agreements in the Black Sea region so as to make them fully in force in the region.

The Protocol is applicable in the geographic coverage of the Bucharest Convention as well as in the waters, sea bed, subsoil up to the fresh water limits. However more than this, the implementation area of the Protocol is extended to cover the Sea of Azov with which for the first time, in a legal instrument of the Black Sea environmental regime, the Sea of Azov is considered as the intrinsic part of the Black Sea.<sup>417</sup> Furthermore, the Protocol is applicable in the coastal zones designated by the Contracting Parties, including in the wetlands.<sup>418</sup> By this way, coastal areas of the Contracting Parties of the Bucharest Convention are considered as part of the

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<sup>412</sup> Article 2.

<sup>413</sup> Article 3.

<sup>414</sup> Article 4.

<sup>415</sup> Article 5.

<sup>416</sup> *Supra*, p.45.

<sup>417</sup> *Supra*, p.54.

<sup>418</sup> Article 3.

environment of the Black Sea to be taken into account in the protection of the Black Sea as a whole. The Protocol can be considered as the specification of the Article 13 of the Bucharest Convention but more comprehensive and holistic than the general obligation set forth by the Convention by integrating sustainability and ecosystem approach into the mainstream of the main framework. The Protocol is based on three approaches. It aimed at firstly conservation of existing protected areas, habitats and species from further deterioration, secondly restoration of deteriorated ones and lastly promotion of conservation of new habitats, protected areas and species. The Protocol is comprised of eighteen Articles and three Annexes, one of which sets the responsibilities of the Contracting Parties regarding the establishment of protected areas in the Black Sea, the second includes the List of Species of Importance for the Black Sea and the third one defines the obligation of Contracting Parties for the conservation of species and management of their habitats.

This Protocol is more comprehensive than the other Protocols of the Bucharest Convention by setting forth regulatory mechanisms and timeframes for each set of policy action. The Contracting Parties are urged to identify and compile inventories of components of biological and landscape diversity, adopt a List of Species of Black Sea importance that may be threatened, or important or other significance for the region to be subject to special measures and a list of landscapes and habitats of the Black Sea importance that may be destroyed or important, all of which are to be made within three years period after the entry into force of the Protocol. The elaboration and adoption of a Strategic Action Plan for the Black Sea Biodiversity and Landscape Conservation Protocol is the other policy action to be implemented by the Contracting Parties.<sup>419</sup>

The approach of Rio has been reflected in many of provisions of the Protocol such as the obligation in which the Contracting Parties are urged to inform the public about the value of protected areas, species and landscapes and their establishment as protected areas and regulations. The public participation in the protection of the

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<sup>419</sup> Article 4.

areas, species and landscapes is encouraged to do by the Protocol.<sup>420</sup> Furthermore, the Contracting Parties are urged to introduce principles of and development of legal instrument of ICZM.<sup>421</sup> As part of the conventional approach of Regional Seas Programmes, the Protocol encourage co-operation in conducting scientific research joint programmes and carrying out projects of scientific research and exchanging relevant scientific data and information on biological and landscape diversity of the Black Sea.<sup>422</sup> The obligation set forth by the Bucharest Convention regarding the responsibilities of the Contracting Parties in terms of liability and compensation for protection of the marine environment is extended by this Protocol for preservation of biological and landscape diversity in the Black Sea.<sup>423</sup>

The Black Sea Commission is held responsible from reporting of the state of the biological and landscape diversity in the Black Sea and to follow measures taken by the Contracting Parties on a five year basis<sup>424</sup> by which compliance control will be provided regarding the implementation of the Protocol.

It can be concluded that the Protocol is innovative for the region by considering the Sea of Azov as intrinsic part of the Black Sea, by integrating landscape as the component of the Protocol, by acknowledging coastal areas as part of the Black Sea environment and by strengthening compliance control mechanism.

### **2.3.1.3 Odessa Declaration and Strategic Action Plan**

The second track of the regimes established under the Regional Seas Programmes is the action plans, which set forth the policies to be adopted and implemented by the Contracting Parties with a view to convert legal commitments into actions. The Action Plans are fulcrum of the Regional Seas Programmes as they include the

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<sup>420</sup> Article 9.

<sup>421</sup> Article 7.

<sup>422</sup> Article 10.

<sup>423</sup> Article 11.

<sup>424</sup> Article 13.

prioritized and appropriate actions, which are determined taking into account the environmental problems and socio-economic characteristics of the region.<sup>425</sup>

The Black Sea States chose decentralized diplomacy approach according to which the negotiations during the elaboration of the Bucharest Convention took place in the form of multilateral legal negotiations with direct involvement of the Black Sea States rather than involvement of an IO such as UNEP.<sup>426</sup> Even if the Black Sea States followed such type of decentralized diplomacy, they chose the pattern of Regional Seas Programmes of UNEP in terms of adopting an Action Plan, which however didn't take place during the adoption of the Bucharest Convention. Being aware of this need, through the third Resolution adopted in the Diplomatic Conference, the Black Sea States invited UNEP for the elaboration of a further Black Sea Action Plan.

Under the initiative of Ukraine along with the support of UNEP, Odessa Declaration was formulated within a nine months period, which was signed on April 7, 1993 in Odessa.<sup>427</sup> The Odessa Declaration is more than a ministerial declaration as it is not simply a ministerial endorsement of the commitments laid down by the Bucharest Convention. Rather, it covers policies along with time-bounded targets for each set of policy and for that reason, it is called as an interim action plan. Furthermore, it introduces new policies that are not the subject of Bucharest Convention.

The Declaration consists of a preamble and nineteen specific actions under the themes of harmful substances; disposal of radioactive materials; pollution from ships; transboundary movement of toxic wastes; natural resources; emergency response plans; assessment and monitoring; ICZM, EIA together with the arrangements for future cooperation. The Odessa Declaration sets forth prioritized actions to be implemented by the Black Sea States in the fulfillment of their

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<sup>425</sup> Haas, "Save the Seas", p.194.

<sup>426</sup> Valentin Bou and Arzu Nuray, "Environmental Law for the Black Sea Region", Erdal Özhan (ed.), *MEDCOAST 99 - EMECS 99 Joint Conference, Land-Ocean Interactions: Managing Coastal Ecosystems*, Vol.2, (Ankara: MEDCOAST, 1999), p.1266.

<sup>427</sup> Mee, "Pollution Control and Prevention in the Black Sea", p.306.

obligations arising from the Bucharest Convention and in the achievement of the aims of the Convention in the short-term of three years period to be completed before 1997. It covers policies for controlling sources of marine pollution including land-based sources, pollution by dumping and pollution from ships as well as controlling transboundary movement of hazardous wastes and responding to environmental emergencies. The Black Sea States are committed to monitor the Black Sea environment and assess the sources and levels of the pollution. These actions can be considered as tools to convert the commitments of the Black Sea States defined in the Bucharest Convention. However, more than that, there exists other sets of actions that are not subject of the Bucharest Convention. For instance, protection, restoration and conservation of biodiversity, protection of natural resources and application of ICZM and EIA have been introduced into the mainstream of the Black Sea environmental regime. Due to presence of these approaches, it is regarded as the first instrument on regional seas that takes up the challenges of the Rio Conference.<sup>428</sup>

The assurance of sustainable development in the Black Sea lies at the heart of the Odessa Declaration. Being aware of further deterioration of the Black Sea and the insufficiency of the existing efforts in tackling with environmental problem of the Sea, the Black Sea States affirm to take effective measures and urgent actions individually or jointly and where appropriate in close cooperation with IOs so as to ensure sustainable development in the Black Sea.

Since the Declaration is based on the policies introduced by the Rio Conference, it encourages the Black Sea States to provide public participation at all levels. The Declaration goes one step further than the Bucharest Convention in the sense that apart from the approach of the Convention in which the aim was to prevent, reduce and control all sources of marine pollution, the aim is extended to cover protection, preservation and rehabilitation of the marine environment and sustainable development of the Black Sea.

In line with the Rio thinking, the Black Sea States committed to apply precautionary approach and polluter pays principle in the rehabilitation, protection and preservation

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<sup>428</sup> Ibid., p.307.

of the Black Sea environment. Furthermore, they decided to use market mechanisms with the development of economic incentives for using low and non-waste technologies and user fees. They agree to integrate marine environmental protection considerations into other policy areas and apply EIA and ICZM for sustainable development of the Black Sea.

The emphasis on provision of public participation and use of market mechanism can be considered as a novelty to the region surrounded by countries that have a long history of communism. In the pre-communist countries of the region, either the emergence of NGOs was not allowed or their role was ignored. The Black Sea States' common decision of application of market mechanisms is a promising decision when Turkey has been the only country that has the experience with the market mechanisms while the other five has none.<sup>429</sup>

Generally speaking, even if the Odessa Declaration is a soft law, that does not have binding effect in the sense of a treaty on the Black Sea States,<sup>430</sup> first of all it has an innovative approach for the region. It reflects the conceptual shift in the understanding of the Black Sea States that is emerging from totalitarian character.<sup>431</sup> While the Black Sea environmental regime had Stockholm-oriented approach on which the Bucharest Convention based, it was with the Odessa Declaration the Black Sea turned to be the first region that reflects the philosophy of the Rio.<sup>432</sup> Secondly, the Declaration served as an agenda for implementation of regional measures, in accordance with the Bucharest Convention. In other words, the Declaration can be called as a short-term action plan, thereby forming the basis of future comprehensive medium-, long-term action plan for the Black Sea.

It was three years after the Odessa Declaration, under the support of GEF, an action plan was prepared after a negotiation process as a result of series of meetings with

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<sup>429</sup> Sampson, "Black Sea Environmental Cooperation", pp.64-65.

<sup>430</sup> Sezer, "The Role of International Environmental Institutions in Protecting Regional Seas", p.59.

<sup>431</sup> Mee, "Can the Marine and Coastal Environment of the Black Sea be Protected?", p.142.

<sup>432</sup> Sampson, "Black Sea Environmental Cooperation", p.65.

the participation of a large number of environmental officials of the Contracting Parties and NGOs, which is based on the outputs of the TDA.<sup>433</sup> BS-SAP was adopted in a Ministerial Conference on October 31, 1996 in İstanbul, four years after the adoption of the Bucharest Convention. Like the Odessa Declaration, the Plan is formed from a set of actions with time bounded targets, however more detailed in scope and designed for a medium-, long-term period according to which the actions to be implemented by the Contracting Parties are to be completed before 2007. Therefore, a ten years period was proposed for the implementation of the defined actions in the Plan.

The Plan starts with a preamble in which the Action Plan is linked with the previous legal instruments including the Bucharest Convention and the Odessa Declaration so that the on-going process for the protection of the Black Sea in the region is recognized.<sup>434</sup>

It is comprised of six chapters in which the first chapter gives the summary of the environmental problems of the Black Sea. The eutrophication, insufficiently treated sewage, harmful substances, in particular oil, exotic species, inadequate resource management and loss of biodiversity and landscape are defined as the main problems of the Black Sea. The second chapter, which forms the basis for international cooperation, sets forth the principles to be taken into account by the Black Sea States in tackling with the environmental challenges of the Black Sea. The very first principle, on which the Black Sea environmental regime is attempted to be based, is the sustainable development which is further complemented with precautionary principle, anticipatory actions, use of clean technologies and economic instruments and transparency and public participation. Integration of environment and health considerations into all policies and sectoral plans, close cooperation between the states in the drainage basin of the Black Sea and involvement of stakeholders in the implementation of BS-SAP are the other supplementary principles stressed in the Plan. The second chapter proceeds with specification of the institutional structure to be responsible from the implementation of the Bucharest Convention, Odessa

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<sup>433</sup> Mee, "Pollution Control and Prevention in the Black Sea", pp.308-309.

<sup>434</sup> Mee, "Can the Marine and Coastal Environment of the Black Sea be Protected?", p.146.

Declaration, BS-SAP and further legal instruments of the Black Sea environmental regime. For the first time and in detail, the institutional structure of the regime was defined by a legal instrument since neither the Bucharest Convention nor the Odessa Declaration does give sufficient information on that. The details of the institutional arrangements including the responsibilities of the institutions are defined in the Annex of BS-SAP. Lastly, the second chapter of the Plan proposes cooperation between a wide spectrum of actors including NGOs, other regional organizations, donors and IOs.

The third chapter, which being the core of the Plan, covers 52 policy actions for reduction of pollution, for living resources management and for sustainable human development, all of which are accompanied with time-bounded targets.

For the reduction of the pollution in the Black Sea, 28 sets of policy actions are defined in the following areas:

- ❑ Land-based Sources of Pollution,
- ❑ Airborne Pollution,
- ❑ Vessel Source Pollution,
- ❑ Pollution from Dumping,
- ❑ Waste Management,
- ❑ Transboundary Movement of Hazardous Wastes,
- ❑ Contingency Planning and Emergency Response,
- ❑ Assessment and Monitoring of Pollutants.

For the living resources management in the Black Sea, 10 sets of policy actions are defined in the following areas:

- ❑ Commercially Exploited Resources,
- ❑ Biological Diversity Protection,
- ❑ Protection of Habitat and Landscape.

For the sustainable human development in the Black Sea 14 sets of policy actions are defined in the following areas:

- ❑ EIA,

- ❑ ICZM,
- ❑ Development of Sustainable Aquaculture and Tourism,
- ❑ Involving the Public in Environmental Decision-Making.

The Plan is supplemented with three more chapters, one proposes to prepare National Black Sea Strategic Action Plans by the Black Sea States with a view to adapt the BS-SAP to the national legislation, the other proposes policies to finance the BS-SAP for its further implementation and the last chapter determines the arrangements for future cooperation, which includes the policies of arrangement of meetings and preparation of reports on the state of the environment of the Black Sea.

The BS-SAP covers all aspects of the Black Sea environment in a more holistic approach. It is not only a legal instrument of setting forth obligations, but also a policy document. In other words, it is a road map for the Governments of Black Sea for protection of the Black Sea environment. The time-bounded targets makes BS-SAP more important in the assessment of the implementation of policy actions by the Black Sea States in given times. The approach of Rio has been integrated into the BS-SAP in a more comprehensive manner, thereby making sustainable development the core principle of the regime. BS-SAP is more detailed than that of the Odessa Declaration in terms of reflecting the philosophy of Rio with the integration of policies like transparency, public participation and involvement NGOs in the decision-making process, open rules on access to administrative and judicial procedures and access to environmental information.

### **2.3.2 The Role of GEF**

The Black Sea States invited UNEP to support their activities in the fulfillment of the obligations arising from the Bucharest Convention with the third Resolution of the Diplomatic Conference. UNEP was invited not only to elaborate a Black Sea Action Plan but also to provide assistance and equipment and to conduct a preliminary work programme for priority environmental issues that covers monitoring and research

programmes, training, protection of endangered species, technology transfer and assistance for achieving sustainable development.<sup>435</sup>

The rationale behind this request must have been the technical and financial difficulties in terms of fulfilling the obligations of the Black Sea States of the ones in transition at the outset of the adoption of the Bucharest Convention. At this request of the Contracting Parties, the Black Sea Environmental Management project, shortly called as Black Sea Environmental Programme (BSEP), was initiated in June 1993 to be funded by GEF,<sup>436</sup> which was firstly planned for a 3-year period to function between 1993 and 1996. At first hand, GEF-BSEP aimed at creating and strengthening the regional capacities of the Contracting Parties for the implementation of the Bucharest Convention; developing and implementing the appropriate policy and legislative framework for the Black Sea, and facilitating the preparation of environmentally sound investments.<sup>437</sup>

GEF-BSEP firstly devoted to develop a network between the Black Sea States and to strengthen their capacities for managing the Black Sea environment. Based on the Odessa Declaration, a system of Activity Centers and Working Parties was devised<sup>438</sup> in the thematic areas of emergency response, routine pollution monitoring, special monitoring programmes, biodiversity, fisheries, ICZM, data management and geographic information systems (GIS), harmonization of environmental quality criteria, standards, legislation and enforcement, and environmental economics.

By 1996, an institutional network at the regional level was developed between the Black Sea Governments in these thematic areas, which formed the basis of the future institutional structure of the Black Sea environmental regime. A network between the NGOs in the Black Sea region was developed as well. The administrative capacity of the Black Sea States in managing the Black Sea environment was strengthened

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<sup>435</sup> Third Resolution of the Diplomatic Conference.

<sup>436</sup> *Supra*, n. 36.

<sup>437</sup> Mee, "Pollution Control and Prevention in the Black Sea", p.308, 314.

<sup>438</sup> UNDP, *Project Document for Phase I*, p.12.

through capacity building programmes in the form of training programmes and provision of office equipment.<sup>439</sup> Furthermore, a list of projects that includes the largest domestic and industrial wastewater sources of regional significance in terms of their degree of pollution creation was prepared by GEF-BSEP, which needs prioritized investment for reduction of the pollution.<sup>440</sup>

Among the GEF-BSEP's contributions, the two activities with the overall aim of developing and implementing the appropriate policy and legislative framework for the Black Sea, deserves particular attention. The first one is the preparation of TDA that analyzes the environmental problems of the Black Sea, the root causes of these problems and the areas where action is proposed, and defines the stakeholders and the actions for each set of problem, the costs of the proposed actions and the time scale for completing these actions. It was prepared by a group of specialists within the GEF-BSEP network in more than two years period of a systematic study. TDA formed the groundwork for the second most significant contribution of GEF-BSEP, BS-SAP.<sup>441</sup> Although evaluation of GEF-BSEP in 1995 revealed that the project was a success in terms of meeting its goals set forth, as there was a further need for the support of GEF in the Black Sea in order to convert the recently defined actions by BS-SAP into implementation, GEF-BSEP project was extended for more two years to be executed in between 1997 and 1998.

The second phase of GEF-BSEP, namely Developing the Implementation of the Black Sea Strategic Action Plan, aimed not particularly to implement the BS-SAP, but to establish the conditions that will enable implementation of BS-SAP in the achievement of the aims of the Bucharest Convention. Therefore, the rationale behind the continuing GEF support in the Black Sea was to form the basis of a sustainable regime so as to enable the future implementation of the environmental policies and targets laid down in the Bucharest Convention and Odessa Declaration, and detailed in the BS-SAP at the national and regional level.

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<sup>439</sup> Mee, "Pollution Control and Prevention in the Black Sea", p.308; UNDP, *Project Document for Phase I*, p.8.

<sup>440</sup> Ibid.

<sup>441</sup> *Supra*, pp.99-102.

Under this overall purpose, it firstly aimed at consolidating the policy strategy of the Black Sea environmental regime, in other words consolidating the short-term Odessa Declaration with the medium/long term BS-SAP to achieve a strong single policy framework for the regime and making this single regional policy strategy applicable at the national level by preparation and adoption of National Black Sea Strategic Action Plans. Secondly, it aimed to lay the ground for the implementation of BS-SAP by providing technical assistance for monitoring activities so as to enable compliance with the regime and financial assistance for organization of workshops and meetings between the Black Sea States for achievement of a common understanding, by improving the communication between the Black Sea States and the Black Sea Commission and by developing an information system. Thirdly, for the effective implementation of BS-SAP, it focused on promoting involvement of public in the implementation of the BS-SAP by supporting the activities of NGOs and preparing mechanisms for the active involvement of local authorities and the public. Lastly it aimed to form the basis of further financing of BS-SAP through preparing demonstration projects for the hot-spots for their consideration by International Financial Institutions (IFIs) and establishing a Black Sea Environmental Fund. These purposes and the relevant actions for the achievement of these purposes of GEF-BSEP formed the basis of the overall strategy of the Black Sea environmental regime.

The label “BSEP” was firstly named for the project supported by GEF. However, as the program provided a platform for the coordination of donor support as well as channelling of inputs of the countries, the donor communities and other international donors, it later turned to be a loose programmatic framework that covers not only the GEF funded projects, but also all other projects and other smaller donor initiatives with a view to make them coherent and comprehensible for the public and governments and to eliminate duplication of activities of all the projects executed for the purpose of implementation of BS-SAP. In other words, BSEP has become the umbrella for national and donor sponsored multi-country projects and initiatives that aimed to save the Black Sea with the overall aim set forth by GEF-BSEP.<sup>442</sup> EC

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<sup>442</sup> UNDP, *Project Document for Phase I*, pp.19-20.

through the “Assistance Programme for Newly Independent States (NIS) Countries” (TACIS)<sup>443</sup> and “Pre-accession Assistance for Central and Eastern European Countries” (PHARE)<sup>444</sup> Programme, the governments such as Netherlands, France, Norway, Canada, Denmark and Japan made parallel funding in the achievement of the aims of GEF-BSEP. UNEP and WB have made contributions other than the scope of the GEF-BSEP project budget.<sup>445</sup>

After the adoption of BS-SAP, BSEP was formalized as the coordinated programme of all projects under the auspices of the Black Sea Commission with the objective of rehabilitating and protecting the Black Sea as well as sustainable development of the region. A Joint Project Management Group (JPMG) has been established to execute all projects and programs under BSEP in coordination with the Black Sea Commission. Even though the GEF-BSEP project was completed by 1998, BSEP continued to function as the umbrella of the continuing projects and donor supports. For instance, European Commission’s provided emergency support under BSEP between 1998-2000.

Today, BSEP functions as a subsidiary body of the Black Sea Commission with which implementation of the Bucharest Convention and BS-SAP is promoted. The projects and programs under BSEP support the activities of the Black Sea Commission. Since 2002 two projects have been executed under the programmatic framework of BSEP, one of which is the “Black Sea Ecosystem Recovery Project (BSERP)”. The project is the extension of the GEF support for the Black Sea for the years 2002-2007 to be executed in two phases between 2002-2004 and 2004-2006. The project has the long-term aim of achieving the environmental conditions in the Black Sea similar to those observed in the 1960s, which is decided to be achieved with the elimination of the main problem of the Black Sea, eutrophication. Therefore, the project focuses on the issue of eutrophication in the Black Sea. Under this specific aim, BSERP supports activities of the Black Sea Commission, the Black Sea

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<sup>443</sup> hereinafter referred to as “TACIS”.

<sup>444</sup> hereinafter referred to as “PHARE”.

<sup>445</sup> Mee, “Pollution Control and Prevention in the Black Sea”, p.308.

States and the Black Sea NGOs for reduction of nitrogen and phosphorus loads in the Sea, for strengthening of service function of wetlands to benefit from their assimilative capacities for nutrients and for improved management of critical habitats to benefit from the fisheries economically.<sup>446</sup>

The other project executed under BSEP umbrella namely “Technical Assistance to the Black Sea Environmental Programme in Russia, Georgia, Ukraine” is supported by European Commission through TACIS, aims the improvement of the environmental conditions of the Black Sea as well. The project supports the Governments of Russia, Georgia and Ukraine as well as the Permanent Secretariat of the Black Sea Commission. It provides technical and financial support to the Activity Centers located in these three Black Sea States regarding the issues on pollution monitoring and assessment, ICZM and biodiversity protection and to the Permanent Secretariat of the Black Sea Commission to increase their regional capacities for the fulfillment of their responsibilities.<sup>447</sup>

Within the framework of BSEP, these two projects arrange their budgets and activities in accordance with the annual Work Programme of the Black Sea Commission by which the possibility for duplication of activities of the projects and the Black Sea Commission is eliminated.

### **2.3.3 Institutional Machinery**

One of the other component of Regional Seas Programmes, the institutional arrangements, is designed for coordination and execution of activities at the regional level and assist in further development of the regime to achieve the aims of the Regional Seas Conventions.<sup>448</sup> Black Sea environmental regime has such a

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<sup>446</sup> UNDP, *Project Document for Phase I*, pp.15-16.

<sup>447</sup> Arcadis Euroconsult, *Technical Assistance to the Black Sea Environmental Programme in Russia, Georgia, Ukraine Inception Report*, (Brussels: European Commission, 2002), p.1.

<sup>448</sup> See Ch.1.

component as well,<sup>449</sup> which however differs from many of the other Regional Seas Programmes of UNEP.

As the regime was established with direct multilateral agreement model, an IO like UNEP was not integrated into the regime. Instead, the regime is decided to be managed by direct participation of the Black Sea States through a Black Sea Commission as the decision-making level whose activities to be coordinated by a Permanent Secretariat formed from the nationals of the Black Sea States.<sup>450</sup> Within this context, the Black Sea States would like to act independently without the incorporation of other IO into the institutional structure.

Black Sea Commission is the body, which is responsible from implementation of the Bucharest Convention. It has the duty to make recommendations on measures, to recommend amendments to the Convention, the Protocols and the Annexes, to elaborate criteria, to disseminate scientific, technical and statistical information, to promote scientific and technical research, to cooperate with relevant IOs and to consider any issues within the framework of the Convention.<sup>451</sup> The Commission is formed from six Commissioners authorized by each Black Sea State<sup>452</sup> who are usually the deputy ministers or the senior environmental department heads.<sup>453</sup> The Black Sea Commission is chaired by the Commissioner of a Black Sea State for a one-year term period in an alphabetical order of the English language on the basis of rotation.<sup>454</sup>

The meetings of the Black Sea Commission are held at least once in a year. If deemed necessary, extraordinary meetings can be convened as well.<sup>455</sup> The meetings

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<sup>449</sup> For a scheme of the institutional design see Appendix B.

<sup>450</sup> Bucharest Convention, Article 17 (8).

<sup>451</sup> Ibid., Article 18.

<sup>452</sup> Ibid., Article 17 (2).

<sup>453</sup> Arcadis Euroconsult, *TACIS Regional Environment Programme*, p.10.

<sup>454</sup> Bucharest Convention, Article 17 (3).

<sup>455</sup> Ibid., Article 17 (4).

of the Commission are highly crucial in which annual progress is reviewed, future work of the Commission for the implementation of the Convention and budget for the future activities is decided and necessary additional legal tools and other measures are adopted.

The Bucharest Convention oblige Black Sea States to open a Permanent Secretariat to be managed directly by the officials of the Black Sea States to support the activities of the Black Sea Commission whose headquarters is to be located in Turkey, İstanbul.<sup>456</sup> In general, Secretariats are opened as soon as the conventions are signed in order to convert the political commitments into actions since effective coordination at the local, national, regional levels and efficient use of donor assistance in support of these efforts lies at the heart of success in the management of the regional seas. This necessitates a permanent secretariat to fulfill these functions. However, the Secretariat couldn't have been established very soon after the adoption of the Bucharest Convention. Rather, it was opened in 2000, eight years after the adoption of the Convention.

From 1993 till the full functioning of the Permanent Secretariat in 2000, this gap was tried to be filled through GEF-BSEP whose Project Coordination Unit (PCU) acted as the *de facto* Secretariat of the Black Sea Commission.<sup>457</sup> The PCU was later transformed to a Project Implementation Unit (PIU) following the recommendation made in the BS-SAP in which it was suggested that a body should be established for supporting the projects in the Black Sea and implementation of BS-SAP.<sup>458</sup> The PIU provided the coordination of the tasks for the implementation of the Bucharest Convention at the regional level, facilitated the Black Sea environmental co-operation process and paved the way for establishment of a donor assistance coordination mechanism in support of this process until the establishment of the Permanent Secretariat of the Black Sea Commission. In other words, PIU functioned as an unofficial interim secretariat. Due to completion of the second phase of GEF-

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<sup>456</sup> Ibid., Article 17 (6).

<sup>457</sup> UNDP, *Project Document for Phase I*, p.20.

<sup>458</sup> Article 2, Item 20.

BSEP in 1998, the PIU was supported by the Black Sea States, UNDP, European Commission and other donors between 1999-2000.<sup>459</sup>

Being aware of the urgent need for a Secretariat, even though BS-SAP urges Black Sea States to open the Secretariat by January 1997<sup>460</sup>, it has started to function in İstanbul since 15 October 2000 after the adoption of the Headquarters Agreement Between the Government of the Republic of Turkey and the Commission on the Protection of the Black Sea Against Pollution (Headquarters Agreement)<sup>461</sup> and Agreement on the Privileges and Immunities of the Commission on the Protection of the Black Sea Against Pollution (Privileges and Immunities Agreement)<sup>462</sup> on 28 April 2000. The Headquarters Agreement was adopted between the Government of Turkey as the Host Country and the Black Sea Commission in which personality of the Black Sea Commission and responsibilities of the Host Country including provisions related to premises of the Secretariat, financial support, working status and conditions of the officials and support staff of the Secretariat under the host country are defined.<sup>463</sup> On the other hand, the Privileges and Immunities Agreement, which entered into force on 15 August 2003, defines privileges and immunities of the officials of the Secretariat in detail. The adoption of these two agreements is crucial for full functioning of the Secretariat and for fulfilment of its responsibilities.

Due to direct multilateral model, only officials of the Black Sea States can be authorized to work in the Permanent Secretariat of the Black Sea Commission.<sup>464</sup> The principal administrator of the Secretariat is the Executive Director, who is authorized by the Black Sea Commission.<sup>465</sup> The Director is responsible from provision of the contact with the Contracting Parties related to the activities and day-

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<sup>459</sup> UNDP, *Project Document for Phase I*, p.136.

<sup>460</sup> Article 2, Item 19.

<sup>461</sup> hereinafter referred to as "Headquarters Agreement"

<sup>462</sup> hereinafter referred to as "Privileges and Immunities Agreement".

<sup>463</sup> Black Sea Commission, *Headquarters Agreement*, İstanbul, 28 April 2000.

<sup>464</sup> Bucharest Convention, Article 17 (6).

<sup>465</sup> Headquarters Agreement, Article 1.

to-day management of the Secretariat<sup>466</sup> and appointment of the support staff of the Secretariat. According to the Regulations for the Staff of the Secretariat, together with an executive director, a pollution monitoring and assessment officer, a land-based sources officer, a biodiversity officer, an environmental information officer and an environmental law officer must be authorized by the Black Sea Commission<sup>467</sup> to work in the Secretariat of the Commission.<sup>468</sup> However, currently a Senior Pollution Monitoring and Assessment Officer, a Secretary, a junior Landscape Architect, who is seconded by the Government of Turkey on a temporary basis and a Biodiversity Expert supported by TACIS is working at the Secretariat.<sup>469</sup>

To carry out the technical tasks arising from the Bucharest Convention at a regional scale, as a subsidiary body to Black Sea Commission, the Black Sea States decided to establish Activity Centers to be based on their Research Institutes.<sup>470</sup> As each Contracting Party agreed to host an Activity Center, their activities are to be financially supported by the Host Country through in kind contributions together with the additional support from donors where possible and necessary.

In the first phase of GEF-BSEP, six Activity Centers were established, each is to be located in and coordinated by a Contracting Party. They are designed as the main bodies for coordination of specific issue areas and relevant programmatic and practical technical support. The Activity Centers were established in the thematic areas of emergency response; protection of biodiversity; development of common methodologies for ICZM, fisheries, special monitoring programme, biological and human health effects and environmental quality standards, and routine pollution monitoring to be coordinated by Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine respectively.<sup>471</sup>

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<sup>466</sup> Ibid., Article 11.

<sup>467</sup> Ibid., Article 1.

<sup>468</sup> UNDP, *Project Document for Phase I*, p.136.

<sup>469</sup> Arcadis Euroconsult, *TACIS Regional Environment Programme*, p.10.

<sup>470</sup> With the fourth Resolution of the Diplomatic Conference, in accordance with the decision of Contracting Parties, the Odessa Declaration urged Black Sea States to select existing national institutions to work as Activity Centers (art. 17).

As subsidiary to Activity Centers, Working Parties in these thematic areas were established to be coordinated by the relevant Activity Centers for the purpose of providing necessary technical advice related to the implementation of the Bucharest Convention. Each Working Party was formed from experts of each Black Sea State who would be authorized as the focal point for that specific issue-area. In addition to these six Working Parties, PCU of GEF-BSEP coordinated three other Working Parties in the fields of data management and GIS, harmonization of environmental quality criteria, standards, legislation enforcement and environmental economics.<sup>472</sup>

However, following the adoption of the BS-SAP in 1996, the institutional structure of the Black Sea environmental regime was re-organized according to which Working Parties are converted to Advisory Groups and issue-areas of the Activity Centers are changed with a view to cover all aspects of the environmental pollution in the Black Sea. Advisory Groups are established to provide the relevant technical advice and the accurate and timely delivered national information to the Black Sea Commission. The primary actors of the Advisory Groups are heads of Regional Activity Centers (RACs) and national focal points who are nominated by each Contracting Party to provide links between the Black Sea Commission, relevant national, regional and international institutions and execute the activities related to their field at the national level. The BS-SAP recommends authorization of experts in the fields of environmental law, environmental economics and public awareness as focal points and involvement of NGO representatives in the Advisory Groups. Groups are managed by a chairperson for a two years period selected by members of the Advisory Group. Each Advisory Group works according to an annual working plan determined by the Group and approved by the Black Sea Commission.<sup>473</sup>

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<sup>471</sup> BSEP, *1994 Annual Report*, (Istanbul: UNDP Publications, 1995).

<sup>472</sup> Ibid.

<sup>473</sup> Black Sea Commission, *Terms of Reference of the Advisory Group on Conservation of Biological Diversity, Terms of Reference of the Advisory Group on Control of Pollution From Land Based Sources, Terms of Reference of the Advisory Group on the Development of Common Methodologies for Integrated Coastal Zone Management, Terms of Reference of the Advisory Group on Environmental Aspects of Fisheries and Other Marine Living Resources Management, Terms of Reference of the Advisory Group on Environmental Safety Aspects of Shipping, Terms of Reference of the Advisory Group on Pollution Monitoring and Assessment*, (Istanbul, October 2003).

Each Advisory Group is supported by an Activity Center. The already established six Activity Centers during the first phase of GEF-BSEP have been re-organized in line with the newly established Advisory Groups in accordance with the BS-SAP. The RACs have to act as regional consulting bodies with wide ranging responsibilities including formulation of regional policies, strategies, recommendations and actions, and drafting documents in their respective issue areas and proposals to attract national and international financial assistance for realization of their activities, developing projects and programs, assisting the Black Sea States in the implementation of relevant conventions and actions, cooperating with and strengthening relationships between relevant stakeholders, coordinating the regional training exercises and ensuring regular information flow into regional database.<sup>474</sup>

The Activity Centers and the Advisory Groups are designed as the integral part of the Black Sea Commission and acts as subsidiary bodies. They perform tasks under the guidance and supervision of the Black Sea Commission and its Secretariat. According to the Article 22 of BS-SAP, the following Advisory Groups and Activity Centers have been functioning under the auspices of Black Sea Commission.

- Advisory Group on the Environmental Safety Aspects of Shipping (AG on ESAS), coordinated by the RAC in Bulgaria;
  - Advisory Group on Pollution Monitoring and Assessment (AG on PMA), coordinated by the RAC in Ukraine;
  - Advisory Group on Control of Pollution from Land Based Sources (AG on LBS), coordinated by the RAC in Turkey;
  - Advisory Group on the Development of Common Methodologies for ICZM (AG on ICZM), coordinated by the RAC in Russia;
  - Advisory Group on the Conservation of Biological Diversity (AG on CBD), coordinated by the RAC in Georgia;
  - Advisory Group on Environmental Aspects of Fisheries and Other Marine Living Resources Management (AG on FOMLR), coordinated by the RAC in Romania;
- and

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<sup>474</sup> Ibid.

- Advisory Group on Information and Data Exchange, coordinated by the Permanent Secretariat of the Black Sea Commission.

The Research Institute of Shipping of Bulgaria in Varna is the Regional Activity Center on Environmental Safety Aspects of Shipping (RAC on ESAS),<sup>475</sup> which is responsible from the activities related to ship based pollution including emergency response, contingency planning, dumping and safety of maritime transport and transboundary movement of hazardous wastes.<sup>476</sup>

As the Regional Activity Center on Control of Pollution from Land Based Sources (RAC on LBS), the activities related to assessment and control of discharges of pollution from land-based sources are coordinated by the Turkish Scientific and Technical Research Institute in İzmit.<sup>477</sup>

Ukrainian Center of Sea Ecology located in Odessa is the Regional Activity Center on Pollution Monitoring and Assessment (RAC on PMA),<sup>478</sup> which coordinates networks of national status and monitoring programs and responsible from monitoring the state of environment of the Black Sea at a regional scale.<sup>479</sup>

The Regional Activity Center on Conservation of Biological Diversity (RAC on CBD), Georgian Marine Ecology and Fisheries Research Institute in Batumi,<sup>480</sup> coordinates the activities related to protection, conservation and sustainable use of biological and landscape diversity in the Black Sea.<sup>481</sup>

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<sup>475</sup> Yegor S. Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I: Report on Meetings in RACs and Focal Points*, (unpublished report, 2002), p.8.

<sup>476</sup> Black Sea Commission, *Terms of Reference of the AG on ESAS*.

<sup>477</sup> Black Sea Commission, *Terms of Reference of the AG on LBS*.

<sup>478</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.8.

<sup>479</sup> Black Sea Commission, *Terms of Reference of the AG on PMA*.

<sup>480</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.8.

<sup>481</sup> Black Sea Commission, *Terms of Reference of the AG on CBD*.

National Institute for Marine Research and Development of Romania in Constanza as being the Regional Activity Center on Environmental Aspects of Fisheries and Other Marine Living Resources Management (RAC on FOMLR)<sup>482</sup> is concerned with the activities for protection and rehabilitation of marine ecosystem, in particular for conservation and sustainable use of marine living resources in the Black Sea.<sup>483</sup>

As the Regional Activity Center on Development of Common Methodologies for ICZM (RAC on ICZM), Krasnodor State Committee for Environmental Protection of Russia,<sup>484</sup> coordinates the activities to achieve integrated coastal zone management in the Black Sea.<sup>485</sup>

Recently an Ad Hoc Working Group on Water Framework Directive (WFD) is established<sup>486</sup> to work under the auspices of the Black Sea Commission to be coordinated by the Permanent Secretariat. The Group will be promoting principles of and enabling implementation of the EU WFD 2000/60/EC<sup>487</sup> in the Black Sea Region.<sup>488</sup>

In addition to the main institutional structure of the Black Sea Commission, there exists other forms of institutional designs functioning in the premises of the Black Sea Commission for the achievement of the aims of Bucharest Convention. Since BSEP is continuing to function as a subsidiary body to the Black Sea Commission, a JPMG has been established with a view to link the activities of all donor-based projects executed under BSEP with the activities foreseen by the Black Sea Commission. The Group acts in an advisory capacity in accordance with the requirements of the

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<sup>482</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.8.

<sup>483</sup> Black Sea Commission, *Terms of Reference of the AG on FOMLR*.

<sup>484</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.8.

<sup>485</sup> Black Sea Commission, *Terms of Reference of the AG on ICZM*.

<sup>486</sup> The establishment of this Group was decided in the 9<sup>th</sup> Meeting of the Black Sea Commission held between 12-13 June 2002.

<sup>487</sup> EU Water Framework Directive aims to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater.

<sup>488</sup> Black Sea Commission, *Terms of Reference for the Ad Hoc Working Group on Water Framework Directive to the Commission on the Protection of the Black Sea Against Pollution*, (Istanbul, October 2003).

Commission and the Contracting Parties under the auspices of the Black Sea Commission. The JPMG consists of representative of each Contracting Party, in particular members of the Black Sea Commission, the Black Sea Commission, the Executive Director of the Secretariat and representatives of each of the major donors executing projects under the umbrella of BSEP. Currently, the representatives of BSERP and TACIS Projects are the members of the JPMG as the major donors executing projects under BSEP. The Executive Director is responsible from coordination of the activities between JPMG and the Commission, the Advisory Groups and other organs of the Commission. The meetings of JPMG held annually are convened by the Executive Director. This Group provides the mechanism for planning of the activities of the donors to prevent duplication of the activities of different projects executed under BSEP and to use resources in a most efficient manner. As JPMG provides the overall management framework for coordinating and implementing BSEP, the Group prepares and adopts annual work-plan and budget for BSEP, reviews work and budget of the previous year and makes any recommendations on the further work of the Group<sup>489</sup>

The BSEP Executive Board has been established to provide implementation of the work-plan defined and agreed by JPMG and day-to-day coordination between various projects executed under BSEP and the Black Sea Commission. The Executive Board consists of coordinators of the projects within BSEP and the Executive Director of the Commission. The meetings of BSEP Executive Board are held at least monthly.<sup>490</sup>

The projects within BSEP has also institutional designs that work in close cooperation with the Black Sea Commission and located in its premises, İstanbul, one of which is the PIU of BSERP. PIU which was firstly established for GEF-BSEP is now functioning as a semi-autonomous unit within BSEP for the implementation of BSERP. The PIU is linked to the Black Sea Commission and donor community through JPMG. The working relations between PIU and the Secretariat is agreed

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<sup>489</sup> UNDP, *Project Document for Phase I*, p.102.

<sup>490</sup> Ibid., p.103.

upon by BSEP Executive Board. PIU provides technical support to the Permanent Secretariat for the attainment of the objectives defined in BSERP. PIU supports activities of the Secretariat in the areas where it is not covered by technical officers of the Secretariat and provides co-ordination of the project at the regional level.<sup>491</sup>

The Steering Committee, which was established during GEF-BSEP, is now continuing to function for BSERP. The primary actors of the Committee is the National Coordinators authorized by each Contracting Party of the Bucharest Convention for the current project who are responsible from coordination of the activities at the national level. Along with National Coordinators, representatives of GEF implementing agencies including UNDP, UNEP and WB, and other major donors contributing 5% or more of the annual project budget are involved in the Steering Committee as members. The Steering Committee which meets twice a year reviews progress of the project, namely BSERP, approves work-plan and timetable for the project, project implementation and expenditures, adopts Annual Project Report and makes recommendations to the Black Sea Commission on issues it may deem necessary.<sup>492</sup>

A PIU like structure is designed for the implementation of the TACIS Project, which is located in the premises of the Secretariat as well.<sup>493</sup>

In order to co-ordinate the activities of the International Commission for the Protection of the Danube River (ICPDR)<sup>494</sup> and Black Sea Commission, a Danube-Black Sea Joint Technical Working Group is established to promote implementation of the "Memorandum of Understanding between the International Commission for

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<sup>491</sup> Ibid., p.25.

<sup>492</sup> Ibid., pp.70-71.

<sup>493</sup> Arcadis Euroconsult, *TACIS Regional Environment Programme*, p.29.

<sup>494</sup> ICPDR is established under the Convention on Co-operation for the Protection and Sustainable Use of the Danube River adopted on 29 June 1994 in Sofia by the eleven Danube Riparian States including Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Moldova, Romania, Slovak Republic, Slovenia, Ukraine and the European Community. The Convention came into force on 22 October 1998. The Convention is aimed at achieving the sustainable and equitable water management in the Danube basin, including the conservation, improvement and the rationale use of surface waters and ground water in the Danube catchment area. For further information see <http://www.icpdr.org/>.

the Protection of the Black Sea and the International Commission for the Protection of the Danube River on Common Strategic Goals” (MoU between Black Sea Commission and ICPDR)<sup>495</sup> and to reinforce cooperation between Danube Commission and Black Sea Commission. The Group is formed from the representatives of Danube as well as Black Sea Commission and experts from the Black Sea States and project managers of the GEF Projects. The Group analyzes status of the Black Sea ecosystem and recommends strategies and measures based on the results of the analysis.<sup>496</sup>

The Danube-Black Sea Task Force (DABLAS Task Force) is established to enable the implementation of the MoU between Black Sea Commission and ICPDR. The Secretariat of the DABLAS Task Force is the European Commission. The DABLAS Task Force consists of representatives from the countries of the Region, the Danube and Black Sea Commissions, the European Commission, interested EU Member States, IFIs and bilateral donors, which meets at least once a year. The Task Force is a platform to bring donors and IFIs for protection of water and water related ecosystems of the wider Black Sea region.<sup>497</sup>

### 2.3.4 Financial Setting

Rather than *ad hoc* voluntary contributions, a long-term funding mechanism is a necessity in order to attain sustainable environmental regimes. Within this respect, one of the pillars of the Regional Seas Programmes is designed as financial arrangements. Generally in the ones where UNEP is directly involved, UNEP together with selected UN agencies and other organizations, provide “seed money” or catalytic financing in the early stages of Regional Seas Programmes. As the program develops, it is expected from Contracting Parties to assume full responsibility of financing the regime in the coming stages. After the Contracting

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<sup>495</sup> hereinafter referred to as “MoU between Black Sea Commission and ICPDR”; The MoU was adopted in November 2001.

<sup>496</sup> UNDP, *Project Document for Phase I*, p.128.

<sup>497</sup> European Commission, *Terms of Reference of the DABLAS Task Force for Cooperation on Water Protection in the Wider Black Sea Region*, Brussels, 2004.

Parties assume full responsibility, trust funds are established that are administered by the Secretariats that are based on voluntary or annual contributions of the Parties.<sup>498</sup> If a financial mechanism on how the activities will be financed is not defined in the Regional Seas Conventions, ratification of the convention implicitly implies that financial support should be given by the Contracting Parties for the conversion of legal commitments into actions.

For the Black Sea environmental regime, establishment of a financial mechanism was not foreseen by the Bucharest Convention. A clear obligation defining responsibilities of the Black Sea States in financing the actions related to implementation of the Bucharest Convention does not exist. Therefore, it can be implicitly understood that for functioning of the regime, the Black Sea States should contribute by somehow.

While not having a definite financial framework, at the same time, the Black Sea States, in particular the former Soviet block countries were in socio-economic transition, thereby having substantial difficulties in securing adequate financial resources during and very soon after the adoption of the Bucharest Convention.<sup>499</sup> Therefore, at the beginning there were financial difficulties in the regime in terms of initiating the process for rehabilitating the Black Sea and for implementing the Bucharest Convention.

Due to lack of a financial framework as well as financial resources, upon the request from Black Sea States, BSEP was initiated in 1993 as a project under the support of GEF with a view to initiate the process for rehabilitating the Black Sea ecosystem in the fulfilment of obligations of Black Sea States arising from the Bucharest Convention. Further additional support for the regime came from other UN agencies, EU and bilateral donors such as Netherlands, Norway, Denmark, Canada and Japan.<sup>500</sup>

In general, GEF-BSEP, which functioned between 1993-1998, together with parallel funding from European Commission has provided significant amount of money both

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<sup>498</sup> Haas, "Save the Seas", p.196.

<sup>499</sup> BSEP, *1997 Annual Report*, (İstanbul: UNDP Publications, 1998), p.i.

<sup>500</sup> BSEP, *1994 Annual Report*, p.iii.

for the formation of the basis of the regime and for the implementation of the activities at the regional and national levels.

**Table 2.9: Donor Support for the Black Sea Environmental Regime, (million United States Dollar (USD))**

| Project Name                                                                         | Project Duration | GEF   | Parallel Financing                           | TOTAL |
|--------------------------------------------------------------------------------------|------------------|-------|----------------------------------------------|-------|
| Black Sea Environmental Management – BSEP Phase I                                    | 1993-1996        | 9.30  | 23.3                                         | 32.60 |
| Developing the Implementation of the Black Sea Strategic Action Plan – BSEP Phase II | 1997-1998        | 1.790 | 6.955<br>(PHARE and TACIS<br>+<br>NGO Forum) | 8.745 |

Source: GEF, *The Operational Report on GEF Programs*, (Washington: GEF, 2000), pp.81-82.

During the first phase of BSEP between 1993-1996, 9.3 million USD from GEF with parallel financing from other donors, a total amount of 32.60 million USD was spent for the Black Sea. The GEF support during second phase of BSEP between 1997-1998 amounted to 1.790 million USD. Together with the GEF support, total amount of the money allocated for the regime during second phase of BSEP amounted to 8.745 million USD.<sup>501</sup> However, as projects were designed for specified time periods and bilateral contributions were not made on a sustainable manner, the Black Sea Commission explored the possibility for establishment of a Black Sea Environmental Fund in late 1994<sup>502</sup> as the primary source of financing for implementation of the Bucharest Convention with a view to achieve a self-sustaining regionally based finance mechanism.

Instead of proposing a regional trust fund relying on assessed or voluntary government contributions,<sup>503</sup> the main source of funding for the Black Sea was considered as set of harmonized economic instruments developed at the national level, which can be supported by international multilateral and bilateral donor organizations, IFIs and private sector sources as well. It aimed at region-wide

<sup>501</sup> GEF, *The Operational Report on GEF Programs*, pp.81-82.

<sup>502</sup> The idea was first emerged at the BSEC's Ministerial Conference on Environment and Development, in Tbilisi, Georgia in 25-27 September 1994, which was further supported in the 1<sup>st</sup> Meeting of the Black Sea Commission held in Varna, Bulgaria in 2-5 May 1995. The Environmental Economics Working Group of BSEP was held responsible for considering the financing problem of Black Sea for future.

<sup>503</sup> Such funds are considered as ineffective in the long term due to its vulnerability to the changes in the domestic political priorities of the governments, bureaucratic delays such as the need for parliamentary approval for each contribution and the irrelevancy of the payments with the use of natural resources.

application of polluter pays principle since each economic instrument would be closely linked with relative contribution of various sources to the pollution problem. The Contracting Parties welcomed this initiative and expressed their strong interest, who were also urged by BS-SAP for establishing a Black Sea Environmental Fund by 2000.<sup>504</sup> However, due to the changes in the priorities and representatives of the countries supporting the idea, and most importantly, due to the inadequately developed economic instruments at the national level as well as the socio-economic problems of the Black Sea States,<sup>505</sup> establishment of such a fund couldn't have been realized so far.

Due to lack of a sustainable finance mechanism and completion of BSEP's second phase in 1998, the regime had hardly succeeded in functioning at the regional level between 1998-2000 and the activities at the regional level was suspended to a certain degree. Since the completion of BSEP in 1998 till to the establishment of the Permanent Secretariat in 2000, the regime was attempted to be operated by European Commission.<sup>506</sup>

Since 2000 with the opening of the Permanent Secretariat of the Black Sea Commission, a regular budget for the Black Sea Commission has been established. The Black Sea States are providing in-kind contributions, which are channelled to the operational, personal costs of the Secretariat and costs for realization of the activities included in the Work Programme of the Black Sea Commission such as for meetings and publications.<sup>507</sup> However, this budget is too limited in terms of functioning the regime while some Black Sea States still haven't contributed to the budget yet.<sup>508</sup> Furthermore, total amount of the budget is reduced from 363 000 USD to 261 360

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<sup>504</sup> Article 4, Item 84.

<sup>505</sup> Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, İstanbul, 2002, p.88.

<sup>506</sup> UNDP, *Project Document for Phase I*, p.20.

<sup>507</sup> Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*, İstanbul, 26-31 May 2001.

<sup>508</sup> UNDP, *Project Document for Phase II*, p.290.

USD for the fiscal year 2003-2004<sup>509</sup>. Therefore, even if the Secretariat is functioning, there still exist financial difficulties at the regional level.

Table 2.10: Annual Budgets of the Black Sea Commission, (USD)

| Fiscal Year | Bulgaria        | Georgia         | Romania         | Russia          | Turkey           | Ukraine         | TOTAL   |
|-------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|---------|
| 2000-2001   | 43 560<br>(12%) | 43 560<br>(12%) | 43 560<br>(12%) | 43 560<br>(12%) | 145 200<br>(40%) | 43 560<br>(12%) | 363 000 |
| 2001-2002   | 43 560<br>(12%) | 43 560<br>(12%) | 43 560<br>(12%) | 43 560<br>(12%) | 145 200<br>(40%) | 43 560<br>(12%) | 363 000 |
| 2002-2003   | 43 560<br>(12%) | 43 560<br>(12%) | 43 560<br>(12%) | 43 560<br>(12%) | 145 200<br>(40%) | 43 560<br>(12%) | 363 000 |
| 2003-2004   | 43 560<br>(1/6) | 43 560<br>(1/6) | 43 560<br>(1/6) | 43 560<br>(1/6) | 43 560<br>(1/6)  | 43 560<br>(1/6) | 261 360 |

Source: Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*, Report of the 8<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution, İstanbul, 18-19 February 2002, *Report of the 9<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*, İstanbul, 12-13 June 2002, *Minutes of the 10<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

Fortunately, GEF has started to support the activities of the regime following the functioning of the Permanent Secretariat with the initiation of BSERP.

Table 2.11: Support of GEF via BSERP, (million USD)

| Project          | Project Duration     | Budget |
|------------------|----------------------|--------|
| BSERP - Phase I  | April 2002-June 2004 | 4.350  |
| BSERP - Phase II | July 2004-June 2007  | 6.000  |

Source: UNDP, *Project Document for Phase II*, p.ii

Even if the support of GEF was not in the form of a direct allocation of money to the budget of the Black Sea Commission, it provided 4.35 million USD to the regime for the realization of activities between 2002-2004. With the initiation of the second phase of BSERP, 6.000 million USD is planned to be spent for the Black Sea.<sup>510</sup>

<sup>509</sup> In line with the Headquarters Agreement (art. 8), Turkey, as the Host Country, paid 40% of the total budget of the Black Sea Commission for the first three years of the Secretariat and the remaining 60 % of the budget was paid by the other Contracting Parties. Since this period was completed, the Black Sea Commission reconsidered the new budget for the fiscal year 2003/2004. Two proposals were made by the Secretariat one of which is keeping the current amount from the countries that accounts for 43 560 USD or obtaining 363 000 USD by increasing the amounts from the countries. Unfortunately, instead of increasing the contributions, the Black Sea States chose the first option. Therefore, the budget of the Commission is reduced from 363 000 to 261 000 USD. The budget is considered to be equally shared among all the Black Sea States. For further see Black Sea Commission, *Minutes of the 10<sup>th</sup> Meeting of the Commission on the Protection of the Black Sea Against Pollution*.

<sup>510</sup> UNDP, *Project Document for Phase II*, p.ii

Since 2002 European Commission through TACIS has been supporting the regime as well. 2.8 million Euro is allocated to the Black Sea for a two years period in the form of a capacity building project for continuation of the work of the Black Sea Commission and its three Activity Centers in the fields of biodiversity, pollution monitoring and assessment, and ICZM.<sup>511</sup>

It can be concluded that the Black Sea environmental regime has a fragile financial mechanism due to lack of which the regime had difficulties in terms of functioning in the past decade. Unless a sustainable financial mechanism is established or if the support of international donors do not continue, it seems that the regime will not be able to stand in future only with annual contributions of the Contracting Parties, which are still not sustainable.



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<sup>511</sup> Arcadis Euroconsult, *TACIS Regional Environment Programme*, p.A-2, A-7.

## **CHAPTER 3**

### **CHALLENGES & OPPORTUNITIES FOR THE BLACK SEA ENVIRONMENTAL REGIME**

#### **3.1 Challenges Affecting the Full Functioning of the Regime**

The functioning of the Black Sea environmental regime is impeded due to the challenges, which in turn delays the process for the recovery of the Black Sea ecosystem. The main challenge of the regime is regarded as the lack of a sustainable financial mechanism due to which the Black Sea States are not successful in fulfilling their obligations arising from the Bucharest Convention. There exists problems with the functioning of the institutional machinery. Other group of challenges including weak political support, unavailability of data and poor communication and less flexible rules of the regime appears as a limiting factor for the effective functioning of the regime, which in turn hinders effective functioning of the regime.

##### **3.1.1 Funding Problems**

The lack of funding for environmental protection has been a perennial problem in the Black Sea region, which comes out as a significant challenge for the regime. As the countries surrounding the Black Sea are the ones in transition economies, which had economical difficulties, activities for the implementation of the Bucharest Convention were initiated not directly by the Contracting Parties, but with the support of international donors in particular by GEF and EU in the first decade of the regime. The GEF initiative of BSEP enabled formation of the basis of the regime.

There still exist significant financial difficulties in the regime. Even if regular annual budgets are prepared and approved for each year since the opening of the Permanent Secretariat of the Black Sea Commission in 2000, there are problems in regular payment of the budget of the Commission by the Contracting Parties. There exists Black Sea States who are indebted to the Commission. On the other hand, the budget of the Commission for the fiscal year 2003-2004 is reduced from 363 000 USD to 1261 000 USD.<sup>512</sup>

The insufficient budget is the main reason for authorization of less number of staff in the Permanent Secretariat. Even if four additional permanent officers were decided to be hired to work for addressing land-based sources, biodiversity, environmental information and environmental law, due to the financial constraints, it couldn't have been done so far<sup>513</sup> and it is not likely to be done in future when reduced amount of the budget of the Black Sea Commission is taken into account. Since the beginning of May 2004 a Biodiversity Expert is authorized to work in the Permanent Secretariat for a two years period, which is supported not from the budget of the Black Sea Commission, but from the TACIS Project for the Black Sea, who will however not be working on a permanent basis.<sup>514</sup>

The budget of the Commission is allocated to cover only operational and personnel costs of the Secretariat including purchase and maintenance of equipment, communication charges and salaries of the staff of the Secretariat. Some amount is allocated for realization of the activities included in the Work Programme of the Black Sea Commission.<sup>515</sup> However, scope of the allocated money for this purpose is used for only publications, not for initiation of any new activities. Unfortunately, the percentage share of this amount is reduced from 44.23% to 27.55% for the fiscal year 2003-2004.<sup>516</sup> Therefore, realization of the activities determined in the Work

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<sup>513</sup> Arcadis Euroconsult, *TACIS Regional Environment Programme*, p.10.

<sup>514</sup> [www.blacksea-commission.org](http://www.blacksea-commission.org).

<sup>515</sup> For detailed budget of the Black Sea Commission see Appendix C.

<sup>516</sup> Black Sea Commission, Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution, Report of the 8<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution, Report of the 9<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea

Programme with the current budget of the Black Sea Commission does not seem to be possible in near future.

It should be noted that regional activities are not only confined to the activities of the Secretariats, but also covers the activities to be fulfilled by the Activity Centers including initiation of new project proposals to be submitted to the potential funding sources, funding of new projects addressing the priorities set in the BS-SAP and fulfilling of other tasks at the regional level.

Due to the financial constraints, RACs couldn't function sustainably. The Report of the Secretariat on the Implementation of the Work Plan and the Budget of the Commission between 6<sup>th</sup> and 7<sup>th</sup> Meetings concluded that RACs are in general poorly equipped as a result of the lack of financial resources due to which activities couldn't have been realized at desired levels.<sup>517</sup> Likewise, it was due to lack of funding, there was a delay in implementation of working programme of the RAC on ICZM<sup>518</sup>. As functioning of RAC on FOMLR depends on the financial resources, due to lack of sustainable financing of it, realization of the regional activities of RAC on FOMLR could be made on a voluntary basis.<sup>519</sup>

It was the RAC on LBS, which couldn't function due to lack of adequate financial resources.<sup>520</sup> Today, this is tried to be filled to a certain degree by the projects executed under BSEP. Following the completion of these projects, if annual contributions to the Black Sea Commission are regularly paid by the Contracting Parties, the functioning of the Secretariat can be provided. However, the regime as a whole will be in a difficulty in sustaining herself at the regional level without functioning of the Activity Centers if financial difficulties cannot be eliminated.

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Against Pollution, Minutes of the 10<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution.

<sup>517</sup> Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

<sup>518</sup> Ibid.

<sup>519</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.36.

<sup>520</sup> Ibid., p.15.

Therefore, the future for funding of the activities at the regional level in the Black Sea is not encouraging in terms of the amount of the budget and sustainability of the financial mechanism.

It can be concluded that the Black Sea environmental regime cannot sustain in future with only national contributions. Without the support of international donors, the regime does not seem to stand alone. Being aware of the need for donor support, the Permanent Secretariat is seeking for international assistance and attempting to attract donors for strengthening institutional capacity of the Black Sea Commission and its subsidiary bodies.<sup>521</sup>

Fortunately, under the international waters focal area, through BSERP, GEF has supporting the Secretariat to function sustainably and capable of coordinating the activities at the regional level. GEF will be providing equipment to the focal points of the Advisory Groups as well as the Activity Centers. The costs of the meetings of the Advisory Groups have been covered by the GEF project.<sup>522</sup>

However, this project will be ending within two-three years period. After completion of the second phase of the GEF project, there is not a guarantee that GEF will continue its support to the Black Sea environmental regime since the money allocated for each focal area is subject to change due to the budget constraints of GEF. For instance, BSERP was initially proposed for a 5 years period with a total budget of 9.5 million USD. But, due to funding constraints experienced by GEF, the project proposal was splitted into two implementation phases with a budget of 4 million USD for the first phase for a two years period and of 5.555 million USD for the second phase for three years period.<sup>523</sup> Furthermore, it was due to the financial constraints of GEF, the first phase of the project was approved in the GEF Council with a delay.<sup>524</sup>

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<sup>521</sup> Ibid., p.11.

<sup>522</sup> UNDP, *Project Document for Phase II*, p.vi.

<sup>523</sup> Ibid., p.iv.

<sup>524</sup> Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

**Table 3.1: Trends in the Work Programs of Fiscal Year 1999 - 2003 by Focal Area (million USD)**

| Fiscal Year | Biodiversity |           | Climate Change | International Waters | Multiple Focal Areas | Ozone | Persistent Organic Pollutants | TOTAL  |
|-------------|--------------|-----------|----------------|----------------------|----------------------|-------|-------------------------------|--------|
|             | Biodiversity | Biosafety |                |                      |                      |       |                               |        |
| 1999        | 181.48       |           | 125.45         | 96.28                | 35.13                | 34.71 |                               | 473.06 |
| 2000        | 182.75       |           | 186.41         | 47.43                | 29.12                | 7.51  |                               | 453.20 |
| 2001        | 185.30       |           | 177.52         | 74.53                | 26.05                |       | 6.19                          | 469.59 |
| 2002        | 79.35        | 7.19      | 132.10         | 80.11                | 42.23                |       |                               | 340.98 |
| 2003        | 120.79       | 2.00      | 171.65         | 79.60                | 75.56                | 2.09  | 40.32                         | 514.36 |
| Jul-03      | 35.26        | 4.62      |                | 8.47                 |                      |       |                               | 48.35  |
| Nov-03      | 35.61        | 5.22      | 95.29          | 56.97                | 31.00                |       |                               | 224.09 |
| 2004        | 70.87        | 9.84      | 95.29          | 65.45                | 31.00                | -     | -                             | 272.44 |

Source: GEF, *GEF/C.22/5: Work Program Submitted for Council Approval for GEF Council of November 19-21, 2003*, (Washington: GEF, 2003), p.1.

As Table 3.1 puts forward, the budget for the international waters for the fiscal year 2000 was reduced almost the half of the previous years' allocation from an amount of 96.28 million USD in 1999 to 47.43 million USD in 2000. The budget depends on contributions of the GEF Member States and any reduction in payment is directly reflected in the allocations.

As the projects are limited in time and GEF's future support after 2007 is not clear, which may not be possible due to the changes in the policy of GEF in supporting the Black Sea, the funding of the regime seem to be an important challenge in near future.

The establishment of the Black Sea Environment Fund would have been the solution for the regime, if it could have been established.<sup>525</sup> If it was established, today Black Sea environmental regime would have a sustainable financial mechanism. In near future, the major task of the Black Sea States must be the establishment of a sustainable financial mechanism. As Black Sea is not only an environmental value but also an economical one through the services it provides to countries within and out of the region with its fisheries that is more than that of the Mediterranean, as being a transportation route whose significance in this respect is increasing every

<sup>525</sup> See Ch.2.

year, its unique tourism opportunities, the Environment Fund to be based on the economic instruments directly provided from the users as well as the polluters, without implying a burden on the tax payers, will be an important step towards achieving a full and effectively functioning sustainable regime.

### **3.1.2 Institutional Drawbacks**

The Secretariats have a very significant place in the institutional structure of the Regional Seas Programmes. They have a large number of roles ranging from preparation of budgets, setting agenda of meetings, organization of meetings, transmission of notifications, consideration of inquiries, reviewing progress concerning the implementation of the conventions, coordination of the activities carried out at the local, national and regional levels, to efficient use of donor assistance.<sup>526</sup> The financially and technically stronger the Secretariats and the more active they are, the more effective the regime will be,<sup>527</sup> as they push the Contracting Parties to take action for the implementation of the agreement.

In a regime with Contracting Parties having high national administrative capacities, the role of international secretariats may not be very decisive. However, if the Contracting Parties' governmental institutions have poor administrative capacities, the role of Secretariats in the regional environmental regimes becomes crucial.<sup>528</sup>

In many Regional Seas Programmes, UNEP is directly involved in the regimes functioning as Secretariat of the Conventions.<sup>529</sup> When the experience and role of UNEP in the management of Regional Seas Programmes are taken into account, it can be argued that direct integration of UNEP into newly established regional seas regimes can be an important factor for increasing the effectiveness and sustainability of the regimes. For the regional seas regimes such as for Baltic and North-East

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<sup>526</sup> Lawrence E. Susskind, *Environmental Diplomacy: Negotiating More Effective Global Agreements*, (New York: Oxford University Press, 1994), p.27.

<sup>527</sup> Jørgen Wettestad, *Designing Effective Environmental Regimes: The Key Conditions*, (UK: Edward Elgar Publishing, 1999), p.27.

<sup>528</sup> Ibid.

<sup>529</sup> Haas, "Save the Seas", p.196.

Atlantic in which generally the Contracting Parties are economically strong and have high national administrative capacities, direct involvement of UNEP might not be crucial when compared with the regimes in which Contracting Parties have financial as well as technical difficulties. The role of UNEP appears as an opportunity in overcoming the challenges in the latter group of regimes.

During the adoption of the Bucharest Convention in the early 1990s, the former Soviet bloc countries, who were in transition from centralized to market economy and from one party to multiparty systems, were economically weak to initiate a process aimed at recovering the Black Sea ecosystem and technically insufficient to tackle with the regional environmental problems. Since the national planning of those States' strategies prioritized economical development, environmental protection was not a priority at the agenda of the decision-makers. In such a situation, it was not expectable from those States in 1992 to support the Bucharest process in opening of a full functioning Secretariat.

However, in the Black Sea, while having such difficulties, instead of authorizing UNEP as the Secretariat of the regime, the Black Sea States decided to establish a Secretariat to be formed from the officials of the Black Sea States. However, the Secretariat could be operationalized eight years after the adoption of the Bucharest Convention in 2000. Even though UNEP has been involved in the regime since 1993 via GEF project, which also supported the regime by acting as a coordinating unit of the regime till the establishment of the Permanent Secretariat, it was a *de facto* Secretariat.<sup>530</sup> Due to delayed establishment of the Permanent Secretariat, coordination of the activities slowed down and practical steps couldn't have been taken at the regional scale.<sup>531</sup> For instance, one of the other reason behind the delayed approval of the GEF-BSERP in the GEF Council was the delayed establishment of the Secretariat.<sup>532</sup>

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<sup>530</sup> UNDP, *Project Document for Phase I*, p.20.

<sup>531</sup> Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, p.10.

<sup>532</sup> Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

The lack of a permanent secretariat hindered the fulfillment of the commitments at a regional scale with a common approach. In that context, one of the challenge in the past can be considered as lack of a permanently functioning Secretariat due to which sustainability and effectiveness of the regime couldn't have been achieved.

However, even if the Secretariat has started to function since 2000, its functioning is still constituting a challenge for the regime. It has still financial as well as technical constraints. Being aware of the problems that the Secretariat facing, both GEF-BSERP and TACIS Project designed one of their component as strengthening the regional capacity of the Secretariat, through which financial as well as technical support is provided to the Secretariat. In this regard, when the past and present situation of the Secretariat is taken into account, if it was chosen, the direct involvement of UNEP would be an opportunity for the regime.

Apart from the Secretariat, the poor functioning of the RACs appears as a significant source of challenge in the full functioning of the regime at regional level. The BS-SAP covers policy actions to be implemented at the regional level in defined time periods under the auspices of RACs. General situation regarding the implementation of the policy actions in those specified time periods by the Activity Centers is not very promising.<sup>533</sup> There are many tasks to be completed by the Activity Centers.<sup>534</sup> All the deadlines for the policy actions to be done at the regional level have already passed. The RACs are far behind the schedule put forward by BS-SAP.

On the other hand, even though RACs of the Commission are not successful enough in fulfilling their responsibilities, the degree of efficiency of all Activity Centers is not similar. When the outputs of their activities are taken into account, the RAC on ESAS seems to be the most effective one when compared with the others. The coordination of the activities addressing vessel source pollution, pollution from dumping, and contingency planning and emergency response are under the

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<sup>533</sup> For the implementation of the BS-SAP at regional as well as national levels see Appendix D.

<sup>534</sup> See Ch.2.

responsibility of the RAC on ESAS.<sup>535</sup> So far, the Center assessed the capabilities of the countries in responding to oil spills and organized training courses on preparedness for and response to maritime pollution accidents and seminars on ballast water management and control. It coordinated the activities for the development of oil spill contingency plan, for the development of strategy and the action plan for the implementation of adequate port reception facilities. It worked for the preparation of appropriate information on contingency planning and implemented projects on port state control.<sup>536</sup> Even though some activities are pending for the RAC on ESAS, it can be considered as successful compared with the other Activity Centers, since quite many activities have been realized at the regional level and concrete outputs were obtained.

The main outputs of RAC on ESAS are the establishment of a harmonised system of port state control with the adoption of the Memorandum of Understanding on Port State Control in 2000<sup>537</sup>; approval of the Regional Action Plan to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens in Ships Ballast Waters in 2001<sup>538</sup> and finalization of the Black Sea Contingency Plan with its adoption of its first volume responding to oil spills in 2003.<sup>539</sup> The pending issues for the Activity Center includes revision of the Dumping Protocol, elaboration of a Protocol Concerning the Transboundary Movement of Hazardous Wastes and Cooperation in Combating Illegal Traffic Thereof, enabling effective implementation of the 1973/78 MARPOL Convention, establishment of a harmonised system of enforcement to prevent illegal discharges, determination of concentration levels for trace contaminants in dredged spoils, preparation of the second volume of the Black Sea Contingency Plan responding to hazardous substances and coordination of the

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<sup>535</sup> Black Sea Commission, *Terms of Reference of the AG on ESAS*.

<sup>536</sup> Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

<sup>537</sup> Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, pp.28-29.

<sup>538</sup> Roman Bashtanny, Leonard Webster and Steve Raaymakers, *1<sup>st</sup> Black Sea Conference on Ballast Water Control and Management, Odessa, Ukraine, 10-12 October 2001: Conference Report*, GloBallast Monograph Series No. 3, (London: IMO, 2002), p.6.

<sup>539</sup> Black Sea Commission, *Minutes of the 10<sup>th</sup> Meeting of the Commission on the Protection of the Black Sea Against Pollution*, p.8.

activities for the implementation of Regional Action Plan related to management of ballast waters and of the first volume of Black Sea Contingency Plan.<sup>540</sup>

One of the other Activity Center that can be considered as effective is the RAC on ICZM, which is responsible from coordinating the activities for the sustainable management of coastal zones.<sup>541</sup> The Center had involved in quite many activities during GEF-BSEP. Under the coordination of the Activity Center, national Black Sea ICZM Reports were prepared for each Black Sea State, which were then converted to a Regional ICZM Report by the Center. A Black Sea Region ICZM Policies and Strategies Report, national ICZM policies and strategies report for each Black Sea State,<sup>542</sup> Coastal Code of Conduct for Russian and Ukrainian Coastal Zones, Coastal Protection Policy for the Azov and Black Sea Coast, Methodology for the Land-use Planning, Sustainable Tourism Development for the Russian Coast of Black Sea were the other documents prepared under the auspices of the Center. ICZM pilot projects were implemented and study tours and training courses on ICZM were organized with the participation of focal points and the Activity Center.<sup>543</sup> It can be concluded that with the realization of all these activities, the initial phases of ICZM were just to be completed.<sup>544</sup> The Activity Center enabled formation of the basis of ICZM by introducing ICZM concepts, methodology and tools at the governmental and local levels. However as the activities couldn't have been carried out at the regional level between 1998-2002, the implementation of ICZM couldn't have been realized at the regional level. The new tasks of the RAC on ICZM is to re-establish regional ICZM Network in line with the changing situation in the Black Sea States, to revise all the documents that have been prepared so far, to promote development of national legal and institutional frameworks for implementing ICZM principles, to

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<sup>540</sup> Black Sea Commission, *Terms of Reference of the AG on ESAS*; Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, pp. 30, 35, 38, 39.

<sup>541</sup> Black Sea Commission, *Terms of Reference of the AG on ICZM*.

<sup>542</sup> For ICZM Policies and Strategies of Turkey in the Black Sea see Remzi Sönmez and Nilgün Görür, *Karadeniz Entegre Kıyı Alanları Yönetimi Politika ve Stratejileri*, (GEF: İstanbul, 1998).

<sup>543</sup> Black Sea Commission, *Report of the 1<sup>st</sup> Meeting of the AG on ICZM*, İstanbul, 18-19 July 2002; BSEP, *1997 Annual Report*, pp.14-17.

<sup>544</sup> *Supra*, n. 125.

organize training courses, to initiate projects on ICZM, to revise the Regional Coastal Code of Conduct and to promote ICZM implementation initiatives.<sup>545</sup>

RAC on CBD, which is responsible from coordinating the activities related to protection of biodiversity and landscape at the regional level,<sup>546</sup> is the other Activity Center that obtained concrete outputs, therefore can be regarded relatively effective. Quite many meetings on biodiversity, marine mammals and wetlands were organized by the Activity Center. It was involved in the preparation and publication of the Black Sea Red Data Book, which includes endangered and rare species of the Black Sea, and of the national reports on Black Sea Biodiversity. It also prepared a regional strategy document for protection of biodiversity in the Black Sea.<sup>547</sup> The major activity of RAC on CBD that deserves particular attention is the preparation of the Black Sea Biodiversity Landscape Conservation Protocol to the Bucharest Convention, which was adopted in 2002.<sup>548</sup> However the RAC on CBD needs to address many activities at the regional level. The assessment of population of marine mammals in the Black Sea and development of a strategy for the reduction of by-catches of them are among the tasks to be realized by the Center. It will have a critical role to play after the Black Sea Biodiversity and Landscape Conservation Protocol enters into force. The Center will be responsible from coordinating the activities for the implementation of the Protocol, that covers finalization of a Strategy and an Action Plan for the Conservation of Biological Diversity as well as for the Conservation of Landscape of the Black Sea, promoting establishment of new protected areas, updating the list of protected areas of regional importance in the Black Sea and harmonizing procedures for the establishment of marine protected

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<sup>545</sup> Black Sea Commission, *Terms of Reference of the AG on ICZM*; Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, pp.72-74.

<sup>546</sup> Black Sea Commission, *Terms of Reference of the AG on CBD*.

<sup>547</sup> Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

<sup>548</sup> Black Sea Commission, *Report of the 9<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

areas.<sup>549</sup> It also needs to revise Red Data Book as well as to initiate and coordinate implementation of regional projects for conservation of the Black Sea cetaceans.<sup>550</sup>

RAC on PMA is responsible from coordinating the activities related to establishment of regionally coordinated networks of national status and trend monitoring programs and development of Environmental Quality Objectives.<sup>551</sup> The Activity Center so far participated to many conferences, meetings and trainings. Its capacity was strengthened through donor support with provision of necessary equipment and training of staff. It worked for the establishment of environmental quality objectives and establishment of a regional monitoring programme. However, the Center so much focused on quality of the waters of Ukraine. Even though a draft regional monitoring system was elaborated to assess the environmental situation in the Black Sea, it couldn't have been fully operationalized yet.<sup>552</sup> The most significant output of the Activity Center is the preparation of the Black Sea Integrated Monitoring and Assessment System (BSIMAP). In this regard, the major task of the RAC on PMA is finalization of the program by providing its full functioning by 2005 and providing regular revision of the program. Furthermore, the Activity Center has to set up Quality Assurance/Quality Control services, organize regional training exercises in monitoring and assessment and quality assurance and quality control and develop a regional database on pollution and its impacts on the Black Sea ecosystem. The Activity Center should be at such a level that the state of the environment of the Black Sea could be analyzed in a proper manner so as to assess the changes in the Black Sea environment.<sup>553</sup>

On the other hand, RAC on FOMLR, which is responsible from coordination of the activities for conservation and sustainable use of marine living resources, in

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<sup>549</sup> Black Sea Biodiversity and Landscape Conservation Protocol, İstanbul, 14 June 2002.

<sup>550</sup> Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, pp.65-70.

<sup>551</sup> Black Sea Commission, *Terms of Reference of the AG on PMA*.

<sup>552</sup> Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

<sup>553</sup> Black Sea Commission, *Terms of Reference of the AG on PMA*; Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, p.46, 48.

particular the fisheries,<sup>554</sup> can be considered as ineffective due to its incapability to come up with concrete outputs. Even though the Activity Center planned to develop a regional fisheries database, preparation of a fish stock assessment, drafting of a regional fisheries report and support for development of marine aquaculture,<sup>555</sup> what has been done so far is the preparation of a draft report for developing a strategy for a joint in-situ fishery stock assessment, preparation of the sustainable fisheries management in the Black Sea project and initiation of the aquaculture demonstration projects in the Black Sea States.<sup>556</sup> Even though such activities had realized during GEF-BSEP, the necessary tasks such as adoption of a legally binding document for the sustainable management of marine living resources, realization of regional fish stock assessment and establishment of a regional database on fisheries couldn't have been done so far, which are the major tasks to be fulfilled by the Activity Center. RAC on FOMLR needs to fulfill a large number of tasks including realization of regional assessment of the fish stocks, establishment of regionally agreed regulations in fishing and regional mechanisms to combat illegal fishing, establishment of regional database on fisheries and preparation of regional report on fisheries.<sup>557</sup> Currently, the major task of the Activity Center seems to be the finalization of the Convention on the Management of Marine Living Resources, whose studies has started in 1994.<sup>558</sup> It can be said that sustainability couldn't have been achieved in the activities of RAC on FOMLR, which was ineffective in coordinating the activities at the regional level in this field.

RAC on LBS is responsible from assessment and control of discharges of pollution from land-based sources.<sup>559</sup> The Center has not been functioning since 1997. Therefore, the Center, which has started to operate by 2001, has a large number of

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<sup>554</sup> Black Sea Commission, *Terms of Reference of the AG on FOMLR*.

<sup>555</sup> BSEP, 1995 *Annual Report*, (İstanbul: UNDP Publications, 1996), pp.13-15.

<sup>556</sup> BSEP, 1997 *Annual Report*, pp.18-20; Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

<sup>557</sup> Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, pp. 51-56.

<sup>558</sup> BSEP, 1994 *Annual Report*, p.23.

<sup>559</sup> Black Sea Commission, *Terms of Reference of the AG on LBS*.

tasks to complete. It can be considered that RAC on LBS is the most ineffective Activity Center of the Black Sea Commission. Even though land based sources of pollution are the main cause of environmental degradation in the Black Sea, due to lack of coordination at the regional level, it couldn't have been addressed at desired levels. Since it didn't not function for a long period of time, many activities are waiting to be considered by the Center. Currently, the main task of the Activity Center is to work for revision of the Land-based Protocol. After its adoption, RAC on LBS will be responsible from coordinating the activities for the implementation of the Protocol as well as harmonizing the procedures for monitoring discharge of effluent at point sources and developing harmonized discharge standards.<sup>560</sup>

It can be said that sustainability in the activities of RACs couldn't have been achieved. One of the major reason behind the poor functioning of the Activity Centers is that they are based on the existing national institutions of the Black Sea States<sup>561</sup> rather than separate institutions specifically responsible from fulfilling the regional tasks. Either the existing marine research institutes or the departments in the ministries are authorized as the Activity Centers to function under the Bucharest Convention.<sup>562</sup> Since the existing national institutions are authorized as RACs in all Black Sea States, separate staff, budget and equipment should have been allocated by the respective Black Sea Governments for fulfillment of the regional tasks of Activity Centers assigned to them. However, instead of allocating separate staff, necessary equipment and financial resources to RACs, the Black Sea Governments attempted to use them as Activity Centers with the existing resources allocated for only fulfilling their responsibilities as existing national institutions rather than as Regional Activity Centers. Nearly all RACs' staff are working on a voluntary basis.<sup>563</sup> For instance, RAC on ICZM is based on a governmental institution of Russia, Krasnador Regional Committee for Environmental Protection and Natural Resources. The fulfillment of its daily tasks as a governmental institution is the priority of the

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<sup>560</sup> Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, pp.21-22.

<sup>561</sup> Fourth Resolution of the Diplomatic Conference.

<sup>562</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.8

<sup>563</sup> *Ibid.*, pp.9-41.

Committee. For this reason, the regional tasks as an Activity Center are fulfilled as a second job. RAC on ICZM has difficulties in terms of time and money for meeting the requirements as a RAC in initiating of new projects at the regional level, drafting of new documents and providing coordination. The staff of the Committee is trying to fulfill the tasks at the regional level in their spare time.<sup>564</sup> Likewise, RAC on LBS was based on one of the marine institute of Turkey, İstanbul University. However, since a separate staff and budget was not allocated to the Activity Center to fulfill its regional tasks, together with the fact that the Institute itself couldn't allocate additional resource, the University couldn't fulfill its tasks at the regional level since its authorization as a Regional Activity Center.<sup>565</sup>

One of the other weak aspect of authorization of existing institutions as Regional Activity Centers is the possibility that the Black Sea Governments may change their Activity Centers by moving from one existing national institution to another. The changes in the Activity Centers hinders sustainability of their functioning, which in turn decreases the overall efficiency. If separate institutions were assigned as Activity Centers, they would function sustainably for years.<sup>566</sup> Unfortunately, in the past the Black Sea Governments changed their Activity Centers. Due to the changes in the RACs, they couldn't have become regional centers that can act as specialized organizations. Therefore, today RACs are far from being "centers of excellence". The future is not promising since there does not exist a guarantee in not moving the RACs from one institution to another in future.

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<sup>564</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.15

<sup>565</sup> Ibid., pp.27-28.

<sup>566</sup> Within the framework of MAP, the Activity Centers are established as separate institutions with the purpose of only fulfilling the regional tasks assigned to them. With this approach, today the RACs of Mediterranean regime are considered as "centers of excellence". The Activity Centers appears as specialized organizations that are technically well-equipped and provide support to other Regional Seas Programmes. For further detail about the Activity Centers of MAP see [www.unepmap.org](http://www.unepmap.org).

Table 3.2: Activity Centers of the Black Sea Environmental Regime

| Regional Activity Center | The Responsible Institutions                                                                                                                                                   |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RAC on CBD, Georgia      | The Black Sea Ecology and Fisheries Institute                                                                                                                                  |
| RAC on ESAS, Bulgaria    | 1 <sup>st</sup> RAC: Regional environmental Inspectorate<br>2 <sup>nd</sup> RAC: Research Institute of Shipping                                                                |
| RAC on FOMLR, Romania    | Romanian Marine Research Institute                                                                                                                                             |
| RAC on ICZM, Russia      | Krasnador Regional Committee for Environmental Protection and Natural Resources                                                                                                |
| RAC on LBS, Turkey       | 1 <sup>st</sup> RAC: İstanbul Technical University<br>2 <sup>nd</sup> RAC: İstanbul University<br>3 <sup>rd</sup> RAC: The Scientific and Technical Research Council of Turkey |
| RAC on PMA, Ukraine      | Ukrainian Scientific Center of the Marine Ecology                                                                                                                              |

Source: BSEP, 1994 Annual Report; 1995 Annual Report; 1996 Annual Report; 1997 Annual Report.

As Table 3.2 reveals, Turkey changed the RAC on LBS for three times and Bulgaria for two times. An opportunity in overcoming such a significant challenge seem to authorize separate institutions, with separate budget, staff and equipment that are responsible from only fulfilling the regional tasks.

### 3.1.3 Weak Political Support

Weak political support to the regime pose a problem in the Black Sea. The state participation to adoption of new legal documents, to the budget of the Black Sea Commission<sup>567</sup> and continuous participation to meetings are not at desired levels.

Table 3.3: State of Participation to Adopted Legal Instruments

| Legal Documents Adopted                                  | Bulgaria | Georgia | Romania | Russia | Turkey | Ukraine |
|----------------------------------------------------------|----------|---------|---------|--------|--------|---------|
| Privileges and Immunities Agreement (2000)               | +        | +       | +       | -      | +      | +       |
| Memorandum of Understanding on Port State Control (2000) | +        | +       | +       | -      | +      | -       |
| Black Sea Biodiversity and Landscape Protocol (2002)     | +        | -       | +       | -      | +      | +       |
| Black Sea Contingency Plan (2003)                        | +        | -       | +       | -      | +      | -       |

+ = adopted; - = not adopted.

Russia has a very poor record in the adoption of the new legal instruments of the regime, which can be considered as a sign of poor political will in this country.

<sup>567</sup> Nur Ziyal, *The Marine Pollution Issue in International Relations: The Mediterranean Action Plan*, Master's Thesis, Unpublished Master's Thesis, (METU Graduate School of Social Sciences: Ankara, 1994), p.104.

Table 3.4: State of Contribution to the Budget of the Black Sea Commission

| Fiscal Year | Bulgaria | Georgia | Romania | Russia | Turkey | Ukraine |
|-------------|----------|---------|---------|--------|--------|---------|
| 2000-2001   | +        | -       | +       | +      | +      | +       |
| 2001-2002   | +        | -       | +       | +      | +      | -       |
| 2002-2003   | +        | -       | +       | +      | +      | -       |
| 2003-2004   | -        | -       | +       | +      | -      | -       |

- = not paid, + = paid

Source: UNDP, *Project Document for Phase II*, p.290.

Continuous participation to the budget of the Black Sea Commission is not very promising in the Black Sea as well. Since the first fiscal year Georgia and since the second fiscal year Ukraine has not paid their contributions to the budget of the Black Sea Commission yet. For the current fiscal year, only Russia and Romania has contributed to the budget. It is expected from Bulgaria and Turkey to pay their contributions.<sup>568</sup> Due to lack of continuous financial support to the regime, all planned activities defined by the Work Program of the Black Sea Commission cannot be realized at the regional level.

It was due to poor political support to the regime, as a result of the slow ratification of the Headquarters Agreement and the delays with the national contributions of the Black Sea States to the budget of the Commission, the opening of the Permanent Secretariat of the Black Sea Commission was delayed. And it was due to this delay, the first phase of GEF-BSERP couldn't have been adopted by the GEF Council at the planned time, rather, postponed to a further period.<sup>569</sup>

The regular higher-level political and ministerial participation in the activities of the regime increases effectiveness of the regime, when compared with the ones with lack of high-level political involvement.<sup>570</sup> For this purpose, nearly all international multilateral environmental agreements include provisions on organization of periodic meetings or follow up conferences in which progress of the implementation of the convention is reviewed, new legal documents such as annexes, protocols are adopted,

<sup>568</sup> UNDP, *Project Document for Phase II*, p.290.

<sup>569</sup> Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

<sup>570</sup> Wettestad, *Designing Effective Environmental Regimes*, p.24.

conventions, protocol or annexes are revised and new rules are adopted so as to increase effectiveness. Those meetings can be considered as tools to reveal the Contracting Parties' status in term of compliance. By the occasion of the meetings, the Parties commit to comply with the obligations and implement them at home.<sup>571</sup> Such conferences or meetings provide a platform for participation of high-level decision-makers and ministers to regimes.

In parallel to this, the Bucharest Convention urge Black Sea States to meet in conferences in order to review the implementation of the Convention and its Protocols.<sup>572</sup> Three Ministerial Conferences has been held so far in the Black Sea, in which the Black Sea States adopted several legal documents. In the Ministerial Conference that took place in 1993 the Odessa Declaration, in 1996 BS-SAP and in 2002 the Biodiversity and Landscape Conservation Protocol to the Bucharest Convention were adopted. As Wettestad rightly puts forward, in each ministerial meeting the regime is taken one step further by adoption of new legal documents by ministers. Since each legal document provides more protection, involvement of ministers in the regimes through such meetings or conferences is considered to have positive impact on the regime effectiveness. However, in the Bucharest Convention, frequency of the conferences was left to the decision of the Black Sea Commission.<sup>573</sup> Such a vague provision is considered to make the regime weak since the conferences can be organized in few frequencies, thereby discouraging involvement of high decision-makers in the regime. The frequency of the conferences were later arranged firstly by the Odessa Declaration in which the Black Sea States are urged to meet every three years,<sup>574</sup> which was then re-arranged by BS-SAP to be held every five years.<sup>575</sup> For instance, the Meetings of the Contracting Parties of the Barcelona Convention are held every two years.<sup>576</sup> Therefore, five-year

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<sup>571</sup> Susskind, *Environmental Diplomacy*, p.27.

<sup>572</sup> Article 19.

<sup>573</sup> Article 18.

<sup>574</sup> Article 19.

<sup>575</sup> Article 4, Item, 85.

<sup>576</sup> Article 18.

approach of the Bucharest Convention can be considered as a factor for decreasing the effectiveness of the regime by hampering the continuity of the political support at the highest decision-making level.

On the other hand, the Bucharest Convention oblige organization of Black Sea Commission Meetings at least once every year.<sup>577</sup> Such a mechanism can be considered to fill the gap emerging from the existence of a weak regular ministerial participation mechanism in the regime. The existence of such a mechanism is promising, since in the Meetings of the Black Sea Commission progress and implementation of the previous work plan is reviewed, coming years' budget, future work plan is considered and new legal instruments or tools are adopted.<sup>578</sup> In other words, these meetings promotes the implementation of the Bucharest Convention.

While having weak ministerial participation mechanism, the continuous participation in the Meetings of the Black Sea Commission appears as an important tool for the effective functioning of the regime. The continuous participation in meetings promotes continuity and sustainability of the work both at the regional and national levels. Unfortunately, there exists problems in continuous participation of the Members of the Black Sea Commission to their meetings, which comes out as a challenge for functioning of the regime.

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<sup>577</sup> Article 17 (4).

<sup>578</sup> See Ch.2.

**Table 3.5: Participation of Members of Black Sea Commission to their Meetings**

| High-Level Participation                       | Bulgaria                | Georgia           | Romania                 | Russia                 | Turkey                      | Ukraine              |
|------------------------------------------------|-------------------------|-------------------|-------------------------|------------------------|-----------------------------|----------------------|
| 7 <sup>th</sup> Meeting<br>26-31 May 2001      | Mr. Emil Marinov        | Mr. Zaal Lomtadza | Mr. Florin Stadiu       | Mr. Dimitri Zimin      | Mr. Melih Akalın            | Mr. Yaroslav Movchan |
| 8 <sup>th</sup> Meeting<br>18-19 February 2002 | Mrs. Manoela Georgieva  | Mr. Zaal Lomtadza | Mr. Florin Stadiu       | Mr. Aleksandr Federov  | Dr. Niyazi Çakmak           | Ms. Natalia Movchan  |
| 9 <sup>th</sup> Meeting<br>12-13 June 2002     | Mrs. Manoela Georgieva  | Mr. Zaal Lomtadze | Mr. Gheorghe Constantin | Ms. Natalia Tretyakova | Ms. Oya Bumin               | Mr. Yaroslav Movchan |
| 10 <sup>th</sup> Meeting<br>27-29 October 2003 | Mr. Nikolai Koyumdzhiev | Mr. Zaal Lomtadze | Mr. Florin Stadiu       | Mr. Kiril Yankov       | Prof. Dr. Hasan Z. Sarıkaya | Mr. Yaroslav Movchan |

Source: Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*, *Report of the 8<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*, *Report of the 9<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*, *Minutes of the 10<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

Table 3.5 reveals that except Georgia there is not a full continuity in participation to the Meetings of the Black Sea Commission. Even though Bulgaria, Romania and Ukraine provided continuity to some extent, the rest including Russia and Turkey have almost changed their representatives for each meeting. From this standpoint, poor higher level political participation in the regime can be considered as a challenge.

Another poor aspect of participation to the meetings, which appears as a challenge to the regime is that the Black Sea States do not participate to their respective meetings in appropriate levels. Low level participation in high-level meetings hampers progress of the regime. The Black Sea Governments sometimes authorize low level officials as participants of the Black Sea Commission Meetings such as Russia and Turkey, which authorized their technical experts to the Black Sea Commission Meetings. Likewise, it was due to the low level participation in the second Steering Committee Meeting of the GEF-BSERP, which was held in May 2003, the Meeting, which aimed to end up with decisions for future work of the project, turned to be a Consultative Meeting. It was for that reason the second Steering Committee of the project is postponed for a further period, to September 2003,<sup>579</sup> which in turn delayed the progress of the project.

<sup>579</sup> UNDP, *Project Document for Phase II*, p.228.

The other challenge concerning the poor political support to the regime can be observed in the authorization of the focal points and the RACs. Many focal points are not authorized by the Black Sea States yet. According to the findings of a Report, the Russia hasn't authorized a focal point for the AG on ESAS and Bulgaria for the AG on CBD yet.<sup>580</sup> It is under the responsibility of the Members of the Black Sea Commission to authorize their experts as focal points. Due to lack of authorization by the Black Sea Governments, continuity of the work of the AGs cannot be achieved, thereby negatively affecting the work and overall performance of the AGs. Due to lack of permanent focal points, RACs does not have a control over the focal points. Likewise, the Black Sea Governments do not officially authorize their national institutions as Activity Centers. For instance, RAC on ICZM does not have an official authorization as a Regional Activity Center. Due to lack of authorization, the system of requirements in Russia does not allow the institution to operate as a Regional Activity Center.<sup>581</sup> Focal points system is devised to provide continuity to the regional work done at the national level. Although such a system was devised, the Black Sea Governments do not continuously authorize their same representatives to participate their respective Advisory Group Meetings. In other words, the Black Sea States, instead of sending their already authorized focal points to their meetings, authorize new experts to participate for each different Advisory Group Meeting, who are not aware of what was discussed in the previous meeting and what was agreed on. There exists a continuity problem in participation to the meetings of the AGs.

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<sup>580</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.10.

<sup>581</sup> Ibid., pp.47-48.

Table 3.6: Participation of Focal Points of the AG on ICZM to their Meetings

| Participation as Focal Points                  | Bulgaria            | Georgia              | Romania            | Russia             | Turkey               | Ukraine                 |
|------------------------------------------------|---------------------|----------------------|--------------------|--------------------|----------------------|-------------------------|
| 1 <sup>st</sup> Meeting<br>18-19 July 2002     | Mr.Krasimir Gorchev | Dr.Ramiz Chitanava   | Ms.Irina Piti      | Mr.Leonid Yarmak   | Ms.Gülsun Yeşilhüyük | Ms. Natalia Movchan     |
| 2 <sup>nd</sup> Meeting<br>14-15 November 2002 | Mr.Krasimir Gorchev | Ms.Tinatin Tetvadze  | Ms.Irina Piti      | Ms.Sergey Velichko | Ms.Gülsun Yeşilhüyük | Ms. Natalia Tchijmakova |
| 3 <sup>rd</sup> Meeting<br>6-7 February 2003   | Mr.Krasimir Gorchev | Ms.Tinatin Tetvadze  | Ms.Claudia Coman   | Mr.Leonid Yarmak   | Ms.Gülsun Yeşilhüyük | Mrs. Vanna Glasova      |
| 4 <sup>th</sup> Meeting<br>26-27 June 2003     | Mr.Krasimir Gorchev | Mr.Ilia Mtskhvetadze | Dr.Simion Nicolaev | Mr.Leonid Yarmak   | Ms.Gülsun Yeşilhüyük | Ms. Natalia Tchijmakova |
| 5 <sup>th</sup> Meeting<br>15-16 March 2004    | Mr.Krasimir Gorchev | Dr.Akaki Komakhidze  | Ms.Claudia Coman   | Mr.Leonid Yarmak   | Ms.Gülsun Yeşilhüyük | Mr. Sergiy Gubar        |

Source: Black Sea Commission, *Report of the 1<sup>st</sup> Meeting of the AG on ICZM*; *Report of the 2<sup>nd</sup> Meeting of the AG on ICZM*, İstanbul, 14-15 November 2002; *Report of the 3<sup>rd</sup> Meeting of the AG on ICZM*, İstanbul, 6-7 February 2003; *Report of the 4<sup>th</sup> Meeting of the AG on ICZM*, 26-27 June 2003; *Report of the 5<sup>th</sup> Meeting of the AG on ICZM*, İstanbul, 15-16 March 2004.

While Bulgaria, Turkey and Russia has authorized same representatives to participate in the Meetings of the AG on ICZM, such a continuity is lacking in Georgia, Romania and Ukraine. The reason behind authorization of focal points for each specific issue area is to enable continuity in the regional work. In that context, the participation of focal points to their meetings will be an opportunity for Black Sea regime. Therefore, consistency should be provided when sending peoples to AG meetings only by which the continuity of the work can be achieved. This can be regarded as a sign of poor political support to the regime, which in turn affects the functioning of the regime as a whole.

### 3.1.4 Constraints Related to Reporting, Data Exchange and Communication

Unavailability of data and information regarding the state of environment of the Black Sea and status of the functioning of RACs and Black Sea States' compliance with the regime is a challenge, affecting the functioning of the regime. There is either no available data or the earlier data is not accessible. Data and information gathered in earlier phases of BSEP are inaccessible in general. Furthermore, the existing information is not compatible and comparable at the regional level.

The information increases transparency of implementation and compliance records of states, thereby increasing effectiveness. The quality and reliability of data is significant for decision-makers and policy makers in making analysis and in assessment of the state of the environment. Since the information is not available or not reliable or not accessible, the RACs have difficulties in making analysis at the regional level.<sup>582</sup> In the assessment of first phase of GEF-BSERP, unavailability of data and information is considered to be the major constraint in the success of the project.<sup>583</sup>

In order to assess the state of environment and status of the functioning of RACs and states' compliance with the regime, reporting mechanisms are generally designed in treaties, which are however often vaguely formulated.<sup>584</sup> The Secretariats of the conventions have a significant role to play in the functioning of reporting mechanisms. The regimes with well-functioning reporting systems tend to be more effective than the ones with lax reporting systems.<sup>585</sup> The Black Sea environmental regime is poor in terms of reporting. The Bucharest Convention, the treaty establishing the Black Sea environmental regime, does not have any provision defining responsibilities of the Black Sea States. They are not legally held responsible from reporting their activities within the framework of the Convention. In other words, a reporting mechanism is not foreseen by the Convention.<sup>586</sup> Even though BS-SAP includes a series of recommendations for reporting of the Black Sea States regarding their implementations, a regular reporting for the regime couldn't have been established yet.

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<sup>582</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*.

<sup>583</sup> UNDP, *Project Document for Phase II*, p.238.

<sup>584</sup> Michael Faure and Jürgen Lefevere, "Compliance with International Environmental Agreements", Norman J. Vig and Regina S. Axelrod (eds.), *The Global Environment: Institutions, Law and Policy*, (USA: Congressional Quarterly, 1999), pp.146-147.

<sup>585</sup> Wettestad, *Designing Effective Environmental Regimes*, pp.34-37.

<sup>586</sup> See Bucharest Convention for details.

According to BS-SAP, Secretariat is responsible from annually reporting to the Black Sea Commission on the progress made in implementing the BS-SAP.<sup>587</sup> To be able to report to the Commission, the Secretariat needs to obtain necessary information from its Advisory Groups as well as Activity Centers. However, regular reporting for assessing the implementation of BS-SAP and for the activities of the Activity Centers couldn't have been done so far due to lack of reliable data as well as a harmonized reporting format.<sup>588</sup>

Furthermore, with a view to assess the improvements in the state of environment of Black Sea, which can be achieved with the implementation of the Convention, BS-SAP recommends publication of a "State of Pollution of the Black Sea" report every five years,<sup>589</sup> which will be based on the outputs of the data collected through the coordinated pollution monitoring and assessment programmes.<sup>590</sup> For this purpose, BSIMAP has been recently adopted as a draft, which will be formed from the national monitoring programmes of the Black Sea States. However, a permanent pollution monitoring system at the regional level couldn't have been established yet.<sup>591</sup> Even though the "State of the Environment of the Black Sea" report has recently published under the auspices of the Secretariat, due to lack of regional environmental indicators and agreed formats as well as lack of data, the report does not provide a comprehensive scientific assessment of the state of environment of the Black Sea.<sup>592</sup>

Such deficiencies in the regime impedes functioning of the regime. The regime can be considered as less effective when compared with the ones that have well functioning reporting systems.

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<sup>587</sup> Article 4, Item 86.

<sup>588</sup> Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, p.47.

<sup>589</sup> Article 3, Item 53.

<sup>590</sup> Article 2, Item 53.

<sup>591</sup> Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, p.47.

<sup>592</sup> Black Sea Commission, *State of the Environment of the Black Sea*, pp.1-2.

The language appears as the other challenge for functioning of the regime as a whole. English is the language of the Commission correspondence. Even if like this, Russian is widely used and known rather than English in the region, in particular in the former Soviet block countries. For instance, even though the staff have poor English in RAC on CBD, all the employees of the RAC are fluent in Russian.<sup>593</sup> This situation is reflected in the meetings of the Black Sea Commission. Some participants of the Advisory Groups' Meetings cannot speak, talk or write in English. As the meetings are held in English, those participants either do not understand about what is discussed in the meetings or Russian is spoken from time to time, which is later unofficially translated to English.<sup>594</sup> This appears as a big challenge for the regime, since it decreases the effectiveness of the meetings and hampers the cooperation between the members of the Black Sea Network. The language can be considered as one of the reason behind lack of communication within the Black Sea Network at the regional level.

In this regard, one of the other challenge in the Black Sea environmental regime is the lack of communication within the Black Sea Network even though regional protection requires a coordinated approach, which can be achieved through close cooperation among the Network Members. It can be indicated that there is lack of communication among focal points, among RACs, between RACs and focal points, between the Secretariat and RACs, and between the Secretariat and the focal points. The findings of the study, made under first phase of BSERP during which meetings were held with several focal points and RACs, revealed that there is either less or no communication and within the Network. The exchange of information within the Network can be considered as very weak. For instance, RAC on FOMLR has zero links with the focal points in Georgia and Turkey. Likewise, the RAC on FOMLR is in cooperation only with the RAC on CBD but not with the other RACs.<sup>595</sup> RAC on LBS have links neither with other RACs nor with the focal points.<sup>596</sup> The RAC on

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<sup>593</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.13.

<sup>594</sup> The author of this work participated in the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> Meetings of the AG on ICZM.

<sup>595</sup> Volovik, *Establishment of the Black Sea Information System for the Black Sea Commission, Part I*, p.13.

<sup>596</sup> *Ibid.*, p.15.

CBD has no communication with the focal points of the AG on CBD.<sup>597</sup> In same token, the focal point of Romania of the AG on ICZM does not have any communication with either RAC on ICZM or other focal points of the AG.<sup>598</sup> RAC on CBD has never contacted with the focal point of Romania for the AG on CBD.<sup>599</sup> The above picture reveals that there is a real need for establishment of operational links among the Network members.

### 3.1.5 Question of Flexibility

The regimes with more flexible characteristics tend to be more effective than the less flexible ones. The presence of reservations in the treaties and arrangements for non-compliance, ability of the rules to cope with rapid changes, rules of decision-making are the rules that affect flexibility, which in turn affect the functioning of the regime.

The presence of arrangements for response to non-compliance is a desired operational rule, which promotes implementation of conventions. The traditional mechanisms for non-compliance in treaties are dispute settlement mechanisms with standard sequence of negotiation, mediation and arbitration or submission to the International Court of Justice.<sup>600</sup>

The Black Sea environmental regime is poor in terms of an enforcement mechanism, which can be considered as a challenge for functioning of the regime. Instead of providing a special enforcement technique, the Contracting Parties are urged only to negotiate for the settlement of disputes.<sup>601</sup> The mechanism chosen by the Black Sea States is the method applied at a first instance, therefore it can be considered as the weakest method. With such a weak mechanism, the Black Sea States cannot be enforced to comply with the regime. The only mechanism that can be considered as an enforcement mechanism is the presence of the Black Sea Commission with the

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<sup>597</sup> Ibid., p.12.

<sup>598</sup> Ibid., p.39.

<sup>599</sup> Ibid., p.41.

<sup>600</sup> Faure and Lefevre, "Compliance with International Environmental Agreements", pp.151-154.

<sup>601</sup> Bucharest Convention, Article 25.

duty to promote the implementation of the Convention.<sup>602</sup> Therefore, lack of a well-defined enforcement mechanism, due to which compliance cannot be promoted, it is hard to achieve an effectively functioning regime in the Black Sea.

The rules of decision-making including qualified majority, unanimity or consensus, all have different reflections on flexibility of the regimes. The regimes, in which decisions are taken by the rule of unanimity or consensus, tend to be weaker than the ones with qualified majority voting.<sup>603</sup> When decisions are taken unanimously, the participating countries have to agree on least common denominator in order to achieve unanimity. Therefore, more stringent environmental principles, objectives and standards cannot be adopted due to different interests and different perspectives of the parties towards environmental protection due to the different priorities they attach. In order to balance the different interests of the parties to be able to reach a consensus, they agree on least common denominator that hinder to adopt more strict rules. In that sense, regimes in which the decisions are taken unanimously tend to be weaker and less effective than the ones in which decisions are taken by qualified majority voting.

As decisions are taken either by unanimously or by consensus, the Black Sea environmental regime can be considered as less flexible. Such decision-making rules appears as a limiting factor for the further developments of the regime. Within this respect, Black Sea departs from the UNEP pattern, which is characterized by a high degree of flexibility.

The presence of reservations in treaties provides some sort of flexibility since the states which does not want to be a Party to a regime due to a specific obligation, can become a Party with putting a reservation on that specific provision. In other words, such provisions enables the reluctant states to become a Party to the conventions while not bound with the particular part of it. The Bucharest Convention, however,

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<sup>602</sup> Mee, "Can the Marine and Coastal Environment of the Black Sea be Protected?", p.140.

<sup>603</sup> Wettestad, *Designing Effective Environmental Regimes*, p.26.

does not provide such flexibility, since the reservations are not allowed.<sup>604</sup> Therefore, all provisions of the Bucharest Convention are binding for all Contracting Parties. The lack of reservation hampers the adoption of stricter provisions in terms of protection.

The presence of binding rules that are flexible enough to cope with rapid changes in environmental information, scientific knowledge and in international environmental policy and law tend to make regimes effective. In that respect, presence of operational rules within an annex to a treaty or protocol where the provisions for revision and amendment are not so stringent as for the main legal instrument itself, plays a significant role in promotion of the effectiveness of the regime.<sup>605</sup>

The Bucharest Convention is open to adoption of new Protocols to the Convention, and annexes to the Convention and its Protocols.<sup>606</sup> This can be traced as a positive factor for increasing flexibility of the regime. However, the adoption procedure for the Protocols of the Bucharest Convention comes out as a limiting factor for further flexibility. If a state is a Contracting Party to the Bucharest Convention, it directly becomes a Party to all the Protocols adopted together with the Bucharest Convention.<sup>607</sup> Therefore, in the adoption of the Protocols of the Bucharest Convention, interests of all Contracting Parties must be reflected in the Protocols. In cases where a state is reluctant to accept the draft Protocol in the way that it is proposed, the Protocol has to be elaborated so as to make it acceptable by all Contracting Parties.<sup>608</sup> Such type of an arrangement hinders adoption of strict regulatory obligations.

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<sup>604</sup> Article 27.

<sup>605</sup> Vogler, *The Global Commons*, pp.158-160.

<sup>606</sup> Article 5 (3).

<sup>607</sup> Land-based Protocol, Dumping Protocol and Emergency Protocol are considered as the integral part of the Bucharest Convention. See Bucharest Convention.

<sup>608</sup> See Ch.2.

### **3.2 Opportunities For the Future of The Black Sea**

Positive developments are taking place in the Black Sea environmental regime that can enable the elimination of the challenges of the regime. The land-based sources of pollution is considerably high when compared with the other sources of pollution in the Black Sea. And the contribution of the Danube countries to the land based pollution is remarkable, which can only be alleviated when the Danube countries also involve in the protective measures for the Black Sea. Therefore, recently established Danube-Black Sea Partnership can be considered as an opportunity in the alleviation of the land based pollution to a considerable degree. The international environmental policy can have a positive impact in the Black Sea environmental regime in terms of providing more protection. The response of the Black Sea environmental regime to the developments in the international environmental policy, adoption of new legal instruments in line with the recent developments and participation of the Black Sea States to global conventions as a Contracting Party enables the regime to address all the environmental challenges of the Black Sea in a more comprehensive and effective manner. Therefore, they are regarded as other opportunities for the regime. The increasing role of EU in the Black Sea and the continuing donor support, in particular the support of GEF, can be considered as significant opportunities to address both the environmental challenges and the ones related with the functioning of the regime. The increasing involvement of EU is a very promising one when compared with the others in terms of addressing the challenges of the regime as a whole and enabling the recovery of the Black Sea ecosystem.

#### **3.2.1 Danube-Black Sea Partnership**

The regimes tend to be effective when their participatory scope matches with the scope of the environmental problems. If all polluter countries do not participate in the regimes, the participating countries will be reluctant to take necessary actions since participating countries' efforts will be insufficient in eliminating the pollution without the involvement of other polluters. Therefore, participation of all states that

contributes to the pollution increases effectiveness of the regimes.<sup>609</sup> From this standpoint, it can be argued that the participatory scope of the Black Sea environmental regime does not match with the scope of the environmental problems in the Black Sea, which constitutes a challenge to the regime. The efforts of coastal states of the Black Sea would be insufficient without the participation of the Danube countries in the elimination of the problem of eutrophication<sup>610</sup> and other subsequent environmental problems of the Black Sea. A basin wide approach, in other words, full co-operation between sixteen countries within the Black Sea drainage basin lies at the heart of effective reduction of eutrophication in the Black Sea.

Cooperation with Danube countries have been emphasized in the Diplomatic Conference<sup>611</sup> via the second Resolution in which rivers flowing to the Black Sea are held responsible from the major source of pollution in the Black Sea, thereby obliging in particular the Danube countries to take action for improvement of the ecological condition of the Danube River for the sake of the Black Sea. In addition to their high amount of contribution to the pollution problem of the Black Sea, the Danube countries are obliged to contribute to the protection efforts of the Sea due to two legal requirements arising from the international environmental law. First of all, it is because of the customary law by which all States are obliged to protect and preserve the marine environment whether they are coastal states or not, the Danube countries should contribute to the protection of the Black Sea. The other one is based on the relevant provision of the Charter of Paris for a New Europe in which it was indicated that it is the common responsibility of all countries to protect the environment with a view to restore and maintain a sound ecological balance in air, water and soil.<sup>612</sup> By these requirements, the Danube countries are held responsible in preventing the pollution in the Danube, thereby indirectly supporting the protection efforts of the coastal states of the Black Sea. Even though the Resolution contributed in forming the basis for future cooperation, since it is through a looser

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<sup>609</sup> Wettstad, *Designing Effective Environmental Regimes*, p.20.

<sup>610</sup> *Supra*, pp.55-61.

<sup>611</sup> Diplomatic Conference on the Protection of the Black Sea against Pollution was held in Bucharest between 21-22 April 1992.

<sup>612</sup> Güneş, "Karadeniz'de Çevresel İşbirliği", p.324.

way of legal instrument, it does have a binding effect neither for Black Sea nor for Danube countries. Acknowledging the role of Danube River in the pollution of the Black Sea, BS-SAP emphasizes promotion of cooperation between the Black Sea and Danube River basin.<sup>613</sup>

On the other hand, there exists the assumption that the regimes with few and homogeneous participants tend to be more effective than the regimes with many and heterogeneous participants regardless of the actual problems. Due to large number of Contracting Parties, there would be quite many interests, which can result in less effective measures to be taken to be able to balance the interests of all Parties.<sup>614</sup> From this standpoint, it might be indicated that, the increasing number of participating countries in the Black Sea with the participation of Danube countries can be considered as a decreasing factor for its effectiveness, since the number of Contracting Parties will be seventeen, rather than six. However, to Wettstad, it is a short-term assumption. In the long-term, the effectiveness of the regimes increases, if all major contributors participate in the regimes.

There is another view that non-coastal countries in the drainage basin of regional seas are usually reluctant to participate in Regional Seas Conventions. For instance, the three non-coastal countries, Sudan, Ethiopia and Uganda, in the drainage basin of Mediterranean, didn't participate in MAP.<sup>615</sup> However, the involvement of Danube countries in the Black Sea environmental regime makes sense in the Black Sea due to the fact that out of 470 km<sup>3</sup> riverine inflow into the Black Sea, 350 km<sup>3</sup> flows from Danube in a drainage basin of 2 000 000 km<sup>2</sup>.<sup>616</sup>

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<sup>613</sup> Article 2, Item 15.

<sup>614</sup> Wettstad, *Designing Effective Environmental Regimes*, p.23.

<sup>615</sup> Whether the involvement of these non-coastal countries in the Mediterranean regime does not make sense since the Nile River, even if it is the major river discharging into the Mediterranean, does not cause major problems for Mediterranean as a result of the Aswan High Dam that serves as an effective sink for sediments and for pollution of the countries in the Nile River basin. Furthermore, the annual riverine discharge into the Mediterranean is only 125 km<sup>3</sup> in a drainage basin of 3 500 000 km<sup>2</sup> with 80 to 100 years for the exchange of the water completely.<sup>615</sup> See Sorensen, "A Comparative Analysis and Critical Assessment of the Regimes to Manage the Black Sea and the Mediterranean Sea", p.700.

<sup>616</sup> Zaitsev and Mamaev, *Biological Diversity in the Black Sea*, pp.9-13.

When the peculiarities and the environmental problems of the Black Sea are taken into account, and from a long-term perspective, it can be concluded that the Black Sea environmental regime can address its most serious environmental problem, eutrophication, only in close cooperation with Danube countries. One of the promising development that can be considered as an opportunity in the elimination of the challenge of eutrophication in the Black Sea, even if currently loose, is the cooperation between Danube and Black Sea States, established in 2001 through the MoU between Black Sea Commission and ICPDR by which the Danube countries recognized that the Danube is the major contributor to the eutrophication in the Black Sea and they committed to reduce the nutrient inputs from Danube to protect the Black Sea environment from further degradation.

One of the output of this cooperation is the establishment of the Danube-Black Sea Joint Technical Working Group responsible from realization of the MoU. The Group initially focused for the establishment of monitoring and assessment standards for the Black Sea to make similar with that of the Danube, since Danube has already developed the major tools for monitoring and assessment. It will be after the establishment of harmonized monitoring and assessment system for both Commissions, the joint reporting, as required by the MoU, is aimed to be implemented. One of the other important task of the Group is the implementation of the EU Water Framework Directive in the basin, the top priority for the Danube Commission, which has been extended as a task for the Black Sea Commission as well.<sup>617</sup> Currently, the Group is working for the establishment of the basis of the cooperation under this Group. For this purpose, it elaborated its Work Plan, a harmonized indicators for the assessment of the impact of Danube on the Black Sea ecosystem and the reporting requirements to the Black Sea Commission and the Danube Commission.<sup>618</sup>

The second output of the cooperation established under MoU is the DABLAS Task Force established as a platform for common decision-making and for encouraging

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<sup>617</sup> UNDP, *Project Document for Phase II*, p.173.

<sup>618</sup> European Commission, *Meeting Report of Third Meeting of the DABLAS Task Force*, 07.05.2004, DABLAS/2004/004, (Brussels, 2004), p.3.

investments for environmental protection, in particular for reduction of eutrophication.<sup>619</sup> The DABLAS Task Force determined a short list of prioritized projects in the Black Sea drainage basin that are addressing the domestic sources of pollution. A short list of 30 projects were presented to the international donors for funding, which are determined to be at different pipeline stages.<sup>620</sup>

Table 3.7: Number of Projects Per Country According to Project Pipeline Stages

| Country               | 1* | 2* | 3* | 4* |
|-----------------------|----|----|----|----|
| Bulgaria              | -  | -  | 1  | 4  |
| Bosnia Herzegovina    | -  | 1  | 2  | -  |
| Croatia               | -  | -  | 2  | -  |
| Czech Republic        | -  | -  | -  | -  |
| Georgia               | -  | -  | -  | 1  |
| Hungary               | 2  | -  | 1  | -  |
| Moldova               | -  | -  | -  | 2  |
| Romania               | 1  | 1  | 1  | 1  |
| Serbia and Montenegro | 2  | 1  | -  | -  |
| Slovakia              | -  | -  | -  | -  |
| Slovenia              | -  | -  | -  | -  |
| Turkey                | -  | -  | 1  | 2  |
| Ukraine               | -  | 1  | -  | 3  |

\* 1 = Nearly approved or approved financing; 2 = Negotiations Ongoing; 3 = Feasibility Stage; 4 = Pre-feasibility stage.

Source: European Commission, *The DABLAS Task Force Evaluation Working Group Prioritization Process: Draft Meeting Report*, DABLAS/2003/EWG/006/Rev1, (Brussels, 2003), pp.2-4.

15 of 30 projects, which are located mostly in the Danube basin, have move forward. After negotiations with the donors for their funding, six of them are approved to be fully funded. The projects that will be supported by the international donors includes two projects of Hungary, one project of Romania and Serbia and Montenegro. The Ukraine's project, which was in the negotiation process for funding, is approved to be funded and transferred to the first pipeline stage. In other words, international donors will be funding construction of wastewater treatment plants in these countries. Since these projects will be funded, they will be taken out of the DABLAS project pipeline.<sup>621</sup> The projects, which are not funded in the DABLAS pipeline will be continued to be developed in near future so as to enable their future funding. Furthermore, DABLAS project pipeline is expected to be enlarged to cover other

<sup>619</sup> UNDP, *Project Document for Phase II*, p.8.

<sup>620</sup> European Commission, *The DABLAS Task Force Evaluation Working Group Prioritization Process*, pp.2-4.

<sup>621</sup> European Commission, *Meeting Report of Third Meeting of the DABLAS Task Force*, p.2.

projects in the Black Sea drainage basin. Together with these tasks, the DABLAS Task Force plans to develop a best practice on project preparation since the reason behind the disapproval of many of the projects by the international donors is considered as the weaknesses in this area.<sup>622</sup>

### **3.2.2 Positive Impact of International Environmental Policy**

The incorporation of latest developments in the field of international environmental policy is an important opportunity, as the new developments take place to make the previous international agreements more effective towards protecting the environment. Today, international environmental agreements are either amended or totally revised with a view to eliminate the deficiencies in the earlier regimes in terms of their effectiveness. It is due to this fact, today the approach in international environmental policy is not the one in 1970s. Each step taken by these changes in the international environmental policy provides more protection of the environment. Therefore, the more responsive the regimes to these developments, the more effective they are.

The response of the Black Sea environmental regime towards such changes is different in two of its tracks. As the Bucharest Convention was adopted two months prior to the Rio Conference, it was based on the previous Regional Seas Programmes and 1982 UNCLOS<sup>623</sup>, therefore was unable to make references to any of the new concepts introduced by the Rio Conference. As the Convention hasn't been revised so far, the principles of sustainable development and the ecosystem approach as well as the aggressive approach towards pollution and consideration of coastal areas as part of the marine environment hasn't been incorporated into the first track yet.

Accordingly, the three of its Protocols adopted together with the Bucharest Convention are concerned with the approach of Stockholm as well. Even though the approach of Rio couldn't have been directly integrated into the first track, the

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<sup>622</sup> European Commission, *The DABLAS Task Force Work Plan 2004/2005*, (Brussels, 2004).

<sup>623</sup> Kiss and Shelton, *International Environmental Law: 1994 Supplement*, p.77.

approach have been discussed during the elaboration of the Convention and its Protocols, which paved the way for the successful and prompt incorporation of Rio approach into the subsequent legal documents such as the Odessa Declaration and later and in a more comprehensive manner into the second track, namely BS-SAP.<sup>624</sup>

The Black Sea Biodiversity and Landscape Conservation Protocol to the Bucharest Convention can be considered as very promising in terms of the regime's respond to the changes. As the Protocol is the integral part of the Convention, it enabled the main framework to respond to the developments. The approach of Rio has been reflected in many of its provisions.<sup>625</sup>

The current Land-based Protocol of the Bucharest Convention is not sufficient in addressing the land based sources of pollution in the Black Sea as well as for implementing the GPA. For this reason, the Protocol is considered to have an outdated approach. Furthermore, it does not meet the goals of limiting nutrient loads to the Black Sea to their 1997 levels.<sup>626</sup> However, the Strategy of the Regional Seas Programmes between 2004-2004 emphasizes close cooperation with GPA and other relevant programs and integration of GPA into the Regional Seas Programmes.<sup>627</sup> In this regard, one of the significant development that can be considered as an opportunity is the response of the Black Sea environmental regime to international environmental policy in controlling the land-based sources of pollution through revising the current Protocol, which has already been included in the Work Programme of the Black Sea Commission for the year 2003-2004<sup>628</sup> and under revision under the auspices of UNEP-GPA in line with the requirements of GPA.<sup>629</sup>

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<sup>624</sup> *Supra*, pp.99-102.

<sup>625</sup> *Supra*, pp.92-93.

<sup>626</sup> UNDP, *Project Document for Phase I*, p.26.

<sup>627</sup> UNEP, *Regional Seas Strategic Directions for 2004-2007*, 5<sup>th</sup> Global Meeting of the Regional Seas, Nairobi, 26-28 November 2003.

<sup>628</sup> UNDP, *Project Document for Phase II*, p.168.

<sup>629</sup> In the revision of the Land-based Protocol, two sets of questionnaires are filled by the relevant focal points of the Black Sea Commission one of which assesses the implementation of the current Protocol. Such a review will enable the identification of obstacles and gaps, which resulted in Protocol's inadequate implementation. The other questionnaire will analyze the situation in the Black Sea States regarding the application of GPA Program to Black Sea in accordance with the national and regional situation. This study will enable the examination of the gaps in the

On the other hand, the Dumping Protocol of the Bucharest Convention was based on the approach of 1972 London Dumping Convention. However, the new dumping regime at the global level, which has been reversed in 1996 through a Protocol is much more effective in terms of protection and elimination of the pollution from dumping to the fullest possible extend in line with the aggressive approach introduced by the Rio Conference.<sup>630</sup> Therefore, there appears a big gap with the regional application of the dumping regime of the Black Sea and the global dumping regime. The regional dumping regime is now less effective and has lesser stricter environmental standards than the global one. In this regard, one of the opportunity will be the revision of the Dumping Protocol, which is included in the 2003-2004 Work Programme of the Black Sea Commission.<sup>631</sup>

Table 3.8: Protection Approach in Legal Documents of the Black Sea Environmental Regime

| Legal Document                                   | Adoption Date   | Protection Approach                                                       |
|--------------------------------------------------|-----------------|---------------------------------------------------------------------------|
| Bucharest Convention                             | 21 April 1992   | Stockholm approach; not revised yet                                       |
| Dumping Protocol                                 | 21 April 1992   | 1972 London Dumping Convention approach, revision is under consideration. |
| Emergency Protocol                               | 21 April 1992   | No revision                                                               |
| Land-based Protocol                              | 21 April 1992   | Ongoing studies for revision, GPA approach will be reflected.             |
| Odessa Declaration                               | 7 April 1993    | Rio approach                                                              |
| BS-SAP                                           | 31 October 1996 | Rio approach                                                              |
| Biodiversity and Landscape Conservation Protocol | 14 June 2002    | Rio approach                                                              |

Even though the main legal framework, the Bucharest Convention is far from responding to the developments, the subsequent legal documents of the Black Sea environmental regime are elaborated in parallel with the developments in the international environmental policy. BS-SAP has a more comprehensive approach than that of the Bucharest Convention. Likewise, the relevant Protocols of the

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current Protocol with respect to national legislation and GPA implementation. On the basis of collected data and information obtained from the questionnaires, a revised Protocol and a GPA Work Programme will be drafted, which is expected to be completed by the end of 2004. With such a method, the adjustment of the Protocol to the real situation of the Black Sea countries and state of the environment of the Black Sea will be done in line with the requirements of GPA. The Protocol will enable implementation of GPA in the Black Sea. (UNEP-GPA, *Objectives and Issues of the Consultative Meeting on the Revision of the Black Sea Land-based Sources of Pollution Protocol, the GPA Work Programme for the Black Sea, the EU Water Framework Directive and EU Marine Strategy*, Istanbul, 20-21 January 2004, p.2.)

<sup>630</sup> See Ch.1.

<sup>631</sup> UNDP, *Project Document for Phase II*, p.121.

Bucharest Convention are under revision for strengthening the effectiveness of the regime in terms of responding towards developments, thereby providing more protection.

The adoption of new legal instruments based on recent international environmental policy can be considered as another opportunity since each legal instrument addresses to specific environmental problems in a comprehensive manner. They form the legal basis of cooperation, provide the framework of the cooperation and promote protection. Recently, new legal instruments are adopted by the Black Sea States and some are under preparation to be adopted soon.

The ongoing preparations by the Black Sea Commission for conclusion of a legally binding document for the management of marine living resources can be considered as an opportunity for the Black Sea ecosystem. In the Black Sea, the fish stocks assessment and monitoring activities are fragmented and irregular, and available data is not comparable and compatible at the regional level.<sup>632</sup> The drawbacks in marine living resources sector of the Black Sea necessitate a number of specific measures to regulate the fishing efforts and to assess fish stocks in Black Sea. There is a need for introduction of environmental dimension to fisheries management. In other words, sustainable management of marine living resources of the Black Sea comes out as a necessity. Unless exploitation of marine living resources is regulated and sustainable management of them is provided, the future of marine living resources in the Black Sea will not be promising. According to the 2003-2004 Work Programme of the Black Sea Commission, it is expected to conclude a regionally binding document for the management of marine living resources of the Black Sea in 2004.<sup>633</sup> Even if there exists some problems due to the different preferences of the Black Sea States<sup>634</sup> about the type of document in terms of adoption of it as a separate Convention or as a new

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<sup>632</sup> Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*, pp.54-55.

<sup>633</sup> UNDP, *Project Document for Phase II*, p.169.

<sup>634</sup> Georgia, Russia and Turkey prefer adoption of a convention. Bulgaria and Romania had no final position of their countries but opinions of different national authorities. Ukraine prefers for the protocol, however different views exist on a national level among relevant institutions. For this reason, Ukraine prefers the text of the draft convention flexible enough to be transformed into a Protocol. See Black Sea Commission, *Minutes of the 2<sup>nd</sup> Joint Meeting of the AG on FOMLR and AG on CBD*, Istanbul, 12-13 December 2002.

Protocol to the Bucharest Convention and, if preferred to be adopted as a Convention, about the host of the headquarters of the future convention,<sup>635</sup> conclusion of a legally binding document for management of the marine living resources of Black Sea is at a very promising stage when the long negotiation process for this agreement is taken into account.<sup>636</sup> It is expected with the legally binding document to introduce environmental aspects to the use of marine living resources of the Black Sea for the sake of the biodiversity as well as for the productivity of the resources of the Sea for present and future generations. In other words, with the overall aim of providing biodiversity conservation, it will enable sustainable management of the marine living resources with which restoration and maintenance of existing biodiversity will be ensured and damage to ecosystems will be minimized.<sup>637</sup>

Another opportunity for the protection of fisheries in the Black Sea is the adoption of the Black Sea Biodiversity and Landscape Conservation Protocol, which also and more importantly addresses the problem of loss of biodiversity in the Black Sea.<sup>638</sup>

One of the other promising development is the adoption of the Black Sea Contingency Plan as an Annex to the Emergency Protocol of the Bucharest Convention in October 2003 by the Black Sea States which will be an important legal instruments overcoming the challenge of ship based pollution, in particular oil pollution in cases of emergency. The Plan, comprised of two volumes covering the

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<sup>635</sup> During 10<sup>th</sup> Meeting of the Commission on the Protection of the Black Sea Against Pollution held in İstanbul between October 27-29, 2003, Bulgaria and Romania expressed their willingness to host the headquarters of the future Convention on Fisheries. See Black Sea Commission, *Minutes of the 10<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

<sup>636</sup> The studies for elaboration of a legally binding document for this purpose had been under negotiation since 1994 under the auspices of BSEC. See BSEP, *1994 Annual Report*, p.23. It was after the establishment of the Permanent Secretariat of the Black Sea Commission, the process for finalization of a legally binding document for the management of marine living resources has accelerated due to the decision, which was given during the Meeting of the Council of the Ministers of Foreign Affairs of the BSEC Member States held in April 2002 in Kiev, of the BSEC Member States of handing over the finalization of Fisheries Convention to the Black Sea Commission to be negotiated between six Black Sea coastal states rather than the Members of BSEC. Even though a consensus couldn't have been reached among the Black Sea States, the tendency among the Black Sea States seems to conclude the document as a separate convention. For more information see Black Sea Commission, *Minutes of the 2<sup>nd</sup> Joint Meeting of the AG on FOMLR and AG on CBD*.

<sup>637</sup> Black Sea Commission, *Draft Convention (Protocol) for Fisheries and Conservation of Living Resources of the Black Sea*, İstanbul, 12 December 2002.

<sup>638</sup> *Supra*, pp.94-96.

Response to Oil Spills and Response to Harmful Substances, is the operationalization of the cooperation between the Black Sea States in responding to marine pollution incidents affecting or likely to affect the Black Sea environment.<sup>639</sup> The adopted version of the Plan includes Volume I that aims to respond to oil spills.<sup>640</sup> The Plan establishes a mechanism for which national authorities will be authorized by their respective countries that will be responsible from preparing for and responding to emergency cases. In other words, it clarifies the extent of cooperation in emergency cases and responsibilities of the Contracting Parties and national authorities that will be involved in the process. The Plan has already defined the competent authorities with detailed communication information.<sup>641</sup> The implementation of the Plan will enable prevention, reduction and combating of pollution of the marine environment of the Black Sea resulting from emergency situations.<sup>642</sup> Since the vessel traffic seem to increase in the Black Sea, this will increase the possibility of marine pollution incidents. However, if the Plan enters into force, such a permanent mechanism with clearly defined responsibilities will enable prompt and effective coordination and integration of the responses of the Contracting Parties affected or likely to affect from marine pollution incidents. The Plan can be considered as a tool for realization of the cooperation in emergency cases.

Another opportunity in the Black Sea in dealing with ship-based pollution is the approval of the Regional Action Plan to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens in Ships' Ballast Water (Regional Action Plan)<sup>643</sup>. Among other marine areas, the Black Sea was one of the most invaded by exotic species of plants and invertebrate animals, which are introduced to the marine environment of

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<sup>639</sup> Black Sea Commission, *Black Sea Contingency Plan to the Protocol on Cooperation in Combating Pollution of the Black Sea By Oil and Other Harmful Substances in Emergency Situations, Volume I: Response to Oil Spills*, İstanbul, 27-29 October 2003, Source: [www.blacksea-commission.org](http://www.blacksea-commission.org).

<sup>640</sup> The Volume II is expected to be elaborated following the preparation of International Guidelines for the development of contingency plans for the hazardous and noxious substances by IMO by the year 2006 to be able to make the Volume II of the Black Sea Contingency Plan in line with the international policy.

<sup>641</sup> The authorized national institutions are obliged to develop appropriate preparedness measures and effective systems for detecting and reporting pollution incidents, necessary measures to limit spreading and to minimize the hazard, to develop training courses for the personnel involved in oil pollution prevention and combating and to implement clean up operations for combating pollution caused by oil spills.

<sup>642</sup> Ibid.

<sup>643</sup> hereinafter referred to as "Regional Action Plan".

the Black Sea accidentally with ships' ballast waters.<sup>644</sup> With the increasing oil transportation in the Black Sea, the exchange of ballast water and in return the possibility for introduction of exotic species will likely to increase in the Black Sea. However, implementation of the Regional Action Plan<sup>645</sup> will enable minimization of the transfer of harmful aquatic organisms in ships' ballast water. The Plan provides a framework for the activities that need to be developed and implemented within the Black Sea region in dealing with ballast water management and facilitates the preparatory process for introduction of new international regulations and practices on ballast water management and control into the Black Sea Region.<sup>646</sup>

The state participation to global conventions can be considered as another opportunity for the Black Sea environmental regime.<sup>647</sup> If the regime does not cover all aspects of the environmental protection that has been covered at the international level, through becoming Parties to global conventions in the field of environment, the Contracting Parties of the regional regime are bound with the rules and standards of the global conventions, which in turn provides extra protection. Therefore, participation of Black Sea States as a Contracting Party to international

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<sup>644</sup> Zaitsev, "Invasive Species in the Black Sea", pp.1-2.

<sup>645</sup> The main activities to be implemented within the framework of this Plan includes increasing public awareness on the problem of invasive marine species, establishing a clearing house mechanism to exchange information on changes in the species content of marine flora and fauna and information about prevention and control measures taken by Black Sea States and worldwide for which National Information Center will be set up. Regional Risk Assessment is planned to be carried out in which shipping arrival patterns will be examined and source ports from which ballast water is imported will be identified. Developing a regional monitoring system for species profile in these ports, undertaking of joint scientific research of technical and technological methods of ballast water treatment and developing international ballast water treatment are the other activities that should be done by the Black Sea States. In order to harmonize rules and regulations for the ports and ships' routings of the region to regulate ballast water management and control procedures, a Working Group is planned to be established, which will review national regulations and practices with a view to adapt them to international regulations and to recommend a uniform regime for ballast water management in the Black Sea. A Training Center will be established for training those personnel that are involved in risk assessment, ballast water control, marine monitoring in ports and on board ballast water management. The Black Sea States are also committed to develop their national action plans that will be complementary to the activities planned in the Regional Action Plan. Furthermore, in the implementation and coordination of the activities within the framework of Regional Action Plan, a Regional Task Force will be established as a regional mechanism for cooperation among the Black Sea States on ballast water problems.

<sup>646</sup> Roman Bashtanny, Leonard Webster and Steve Raaymakers, *1<sup>st</sup> Black Sea Conference on Ballast Water Control and Management, Odessa, Ukraine, 10-12 October 2001: Conference Report*, GloBallast Monograph Series No. 3, (London: IMO, 2002), p.11.

<sup>647</sup> For the analysis of the issue for Mediterranean see Ziyal, *The Marine Pollution Issue in International Relations*, pp.105-108.

environmental agreements can be considered as an opportunity for the regime in terms of addressing all environmental challenges of the Black Sea.

One of the important agreement to which participation of Black Sea States makes sense is the 1982 UNCLOS. The state participation to the Convention is important, since it is the basis of international environmental law regarding marine environment. In the Black Sea, except Turkey, the other Black Sea States are Party to 1982 UNCLOS.<sup>648</sup>

The other agreement to which state participation has considerably important effect on protecting the marine environment is the 1973/78 MARPOL Convention. Even if different aspects of ship-based pollution has been the subject of Regional Seas Programmes such as emergency response or dumping, ship-based pollution is not covered by a specific protocol in any of the Regional Seas Programmes. Instead, becoming a Contracting Party to the global convention regulating the pollution from ships, 1973/78 MARPOL Convention, in which nearly all aspects of the ship-based pollution is covered, is encouraged to do within the framework of the programmes.<sup>649</sup> To be a Party to the 1973/78 MARPOL Convention is important for the Black Sea environmental regime not only in order to address all aspects of ship based pollution in the Sea, but also due to the fact that the Convention provides extra protection for the Black Sea as the Sea is designated as a special area in its three of its six annexes.<sup>650</sup> According to the Convention, as the special areas refer to the sea areas, which have unique oceanographic and ecological conditions, they necessitate particular treatment and strict regulations than the usual application of the Convention.<sup>651</sup> Therefore, since the Black Sea is designated as a special area, more stringent environmental standards should be applied in the Sea in regulating the pollution from ships.<sup>652</sup> All the Black Sea States are Party to the 1973/78 MARPOL

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<sup>648</sup> See Ch.1.

<sup>649</sup> See Ch.1.

<sup>650</sup> Mee, "Can the Marine and Coastal Environment of the Black Sea be Protected?", p.138.

<sup>651</sup> OECD Development Assistance Committee, *Guidelines on Aid and Environment*, p.41.

<sup>652</sup> In accordance with 1973/78 MARPOL Convention, oil discharge is completely prohibited and oil carrying ships are made responsible to operate the method of retaining oily wasted on board either load on top system or

Convention, therefore the Convention is fully in force in the region, which enables extra protection of the Sea if effectively implemented. Being aware of the importance of full implementation of the 1973/78 MARPOL Convention, the fifth Resolution of the Bucharest Convention urges Black Sea States to initiate necessary actions in cooperation with IMO in order to allow the non-signatory country to obey the obligations of 1973/78 MARPOL Convention and its specific provisions about the Black Sea's special status.

With the increasing production of the Caspian oil and its transportation, the Black Sea has become a significant route for the transportation of the oil to international markets. The possible increase in the vessel traffic will in turn increase the possible maritime accidents in the Black Sea. In this regard, 1990 OPRC<sup>653</sup> should have an important role to play in the Black Sea with the ratification of the Convention by all the Black Sea States.

Black Sea is one of the invaded marine areas by exotic species.<sup>654</sup> Today, in line with the increasing vessel traffic in the Black Sea, the degree of severity and urgency of this problem is increasing for the Sea. Since a global regime couldn't have been established till early 2004 in which International Convention for the Control and Management of Ships' Ballast Water and Sediments<sup>655</sup> was adopted, control of invasive species hasn't been subject of any Regional Seas Conventions. The Bucharest Convention does not cover such a Protocol as there was not a globally and a regionally binding instrument dealing with the invasive species till 2004. However,

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discharge to shore reception facilities in the Black Sea. Therefore, to make this provision of the Convention active in the region, the Black Sea States need to establish sufficient shore reception facilities, which will provide extra protection to the Black Sea against the pollution from vessels. In the usual application of the Convention, other than the residues of the some 250 substances whose residues are allowed to be discharged to reception facilities if certain concentrations and conditions are provided, discharge of residues containing noxious substances is permitted within 12 miles of the nearest land. However, this is more stringently restricted in the Black Sea area. In dealing with garbage from ships, the distance from the land and the method for disposal is stricter as well in the Black Sea than its usual application according to which disposal of garbage is completely prohibited, thereby requiring establishment of harbour reception facilities. See Mee, "Can the Marine and Coastal Environment of the Black Sea be Protected?", p.138; [http://www.imo.org/Conventions/contents.asp?doc\\_id=678&topic\\_id=258](http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258)

<sup>653</sup> *Supra*, p.40.

<sup>654</sup> Zaitsev, "Invasive Species in the Black Sea", p.1.

<sup>655</sup> *Supra*, pp.42-43.

since a regime has just been established at the global level, it will be an opportunity for the Black Sea in tackling with this problem, if the Black Sea States become a Contracting Party to this Convention.

The liability and compensation for damage to marine and coastal environment of the regional seas is part of the Regional Seas Conventions since the initiation of the first Regional Seas Programmes in 1976. However, instead of dealing with the issue of liability and compensation with a specific Protocol of the Conventions, the responsibilities of the states in treaties are defined through general obligations. In accordance with this application, the Bucharest Convention covers general provisions related to liability and compensation as well in which the Black Sea States are urged to adopt rules and regulations and to cooperate for this purpose.<sup>656</sup> However, such provisions are so vague and therefore needs further clarification. In this regard, to provide a more comprehensive and detailed framework for liability and compensation and to more specifically define responsibilities of the States in response to damage to marine environment of the Black Sea, it is significant for the Black Sea environment, if 1969 CLC and 1971 FUND<sup>657</sup> are adopted by the Black Sea States.

With a view to prevent the pollution of the marine environment of the Black Sea as a result of the transboundary movement of hazardous wastes, through the first Resolution of the Bucharest Convention, the Contracting Parties agreed to adopt a Protocol concerning transboundary movement of hazardous wastes and cooperation in combating illegal traffic thereof as soon as possible. Furthermore, the Odessa Declaration together with BS-SAP oblige the Black Sea States to draft a Protocol for this purpose.<sup>658</sup> However, elaboration of such a Protocol has never been on the agenda of the Black Sea States and it couldn't have been adopted so far. Therefore, becoming a Contracting Party to the 1989 Basel Convention,<sup>659</sup> makes sense for the

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<sup>656</sup> Article 26.

<sup>657</sup> *Supra*, pp.41-42.

<sup>658</sup> Odessa Declaration, Article 7; BS-SAP, Article 3, Item 47.

<sup>659</sup> See Ch.1.

Black Sea environment to close this gap at the regional level. Fortunately, all the Black Sea States are Party to the Basel Convention.

Regional Seas Conventions initially focused on prevention of pollution to marine environment, but not on conservation of natural resources of marine and coastal environments. Even though such an approach was not the focus Regional Seas Conventions, the conservation approach was introduced to the international environmental policy by the RAMSAR Convention in 1974.<sup>660</sup> The policy of conservation of wetlands was not the subject of the Black Sea environmental regime till 2002 in which the Black Sea Biological Diversity and Landscape Conservation Protocol was adopted integrating the ecosystem approach into the mainstream of the regime.

Table 3.9: RAMSAR Sites in the Black Sea States

| Country  | Number of RAMSAR Sites | Surface Area (ha) |
|----------|------------------------|-------------------|
| Bulgaria | 10                     | 20,306            |
| Georgia  | 2                      | 34,223            |
| Romania  | 2                      | 664,586           |
| Russia   | 32                     | 10,323,767        |
| Turkey   | 9                      | 159,300           |
| Ukraine  | 22                     | 716,250           |

Source: [http://ramsar.org/key\\_sitelist.htm](http://ramsar.org/key_sitelist.htm)

However before than this, fortunately, all the Black Sea States have become Party to RAMSAR Convention, therefore they have already designated internationally important wetlands as RAMSAR Sites that needs particular attention in terms of conservation, which have been under conservation long before the adoption of the Bucharest Convention.<sup>661</sup>

It was after the Rio Conference conservation of biological diversity has become the subject of the Regional Seas Conventions with the adoption of the 1992 Convention on Biological Diversity.<sup>662</sup> Since the Bucharest Convention was adopted before the

<sup>660</sup> UNEP, *Register of International Treaties and Other Agreements in the Field of the Environment 1996*, p.108.

<sup>661</sup> Among these RAMSAR Sites, there exists quite important RAMSAR Sites in coasts of the Black Sea one which is the Danube Biosphere in Romania with a unique ecosystem.

<sup>662</sup> *Supra*, p.45.

Rio Conference, the Convention does not cover any aspect of conservation of biological diversity. Even if recently the Black Sea Biodiversity and Landscape Conservation Protocol to the Bucharest Convention have been recently adopted, since it haven't entered into force yet, the participation of the Black Sea States to the 1992 Convention on Biological Diversity is important in order to conserve the biological diversity in the Black Sea and to use components of biological diversity of the Sea in a sustainable manner. It is very promising that all the Black Sea States are Party to the Convention, therefore the Convention is fully in force in the region.

Since there exists a large number of international conventions that needs participation, the status of the Black Sea States in terms of their participation to these Conventions are given in a table in Appendix E with a view to give a general idea.

### **3.2.3 Continuing GEF Support**

The continuing GEF support can be considered as an opportunity for the Black Sea environmental regime when the financial constraints are taken into account. The GEF support under BSEP between 1993-1998 was an important financial resource together with the technical support.<sup>663</sup> This support was further extended with the initiation of the BSERP, which was implemented between 2002-2004 period. The project supported the activities of the Secretariat defined by the Work Program of Black Sea Commission, and activities of the Advisory Groups and the Activity Centers where they were insufficient in fulfilling.<sup>664</sup>

Now the project will be extended for further three years to be implemented between June 2004 - June 2007 with a budget of 6.000 million USD<sup>665</sup> to achieve the long-term objective of reducing the nutrient levels and hazardous substances to such levels that will enable recovery of the Black Sea ecosystem.<sup>666</sup> Under the umbrella of this

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<sup>663</sup> *Supra*, n. 36.

<sup>664</sup> UNDP, *Project Document for Phase II*, p.vi.

<sup>665</sup> *Ibid.*, p.i.

<sup>666</sup> *Ibid.*, p.20.

aim, the project plans to realize a large number of activities. Its planned activities will address not only the environmental challenges, but also the institutional, functional and financial challenges of the regime.

It will be supporting activities of the Secretariat, the Advisory Groups and the Activity Centers so as to achieve consolidation of the institutional mechanism for the full functioning of the regime that will be sufficient enough to efficiently implement the Bucharest Convention. It is also planning to support the Danube-Black Sea partnership under the Danube-Black Sea Joint Technical Working Group.<sup>667</sup>

It will give technical support to the regime in the efforts of the Black Sea Commission in controlling the land-based sources and protecting the Black Sea ecosystems as well as coastal zones by which the main environmental challenges of the regime will be addressed. For this purpose, the project will support the process for the revision of the Land based Protocol of the Bucharest Convention.<sup>668</sup> In terms of addressing the land-based sources of pollution and in particular eutrophication, it will look for the possibility of channeling of funds to the bankable projects in the region and for the opportunities for public-private partnership for investment projects in the Black Sea coastal zone. The project is planning to prepare prioritized investment programmes for municipal, industrial and other infrastructural projects, which will be further presented in a Donor Conference organized under the project.<sup>669</sup>

With a view to protect the marine living resources of the Black Sea, it will promote application of modern approaches to management of marine living resources such as fisheries not take zone and marine protected areas through. It also plans to support the negotiation process for finalization of the legally binding document for the management of marine living resources. The project includes an activity to prepare and implement training and information seminars for the fishermen community on

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<sup>667</sup> Ibid., pp.23-25.

<sup>668</sup> Ibid., pp.27-28.

<sup>669</sup> Ibid., pp.35-36.

proposed free zones and sustainable exploitation of fish resources in the Black Sea.<sup>670</sup>

In terms of protection of the Black Sea ecosystem, it will assist in finalizing guidelines and in developing national strategies for ICZM. A pilot project is planned to be developed in order to test the applicability of the guidelines. The capacities of the Black Sea Commission in coordinating the ICZM planning process and the focal points of the AG on ICZM in providing relevant information and indicator-based data on the coastal and marine ecosystems will be strengthened as well.<sup>671</sup>

The project will also address the information gap in the region by supporting the activities of the Black Sea Commission in the establishment and functioning of the BSIMAP. The functioning of BSIMAP will be strengthened so as to enable assessment of the water quality and nutrient reduction in the Black Sea. For this purpose, the capacities of identified monitoring institutions in the region will be strengthened and applicability of the BSIMAP will be tested through a pilot project. It is expected to provide full functioning of BSIMAP by mid 2005 at such a level that it will become an effective tool for monitoring and indicator-based assessment of the status and dynamics of the Black Sea ecosystem. In order to enable communication and exchange of information, the development and the operation of Black Sea Information System will be supported with the development of GIS, mapping and remote sensing after which the data exchange and reporting procedures within the implementation of the Bucharest Convention will be possible.<sup>672</sup>

On the other hand, the project is planning to look for financial resources as well. For this purpose, it will analyze application of economic instruments on a country by country basis in order to find the deficiencies regarding water supply and wastewater legislation, including water pollution charges, fines and incentives. Based on the results of socio-economic analysis, the mechanisms for cost recovery for water

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<sup>670</sup> Ibid., pp.33-34.

<sup>671</sup> Ibid., pp.28-29.

<sup>672</sup> Ibid., pp.36-39.

services will be evaluated. The aim of this study will be the application of pollution discharges, fines and incentives at the national level.<sup>673</sup>

The last component of the project is allocated for increasing public participation in the matters related to the Black Sea through access to information, stakeholder training and awareness raising. Therefore, institutional development of the NGOs in the region will be strengthened.<sup>674</sup>

It can be concluded that GEF support will be an important opportunity for the whole regime since the new project will be responding to land-based sources of pollution, marine living resources, biodiversity in terms of addressing the environmental challenges and to information gap from functional point of view. With its support to the Commission, Activity Centers and Advisory Groups it will be responding to the institutional and financial challenges of the regime.

### **3.2.4 Increasing Role of EU**

During the Cold War, West tried to persuade the USSR and its socialist allies to adopt stricter policies towards protecting environment and solving the transboundary environmental problems of West to which East contributed, which can not be solved without cooperation of Eastern block. Within this period of time, due to the secrecy of the world, West couldn't have been involved in solving the transboundary environmental problems of the East. However, it was after the collapse of Soviet socialism that led to the end of the Cold War, the West has begun to involve in solving the environmental problems of East that had a deteriorating affect on West since the former socialist countries had neither successful in solving their environmental problems alone, nor it would be possible to push them to protect their environment at a time of a turmoil. The opening of the former socialist countries system to world has led to the involvement of West in the East's protection efforts. The Western governments has become more increasingly involved in identifying, planning, subsidizing the environmental protection projects in the former USSR and

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<sup>673</sup> Ibid., pp.34-35.

<sup>674</sup> Ibid., pp.40-43.

the former Soviet block. They have started to subsidize the environmental protection in the Eastern block through a series of grants and loans.<sup>675</sup>

The Western enthusiasm towards protecting the environment of the East was not just a gesture but for economical considerations. Indeed, Western countries had relatively little interest in subsidizing the reduction of pollution in parts of the former USSR. They were interested in the problems that have a transboundary impact on them. It was due to the fact that western governments took all necessary measures within their territory to improve their environment till early 1990s, and it would be costly if they continue to take more aggressive measures for which great amount of investments would be necessary. Therefore, rather than making big investments, they preferred to invest on the more basic and less expensive environmental protection measures in former USSR and Eastern Europe countries, which became more advantageous for West.<sup>676</sup>

Since early 1990s, EU has supported the protection efforts in the Black Sea as well, whose problems were considered as transboundary. It was through its different funding mechanisms, the support of EU was in the form of institutional capacity building and strengthening through provision of equipment, preparation of several reports, raising education and public awareness in the former Soviet block.<sup>677</sup>

Till 2000, 10 million Euro was spent by EU for Black Sea and 40 million Euro for Danube. However, in the early 2000s, after the assessment of its earlier funding together with its strategy, EU has changed its strategy towards the Black Sea and Danube due to the enlargement process of EU, which has already made many of the Danube countries as the new EU Member States and will make some Black Sea States as EU Members very soon.<sup>678</sup> EU has started to involve more actively in the region, which offers new opportunities to the region.

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<sup>675</sup> Darst, "The Internalization of Environmental Protection in the USSR and Its Successor States", p.117.

<sup>676</sup> Ibid.

<sup>677</sup> Ibid.

<sup>678</sup> Commission of the European Communities, *Communication from the Commission*, p.3.

The strategic importance of the basin for EU has increased as 74% of the Danube catchment area lies within the EU after the full membership of Danube countries to EU, thereby making the Danube central axis of Europe. Besides, Bulgaria and Romania's accession to EU by 2007, and at a later date that of Turkey's, EU will have a long coastline in the Black Sea.<sup>679</sup> Therefore, Black Sea's environmental problems won't be a transboundary issue for Europe anymore, instead an internal problem which will necessitate more proactive approach. In other words, it will lead to a process of internalization of externalities. As a result of this policy formulation, the earlier perspective of the EU and the EU funding in 1990s, which considered the Black Sea as a transboundary environmental problem, is now on the verge of shift towards a more inclusive approach.

As part of the new strategy of EU, there are clear signs that indicate the increasing role of EU in the region. The European Commission has decided to take a more proactive role in the Black Sea as well as in Danube. Danube-Black Sea region has been identified by EU as a geo-political importance within the enlarged EU. Therefore, the EU accession process appears as a very significant opportunity for the Black Sea. European Commission calls both the EU Member States to include the Danube and Black Sea in their priorities for bilateral support and the international financial institutions to be more actively involve in the region as well as encourage the countries of the region to benefit from the EU funding mechanisms through projects that aimed at protection of Danube-Black Sea environment. European Commission is looking forward to extend its several funding mechanisms to include all countries of the region.<sup>680</sup>

Since large amount of nutrient is discharged from Romania, Commission attached particular attention to this country's efforts in protecting the Black Sea and Danube. European Commission took the initiative of establishing the DABLAS Task Force with a view to create a platform for cooperation between the Danube and Black Sea countries. This platform does not only aimed at creating common strategic goals but

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<sup>679</sup> Ibid., p.5.

<sup>680</sup> Ibid., p.22.

also it aimed to bring together the European Commission, interested EU Member States, the IFIs and bilateral donors to talk over the possibility of subsidizing the prioritized projects of the region.<sup>681</sup>

Apart from this, as a result of the EU accession strategy, there will be important benefits that will be achieved for the region in future. As part of accession strategy, the first group of benefits will be achieved as a result of the adoption and implementation of the EU Environmental Legislation by the accession countries in the Black Sea States, including Bulgaria, Romania and Turkey, which provides vigorous actions to be taken by them to achieve the EU environmental standards. It is due to the precondition for membership to EU for the candidate countries according to which the candidate countries must align their national laws, rules and procedures, including those relevant to the environmental sector, with those of the EU in order to give effect to the entire body of EU law contained in the *acquis communautaire*. This process, the so-called Approximation Process, which is described as a unique obligation of membership of the EU requires that all relevant EU Legislation is fully transposed into national legislation. Then, they are effectively implemented and enforced to ensure full compliance.<sup>682</sup> This means that the accession countries in the Black Sea should complete the approximation process in the field of environment for the full membership to EU, which will enable high level of protection of the environment in these countries. There will be environmental benefits, which will be achieved following the adoption, implementation and enforcement of the EU Environmental Legislation in the Black Sea States.

Secondly, as part of accession strategy, EU provides financial assistance to the accession countries towards development of infrastructures necessary for the implementation of the EU Environmental Legislation. This type of funding can be considered as a sign of shift in the strategy of EU, since the focus of funding is not narrowed with public awareness raising grants, but extended to the construction of the necessary environmental infrastructure.

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<sup>681</sup> Ibid.

<sup>682</sup> Carl Bro International, *Analysis of Environmental Legislation for Turkey*, (Denmark, 2002), p.11.

In terms of the first group of benefits as part of accession strategy, high environmental standards in the accession countries of the Black Sea Region will be achieved with the adoption, implementation and enforcement of EU Environment Legislation, which in turn will be reflected in the Black Sea. Today environmental policy is one of the most important and highly regulated areas of EU, even though it was not part of the Treaty of Rome, the treaty establishing the EC. At the beginning environmental protection was only a corollary of “good living conditions” enjoyed by all European Economic Community citizens, therefore the environmental legislation was narrow in scope only addressing the internal market measures. The environmental movements in 1970s and 1980s paved the way for EC to adopt the first Environmental Action Program (EAP)<sup>683</sup>, which in general puts forward the EU’s environmental policy objectives and the strategic tools for the realization of these objectives over a limited period of time. It was with the Single European Act (SEA) of 1987 after which the “environment” was introduced into the Treaty establishing the European Economic Community. With SEA, environmental policy was attempted to be made the integral part of all other policies including the economic, industrial, transport, energy, agricultural and social. Since 1990s environmental policy has been at the top of EU’s political and economic agenda. The Treaty of EU of 1992 acknowledges the importance of taking into account the environmental policy in the formulation and implementation of other EU policies. Following the pressure from Netherlands and the two new Nordic Member States, Finland and Sweden, the Treaty of Amsterdam of 1996 stipulates that environmental protection requirements must be integrated into the definition and implementation of the EC policies and activities, in particular with a view to promoting sustainable development.<sup>684</sup>

Today environmental protection is not considered as a tool for regulation of the internal market, instead it has become the core of all community policies and activities. As a result of the development of the EU environmental policy to such

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<sup>683</sup> The first four EAPs were adopted for four-year periods (1<sup>st</sup> EAP – 1973-1976; 2<sup>nd</sup> EAP – 1977-1981; 3<sup>rd</sup> EAP – 1982-1986; 4<sup>th</sup> EAP – 1987-1992). The 5<sup>th</sup> EAP was a much more comprehensive programme than previous EAPs whose objectives were set for a longer time period 1992-1999. The 6<sup>th</sup> EAP, which is currently in action, covers the period 2001-2010.

<sup>684</sup> Dinan, *Ever Closer Union*, pp.408-410.

extent, today there exists a huge environmental legislation covering directives, regulations, decisions, and recommendations and opinions among which the former group is the binding and the latter groups is the non-binding forms of EU Legislation. In this regard, the end result of approximation process for the EU accession countries in the Black Sea region will enable high level of protection of their environment and will lead to take more active and strict policies towards achieving the high level environmental standards of the EU.

An assessment made by European Commission puts forward ecosystem, health and economical benefits to be achieved from the full compliance of the EU candidate countries with the implementation EU Environmental Legislation.

**Table 3.10: Annual Benefits of Full Compliance by Media (million Euro)**

| Country  | Water |      | Waste |      |
|----------|-------|------|-------|------|
|          | Low   | High | Low   | High |
| Bulgaria | 160   | 435  | 20    | 680  |
| Romania  | 405   | 1250 | 85    | 2650 |
| Turkey   | 880   | 3400 | 77    | 1850 |

Source: ECOTEC, *The Benefits Of Compliance With The Environmental Acquis For The Candidate Countries Final Report*, (UK: Priestley House, 2001), p.54.

**Table 3.11: Annual Benefits of Full Compliance (per Capita & as % of GDP)**

| Country  | Ratios of Benefits of Full Compliance |      |                      |      |
|----------|---------------------------------------|------|----------------------|------|
|          | Benefits per Capita (Euro)            |      | Benefits as % of GDP |      |
|          | Low                                   | High | Low                  | High |
| Bulgaria | 36                                    | 273  | 2.5                  | 19.3 |
| Romania  | 57                                    | 436  | 4.0                  | 30.7 |
| Turkey   | 49                                    | 233  | 1.7                  | 8.2  |

Source: ECOTEC, *The Benefits Of Compliance With The Environmental Acquis For The Candidate Countries Final Report*, p.57.

**Table 3.12: Total Benefits over the Benefit Period until 2020 by Media (million Euro)**

| Country  | Water |       | Waste |       |
|----------|-------|-------|-------|-------|
|          | Low   | High  | Low   | High  |
| Bulgaria | 1580  | 4200  | 195   | 6620  |
| Romania  | 3960  | 12150 | 825   | 26300 |
| Turkey   | 8640  | 33200 | 750   | 18000 |

Source: ECOTEC, *The Benefits Of Compliance With The Environmental Acquis For The Candidate Countries Final Report*, p.58.

The benefits to be achieved from the implementation of the water related directives will amount to 160 million Euro for Bulgaria, 405 million Euro for Romania and 880

million Euro for Turkey annually with lowest scenario. Likewise, the benefits to be achieved from the implementation of the waste related directives will amount to 20 million Euro for Bulgaria, 85 million Euro for Romania and 77 million Euro for Turkey annually with lowest scenario.

Apart from the financial benefits to be achieved from full compliance, within the scope of this study, significant benefits will be obtained in terms of environmental protection. According the study, the fish stocks that are damaged by current pollution levels due to releases of heavy metals, excess fertilizers, untreated wastewater and pesticides will be protected. With the implementation of water related directives, the water quality will be improved, which in turn will improve the water based ecosystems such as the Danube Biosphere Reserve and the Black Sea.

Table 3.13: Estimated Reduction of Nitrogen-total and Phosphorus-total

| Country  | Nitrogen-reduction |    | Phosphorus-reduction |    |
|----------|--------------------|----|----------------------|----|
|          | kt/yr              | %  | kt/yr                | %  |
| Bulgaria | 12.1               | 47 | 2.4                  | 52 |
| Romania  | 27.8               | 41 | 5.3                  | 43 |

Source: ECOTEC, *The Benefits Of Compliance With The Environmental Acquis For The Candidate Countries Final Report*, p.168.

As a whole, there will be 47% nitrogen and 52% phosphorus reductions in Bulgaria and 41% nitrogen and 43% phosphorus reductions in Romania.

The implementation of the EU's water related directives will enable improved access to clean drinking water, bathing water and rivers by which up to 59 million households will be benefiting from improved drinking water quality and 10 million households will be benefiting from new connection to drinking water.<sup>685</sup>

<sup>685</sup> ECOTEC, *The Benefits Of Compliance With The Environmental Acquis For The Candidate Countries Final Report*, pp.69-70.

Table 3.14: River Quality Classification (% of rivers) Before and After Implementation of Water Directives

| Country  | Classification Before Compliance with Water Directives |      |      |     |          |           | Classification After Compliance with Water Directives |      |
|----------|--------------------------------------------------------|------|------|-----|----------|-----------|-------------------------------------------------------|------|
|          | Good                                                   | Fair | Poor | Bad | Very Bad | Data From | Good                                                  | Fair |
| Bulgaria | 25                                                     | 18   | 48   | 11  | -        | 1998      | 41                                                    | 59   |
| Romania  | 59                                                     | 26   | 6    | 9   | -        | 1999      | 85                                                    | 15   |

Source: ECOTEC, *The Benefits Of Compliance With The Environmental Acquis For The Candidate Countries Final Report*, p.44.

For instance, as a result of the improvement in river quality, the number of “good” quality rivers will be more than doubling in Bulgaria.

Waste management will be improved as a result of the implementation of EU’s waste related directives. The result will be less emissions of heavy metals and dioxins from incineration and less groundwater pollution from the illegal dumping of waste and from untreated waste.<sup>686</sup>

The implementation of the EU’s nature related directives will reduce the damage to habitats by securing many thousand hectares of valuable habitats and hundreds of endangered species.<sup>687</sup>

Therefore, significant benefits are expected to be achieved in the protection of the environment as a result of the adoption, implementation and enforcement of the EU Environmental Legislation all of which have direct positive impact on the Black Sea.

On the other hand, the other type of benefit that will be obtained as part of accession strategy is the EU’s significant amount of financial contributions to the accession countries in particular for infrastructure investments. For this purpose, the Instrument for Structural Policies for Pre-accession (ISPA) has been set up within the framework of enhanced pre-accession strategy, which aims to assist the candidate countries in preparing for accession during 2000-2006 that provides assistance to Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania,

<sup>686</sup> Ibid., p.70.

<sup>687</sup> Ibid.

Slovakia, and Slovenia, in the area of economic and social cohesion, concerning environment and transport policies. ISPA provides financial assistance to environmental projects that require large infrastructure investments for drinking water supply, wastewater treatment and solid waste management.<sup>688</sup>

Table 3.15: Total ISPA Contributions for Environment Sector, 2000-2003, (Euro)

| Country        | Number of Projects | ISPA Contribution |
|----------------|--------------------|-------------------|
| Bulgaria       | 17                 | 264 759 875       |
| Czech Republic | 15                 | 230 354 732       |
| Hungary        | 25                 | 332 644 554       |
| Romania        | 27                 | 649 018 428       |
| Slovakia       | 23                 | 186 956 539       |
| Slovenia       | 11                 | 46 941 144        |

Source: European Commission, *The Mini ISPA Report 2000-2003*, (Brussels, 2004), pp.11-20.

Within the period 2000-2003, significant amount of money is allocated to the EU accession countries for the construction of wastewater treatment plants, solid waste disposal sites, which will be completed in near future. 17 projects from Bulgaria that amount to around 265 million Euro and 27 projects from Romania that amount to 649 million Euro are involved in the ISPA project cycle. The number of projects will be increasing between 2004-2006 period due to the continuing support of the Commission under ISPA.<sup>689</sup>

European Commission has attached priority to the Black Sea and Danube Region in the selection of the projects.<sup>690</sup> Therefore, some of the projects related to construction of wastewater treatment plants and landfill construction are addressing the Black Sea coast of Bulgaria and Black Sea and Danube coast of Romania.

Another dimension of EU accession that can appear as a benefit for the Black Sea region is related with the possibility of EU's participation to the Bucharest Convention as a Contracting Party.<sup>691</sup> SEA authorized EU to enter into international agreements on environmental issues. Furthermore, the fourth EAP also called the EC

<sup>688</sup> European Commission, *The Mini ISPA Report 2000-2003*, p.4

<sup>689</sup> Ibid., pp.11-20.

<sup>690</sup> Commission of the European Communities, *Communication from the Commission*, p.24.

<sup>691</sup> Ibid., p.22.

to participate actively in the international stage to protect the environment, which led to the participation of EU to many international and regional conventions as a Contracting Party.<sup>692</sup> In line with this approach, EU has become a Party to the conventions related to protection of the marine and coastal environment of the seas in which it has a coastline and of the waters of the rivers, which is flowing within its borders.

Today, Black Sea Commission has granted observership status to European Commission.<sup>693</sup> However, as in Mediterranean, Baltic Sea and in North East Atlantic<sup>694</sup>, it is expected from EC to be a Contracting Party to the Bucharest Convention following the full membership of Bulgaria, Romania and Turkey to EU by which EU is expected to treat the Black Sea with a different strategy. The new strategy will be considering the Black Sea as a Sea of the Europe, which has already been started. EU's direct involvement in Black Sea will enable financing the region for the implementation of the Bucharest Convention's activities and pushing for adoption and implementation of stricter regulations to achieve high environmental standards in the Black Sea.

These are the benefits that will be obtained as part of EU membership of the Black Sea States, which can be considered as an important opportunity for the Black Sea in terms of improving its environment and providing the recovery. In addition to such type of involvement of EU, which has been involved in the region since 1990s, there exist other benefits from the involvement of EU in the region from a different strategic point of view. EU has been supporting the NIS involved in the region through TACIS and PHARE since 1990s.

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<sup>692</sup> Dinan, *Ever Closer Union*, p.419.

<sup>693</sup> Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

<sup>694</sup> To see the detailed list for the agreements related to protection of marine waters to which EC is a Contracting Party see Appendix F.

Table 3.16: TACIS Support to the Activities of BSEP

| Budget Year | Amount (Euro)          | Project                                                                       | End Date         |
|-------------|------------------------|-------------------------------------------------------------------------------|------------------|
| 1995        | 149 000                | Black Sea Pollution Monitoring                                                | 9 January 1997   |
| 1995        | 150 000                | Feasibility Study Reception Facilities Black Sea Ports                        | 23 April 1997    |
| 1995        | 1 500 000              | TACIS/PHARE 1995 Funds for the Black Sea Environmental Programme              | 18 December 1999 |
| 1996        | 18 000                 | Black Sea Environmental Programme                                             | 8 September 1997 |
| 1996        | 52 000                 | Batumi Dolphinarium                                                           | 6 March 1998     |
| 1996        | 1 600 000<br>2 000 000 | TACIS 1996 and 1997 Funds for the Black Sea Environmental Programme - Phase 1 | 8 November 1999  |
| 1997        | 3 000 000              | TACIS 1996 and 1997 Funds for the Black Sea Environmental Programme - Phase 2 | 1 January 2001   |

Source: Arcadis Euroconsult, *TACIS Regional Environment Programme*, p.A-6.

The EU has concluded Partnership and Cooperation Agreements with each one of the Newly Independent States through which it provides financial assistance. To date PHARE and TACIS have contributed about 18 million Euro to the Black Sea Environment Programme. It is with the new TACIS Regulation greater assistance on environmental pre-investment activities will be initiated for the Black Sea States including Georgia, Russia and Ukraine.<sup>695</sup>

<sup>695</sup> UNDP, *Project Document for Phase I*, p.173.

## CONCLUSION

The Black Sea environmental regime was established in 1992 with the participation of its coastal states including Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine with the aim of enabling recovery of the Black Sea ecosystem and protecting its environment from further deterioration.

Due to its serious environmental problems together with its unique characteristics, the Black Sea was regarded as an unrecoverable sea in 1990s. The major cause for the problems of the Black Sea is considered as the land based sources of pollution among which eutrophication deserves particular attention with the degree of the damage given to the Black Sea ecosystem. The other cause can be regarded as the ship-based pollution that leads to oil pollution or the problems that appear with the introduction of invasive exotic species to the Black Sea ecosystem. This leads to reduction in diversity and amount of fisheries and loss of biodiversity in the Black Sea. The ship-based pollution will seem to pose a serious threat in near future with the transportation of the Caspian oil to international markets via Black Sea. These environmental problems of the Black Sea are exacerbated with its unique peculiarities. Its isolation from the oceans, high amount of riverine input from the rivers in the drainage basin of the Black Sea, in particular from Danube and presence of poisonous hydrogen sulphide layer, which accounts for nine tenths of the Black Sea volume, combined to make the Black Sea a unique ecosystem.

While having such problems, it can be said that the Black Sea States were late in responding to the environmental degradation in the Region. Even though the first Regional Seas Programme was established in 1976 to manage the marine environment of the Mediterranean, the Black Sea environmental regime was established in 1992 with a sixteen years delay. The main reason behind the establishment of the regime that much late is considered as the international climate of Cold War, which shaped the foreign policy goals of the states surrounding the

Black Sea, thereby affecting the position of the Black Sea States, in particular USSR and Turkey in the international environmental politics. USSR as a superpower shaping the international system as well as the policies of Eastern bloc under the Cold War on one hand, and Turkey as a Western ally on the other, cooperated in a very limited scope during this period. In this respect, the international climate is regarded as the most remarkable disintegrative factor in the regime formation process in the Black Sea. Another factor behind the late establishment of the regime is considered as the poor degree of value attached to environment by the Black Sea States. USSR even though the militarily one of the most powerful and economically one of the most largest one in the world, had so much focused on military and economic development to endure its position as a superpower. On the other hand, Turkey focused on its economic development for which it couldn't have made environmental protection a prior issue in the national agenda. In this context, neither USSR nor Turkey who can be regarded as possible candidates as pushers for a regime formation in the Black Sea, couldn't fill this vacuum. UNEP, as the founder of regional seas programmes, couldn't act as a pusher in the Region as well. Since existing scientific knowledge about the state of the Black Sea environment couldn't have been shared among the Black Sea States due to the secrecy under the Cold War, a common understanding couldn't have been reached, which therefore couldn't be an integrative factor for regime formation in the Black Sea. It was only after the end of the War, the Black Sea States have come together to save their Sea. In that sense, the international climate can be considered as the most significant integrative factor for the establishment of a regime in the Black Sea. The exchange of the existing information among the Black Sea States and the role of epistemic communities of the Black Sea States in the transmission of this information to the decision-makers combined to build the political will in those States in inclining towards protecting their common environment. With considerable support from GEF, the region turned from a latecomer to an innovator.

The regime was established with the adoption of the Bucharest Convention in 1992 as the main framework of the regime, by which the Black Sea States committed to protect the Black Sea ecosystem and to enable its recovery. The Convention together with its four Protocols including Land-based Protocol, Emergency Protocol,

Dumping Protocol, and Biodiversity and Landscape Conservation Protocol addressing the specific environmental problems of the Sea, formed the legal basis of the regime. However, even though the legal basis of the regime was established in 1992, the Black Sea States, in particular the ones with economies in transition, having economic problems and low administrative capacities, couldn't have initiated the process of converting the commitments laid down by the Bucharest Convention into action. Due to such difficulties, upon the request of the Contracting Parties of the Bucharest Convention, GEF had supported the regime between 1993-1998 in the preparation of the policy instruments as well as forming the basis of the regime. This support was further strengthened with parallel funding from the European Commission and other donors. It was with the support of GEF, the policy actions were determined with the adoption of BS-SAP in 1996, four years after the adoption of Bucharest Convention. Before than this, the Odessa Declaration was adopted in 1993 as an interim action plan that can be considered to fill the gap between the Bucharest Convention and BS-SAP. The latter laid down the actions to be realized by the Black Sea States in specified time frames. The Action Plan can be considered as a road map for the Black Sea States to achieve recovery of the Black Sea ecosystem.

For the implementation of Bucharest Convention, the Black Sea Commission is designed as the decision-making body of the regime, which is technically supported by Activity Centers and Advisory Groups in thematic areas for application of ICZM, conservation of biodiversity, management of marine living resources, control of land-based sources of pollution, monitoring and assessment of marine pollution, and promotion of environmental safety for shipping in the Black Sea. Complementary to the activities of the Black Sea Commission together with its Activity Centers and Advisory Groups, BSEP was designed as a subsidiary body to the Commission in order to execute donor supported projects in line with the requirements of the Commission.

A permanent secretariat for the regime couldn't have been established till 2000. Within this period, due to lack of a permanent coordination mechanism, GEF's PIU acted as *de facto* Secretariat of the Black Sea Commission for the coordination of the

activities at the regional level. After the establishment of the Permanent Secretariat of the Commission, the regime has entered to a new era by which a regular budget for the Commission is established as well as new projects has started to be executed under BSEP to support the activities of the Commission. The Activity Centers and Advisory Groups, whose activities were impeded due to poor funding of the regime between 1998-2000, has been re-launched.

In this regime, many challenges have been observed affecting its well functioning, which in turn does not enable elimination of the environmental problems of the Sea. The most significant challenge for the regime is regarded as the lack of a sustainable financial mechanism. Due to the funding problems, the Permanent Secretariat could have been established eight years after the adoption of the Bucharest Convention. The Regional Activity Centers couldn't have fulfilled their tasks at desired levels, which could have operated only with the support from GEF and other international donors. The previous GEF support enabled the formation of the basis of the Black Sea environmental regime after the completion of which it was expected from the Black Sea States to give further support to the regime. Even though a budget for the Black Sea Commission has been established after the opening of the Secretariat, national contributions are still far from sustainability. Fortunately, GEF and EU have recently begun to support the regime through initiating new projects. However, the future funding from international donors hasn't been clear yet. The regime does not seem to function in future without donor support or without a sustainable finance mechanism for the regime.

Another challenge is related with the institutional design of the regime. The Black Sea States choose decentralized model in which UNEP was not directly incorporated into the regime to function as the secretariat for coordination of the activities at the regional level. UNEP, in the ones if allowed, operates as the secretariat from the very beginning of the regimes by incorporating UN system into it, thereby enabling establishment of a permanently functioning coordination mechanism since the initiation of the regime. Instead, the Black Sea States decided to establish a permanent secretariat to be formed from the nationals of the Black Sea States, which was however established eighth years after the adoption of the Convention, that

hindered coordination of the activities at the regional level. Even though the secretariat is established, the regional coordination system still cannot function properly. It can be concluded that if UNEP were allowed to operate the secretarial functions, the regime would have a functioning coordination mechanism from the very beginning of the initiative. Another challenge observed in the institutional structure is related with the design of the Activity Centers, which are based on existing national institutions. Such an institutional design had two-fold drawbacks one of which was that the Black Sea States made changes in their Activity Centers by moving them from one national institution to another, which hindered sustainability of their operations. Another drawback of such a design was that extra budget and staff couldn't have been allocated by the Black Sea States to their national institutions to function as Activity Centers, both of which are continuing to be problems for the sustainable and effective functioning of the Activity Centers. Due to existence of such a design, the RACs are still far from being "centers of excellence".

The full and effective functioning of the regime is affected with the presence of challenges one of which is the weak political support given by the Black Sea States to the regime. The rules for participation of higher-level decision-makers, in particular ministers, to the regime can be considered as weak. The meetings of the ministers are to be held every five years in the Black Sea environmental regime, while the general application foresees organization of such meetings for every two years. The Meetings of the Black Sea Commission, which are to be held at least once in a year, can be regarded to fill this gap. However, there is not continuity in participation to these meetings. Furthermore, low-level participation to higher-level meetings is very common. There are problems with official authorization of focal points and Activity Centers due to which well functioning of Activity Centers and continuous work of Advisory Groups are hampered. Participation to the budget of the Black Sea Commission and adoption of new legal documents by the Black Sea States are not at desired levels as well. All of these factors are regarded as sign of poor political will in the Black Sea States in supporting the regime.

The data in the regime is either not available or not reliable due to which analysis regarding the state of the environment of the Black Sea cannot be made and

effectiveness of the regime cannot be assessed. There is not a regular reporting mechanism in the assessment of the state of the Black Sea environment and the activities of RACs. Therefore, the progress in the recovery of the Black Sea environment or the further deterioration cannot be assessed, which creates a vacuum in the determination of the next step to be taken by the Black Sea States. Likewise, the compliance of the RACs and the Black Sea States cannot be assessed.

There are problems with the use of the common language in the regime, which hinders the communication with the members of the regime and negatively affects the success of the meetings of Advisory Groups. The poor communication and exchange of information among the members of the regime impedes reaching a common understanding for the protection of the Black Sea at regional level, which therefore appears as a challenge to the regime.

The less flexible rules of the regime appear as a limiting factor for its further development. The presence of reservation in the Bucharest Convention, the poor compliance mechanism, the unanimity rule in decision-making combined to make the regime less flexible, which in turn does not enable it to function effectively.

Fortunately, there are promising developments taking place that can contribute to handling of the challenges in the regime. The land-based sources of pollution are affecting the Black Sea ecosystem to a considerable degree to which the contribution of the Danube River to this problems is remarkably high. Even if this is the case, the Danube countries are not the part of the Black Sea environmental regime, which in turn hinders the effectiveness of it. Therefore, in the alleviation of this problem, a basin wide approach is necessary, which can only be achieved in cooperation with the Danube countries. In this regard, the recently established Danube-Black Sea partnership, which aims to protect the Black Sea from its further deterioration through Danube, is of crucial.

The international environmental policy is changing by time to increase the effectiveness of earlier policies in order to provide more protection. Therefore, respond of the regimes to the developments, to the changing global environmental

regimes is important to make them more effective. The Black Sea environmental regime can be considered as responsive to these developments since either the new legal instruments are elaborated in line with the new global policies or the existing legal instruments are under revision to make them parallel with the current global policies in the field of environment. While the first track of the regime, the Bucharest Convention has the approach of Stockholm, interestingly it is the first regional seas regime that takes up the challenges of Rio Conference by the Odessa Declaration and further with BS-SAP in which sustainable development has become the core principle of the regime. The recently adopted new Black Sea Biodiversity and Landscape Conservation Protocol is the reflection the Rio approach as well. Furthermore, the two other Protocols including the Dumping Protocol and the Land based Protocol are under consideration to make them in line with the global rules and standards since the current Protocols are far behind the revised global regimes.

Adoption of new regional legal instruments by the Black Sea States appears as another opportunity for the regime since each adopted new legal instrument enables to address an environmental problem. The Black Sea Contingency Plan, adopted in 2003, addresses the oil pollution problem in the Black Sea in particular in cases of emergency by which the framework of cooperation is drawn. There are ongoing studies for the adoption of a new legally binding instrument for the management of marine living resources, in particular fisheries. The main problem in the Black Sea has been lack of such a management mechanism for the fisheries sector, whose studies have been going for years. Therefore, the process for adoption of a legally binding document can be considered to be at a very promising stage. It was due to the exotic species, which deteriorated the Black Sea ecosystem in 1980s, the Black Sea was called as the most invaded marine environments in the world. The endorsement of adoption of a regional action plan to minimize the transfer of harmful aquatic organisms and pathogens in ships' ballast water, which defines the policy actions to be realized by the Black Sea States, can be considered as another opportunity in addressing this problem in a more comprehensive manner. Therefore, adoption of such legal instruments is highly crucial in terms of controlling, reducing and preventing the environmental problems of the Black Sea.

The regional regimes for managing marine environments may not cover all aspects of the pollution. Therefore, if Contracting Parties of the regimes become party to the global environmental agreements, the states are bound with the rules by which the rules and standards defined by these agreements become applicable in the region for the Parties. Among the international agreements with such positive impact to the Black Sea environment, the ones that deserves particular attention are 1982 UNCLOS, 1973/78 MARPOL Convention, 1989 Basel Convention, 1990 OPRC, 1992 Convention on Biological Diversity and 2004 International Convention for the Control and Management of Ships' Ballast Water and Sediments, all of which addresses the environmental problems that are either not covered under the Bucharest Convention or covered in an incomplete manner.

Funding problems as well as low administrative capacities of the Black Sea States have always been a problem for the regime since its initiation. It is due to such difficulties, GEF had supported the regime between 1993-1998 to initiate the Bucharest process. There was not a GEF support between 1999-2002 and regional implementations for this period revealed that the regime couldn't sustain properly without the support of international donors in particular GEF. In this regard, the new GEF project started in 2002, which will continue till 2007 will be an opportunity in terms of addressing the environmental problems of the Black Sea as well as promoting the functioning of the regime.

EU has been involved in the Black Sea after the end of Cold War. The initial approach of EU was to eliminate the transboundary environmental problems of the Black Sea due to which the scope of support of EU was narrow. However, with the start of accession process for Bulgaria, Romania and Turkey, the strategy of EU has changed, as the Black Sea is no more considered as a transboundary environmental problem. Rather, the Black Sea will become the sea of EU. The EU accession process appears as an opportunity by which two-fold benefits for the regime can be obtained. First of all, as part of accession process, high environmental standards of EU will be achieved in the accession countries as a result of approximation of EU Environmental Legislation with that of their Legislation. Secondly, EU has been financially contributing to accession countries during their accession process to

enable rapid completion of the process and most of this support is channeled for the protection of the Black Sea environment in particular to Romania. Apart from the benefits to be achieved from EU accession process, EC can become a Party to the Bucharest Convention, thereby pushing for stricter regulations for its adoption and implementation by the Black Sea States. In this regard, increasing role of EU in the Black Sea appears as a significant opportunity for the regime.

On one hand, among all the challenges, the funding problems lie at the heart of the Black Sea environmental regime. Due to poor funding, the regime couldn't stand in the past and does not seem to stand alone in near future after the completion of donor supported projects. On the other hand, the major opportunity for the regime can be considered as the increasing role of EU in the Black Sea.

Without considering the opportunities, with the current challenges in the regime, the recovery of the Black Sea does not seem to be possible. First of all, the Black Sea States have to increase their political support to the regime. The functioning of the Secretariat and the Activity Centers should be strengthened. Furthermore, the degree of flexibility of the rules should be increased. This will lead to effective functioning of the regime, thereby enabling handling of environmental problems of the Sea.

Even though there are opportunities for the regime, the point is that the opportunities must be effectively used by the Black Sea States to handle the challenges of the regime. If the Danube-Black Sea partnership becomes a loose framework of cooperation, the efforts of the Black Sea States in the alleviation of the land-based sources of pollution will be vain. Even if the legal instruments of the regime are revised or adopted in line with the recent global environmental policy, if they not effectively implemented, the prevention and control of the pollution in the Black Sea and its protection cannot be provided. If the support of GEF cannot be utilized properly, neither the basis of a well functioning regime nor recovery of the Black Sea ecosystem will be possible.

There were integrative and disintegrative factors that played role in the regime formation process of the Black Sea. However, the regimes are not confined to regime formation processes. The important point about the regimes is that they are not temporary arrangements, but designed as a process with the aim of being permanent. However with the current challenges, the future existence of the Black Sea environmental regime is doubtful. Unless the challenges are addressed by the Black Sea States as well as the opportunities are effectively utilized, the regime seems to fail in future to achieve its establishment purpose: recovery of the Black Sea ecosystem. The regime has been supported by international donors, which enables its functioning as well as existence. However, the future support hasn't been clear yet. After the establishment of the regime, Turkey took the initiative of establishing the regime in Turkey and supported the regime financially, by which it can be considered as a leader in the region. However this type of support is insufficient for further existence of the regime. The real opportunity will seem to be the EU accession processes of Bulgaria, Romania and Turkey through which high environmental standards will be obtained and economical conditions will get better in these states, which in turn can directly contribute to the recovery efforts in the Black Sea. The EU with its high environmental standards as well as living conditions will seem to fill the vacuum that is possible to appear with the completion of the international donor support.

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## APPENDICES

### APPENDIX A

#### TRANSPORTATION ROUTES FOR CASPIAN OIL

Table A.1: The Transportation Routes of Oil from Caspian Region to International Markets

| Direction | Location                       | Destination                                                   | Carrying Capacity<br>million tons /<br>year            | Situation                                     |
|-----------|--------------------------------|---------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------|
| West      | AIOC* Early Western Route      | Baku (Azerbaijan) – Supsa (Georgia)                           | Existing: 5<br>Max: 11                                 | Functioning since April 1999.                 |
|           | AIOC, Main Export Route        | Baku (Azerbaijan) – Tbilisi (Georgia)-Ceyhan (Turkey)         | 50                                                     | Oil will begin to flow by 2005.               |
|           | Trans - Caspian                | Kazakhstan–Baku–Ceyhan                                        | 50                                                     | Feasibility study.                            |
|           | CPC                            | Tengiz (Kazakhstan) – Novorossiisk (Russia)                   | 1 <sup>st</sup> Phase: 28<br>2 <sup>nd</sup> Phase: 67 | Functioning since November 2001.              |
| North     | AIOC Early Northern Route      | Baku (Azerbaijan) – Novorossiisk (Russia)                     | Existing: 5<br>Max: 17                                 | Functioning since 1997.                       |
|           | Northern Route                 | Baku (Azerbaijan) – Dağıstan (Russia) – Novorossiisk (Russia) | 30                                                     | Not functioning.                              |
| South     | Kazakhstan –China              | Kazakhstan – China                                            | 20-40                                                  | Feasibility: 1999                             |
|           | Southern Route                 | Kazakhstan-Turkmenistan-Afghanistan - Pakistan                | 50                                                     | Protocol.                                     |
|           | Iran- Azerbaijan               | Baku (Azerbaijan) – Tebriz (Iran)                             | ?                                                      | Proposal.                                     |
|           | Kazakhstan – Turkmenistan-Iran | Tengiz (Kazakhstan) – Turkmenistan–Iran Gulf                  | 25 – 75                                                | Initiated, capacity will be increased by 2003 |

♦ Azerbaijan International Operating Company

Source: Pamir, *Baku – Ceyhan Boru Hattı*, p.101; <http://www.eia.doe.gov/emeu/cabs/caspian.html>.

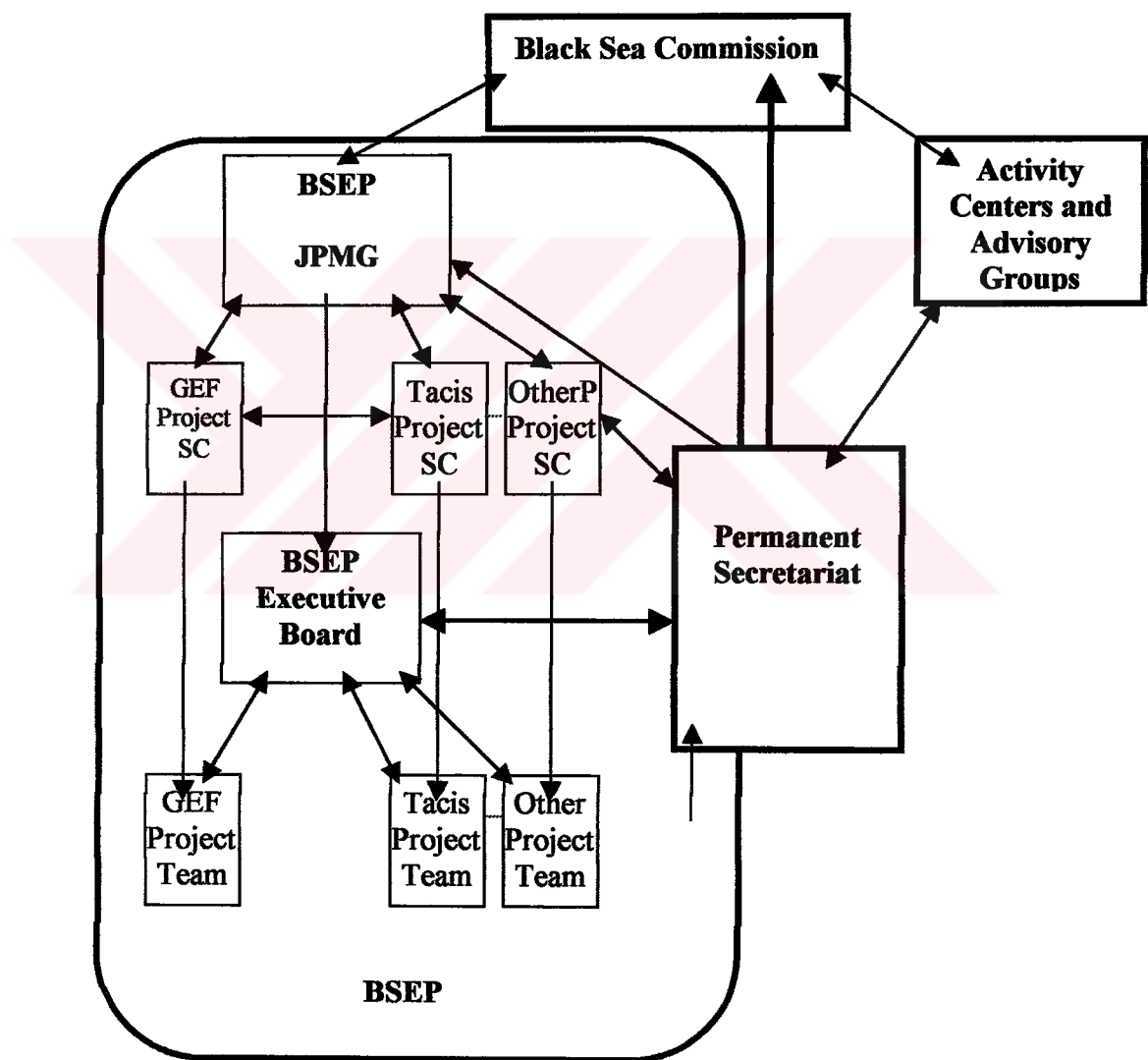
Table A.2: Bosphorus By-Pass Options

| Location                  | Destination                                                      | Pipeline (km) | Carrying Capacity million tons / year | Situation                                                                                                                             |
|---------------------------|------------------------------------------------------------------|---------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| AMBO                      | Burgas (Bulgaria)<br>-<br>Vlore (Albania)                        | -             | 30-40                                 | The feasibility study of this project proposal was completed in 2002 and it is expected to function by 2008.                          |
| Burgas-Alexandroupolis    | Burgas (Bulgaria)<br>-<br>Alexandroupolis (Greece)               | 320           | 30-40                                 | After the agreement made among Bulgaria, Russia and Greece in 1997, a feasibility study was made in 1998, which will be remade again. |
| South East European Route | Constanza (Romania) –<br>Omialj (Croatia)-<br>Trieste (Italy)    | 1600          | 30-40                                 | Feasibility will be completed by the end of 2004.                                                                                     |
| Ukraine                   | Odessa (Ukraine) –<br>Brody<br>(Russian Druzhba Pipeline System) | 670           | 30-40                                 | Completed 2001.                                                                                                                       |

Source: Pamir, *Bakū – Ceyhan Boru Hattı*, p.102.

## APPENDIX B

### THE INSTITUTIONAL MACHINERY



Source: UNDP, *Project Document for Phase I*, p.106.

Figure B.1: The Scheme of the Black Sea environmental regime

## APPENDIX C

### DETAILED BUDGET OF THE BLACK SEA COMMISSION

Table C.1: Share of the Costs in the Budget of the Black Sea Commission for the Fiscal Year, (%)

| Costs                                                                | 2000-2001 | 2001-2002 | 2002-2003 | 2003-2004 |
|----------------------------------------------------------------------|-----------|-----------|-----------|-----------|
| 1. Operational costs                                                 |           |           |           |           |
| 1.1 <u>Purchase and maintenance of equipment</u>                     |           |           |           |           |
| 1.1.1 Office furniture, upholstery, carpeting                        |           |           |           |           |
| 1.1.2 All other office equipment                                     |           |           |           |           |
| 1.2 <u>Communication charges</u>                                     |           |           |           |           |
| 1.2.1 Telephone, fax, postage                                        |           |           |           |           |
| 1.3 <u>Purchase or subscriptions of books, newspapers, magazines</u> |           |           |           |           |
| 1.4 <u>All kind of stationary</u>                                    | 10        | 10.47     | 9.09      | 15.05     |
| 1.5 <u>Temporary assistance (Miscellaneous)</u>                      |           |           |           |           |
| 1.5.1 Interpretation or translation                                  |           |           |           |           |
| 1.5.2 Secretarial work                                               |           |           |           |           |
| 1.5.3 Consultancy                                                    |           |           |           |           |
| 1.5.4 Expertise                                                      |           |           |           |           |
| 1.5.5 Vehicle renting                                                |           |           |           |           |
| 1.6 <u>Representation</u>                                            |           |           |           |           |
| 1.7 <u>Unforeseen costs</u>                                          |           |           |           |           |
| 2. Personnel costs                                                   |           |           |           |           |
| 2.1 <u>Salaries, wages, medical/social</u>                           |           |           |           |           |
| 2.1.1 Director                                                       |           |           |           |           |
| 2.1.2 Officer                                                        | 49        | 35.81     | 41.86     | 57.40     |
| 2.1.3 Accountant (half time)                                         |           |           |           |           |
| 2.1.4 Secretary                                                      |           |           |           |           |
| 2.1.5 Medical/social insurance                                       |           |           |           |           |
| 3. Activities included in the Work Programme                         |           |           |           |           |
| 3.1 <u>Meetings</u>                                                  |           |           |           |           |
| 2.2.1 Transportation                                                 |           |           |           |           |
| 2.2.2 Per-diems                                                      |           |           |           |           |
| 2.2.3 Representation                                                 | 41        | 53.72     | 44.23     | 27.55     |
| 3.2 <u>Publications</u>                                              |           |           |           |           |
| 3.1.2 Secretarial documents, meeting reports                         |           |           |           |           |
| 3.1.2 Information and promotional material                           |           |           |           |           |
| 3.1.3 Annual report (yearbook), maps, card, etc                      |           |           |           |           |
| TOTAL BUDGET                                                         | 363 000   | 363 000   | 363 000   | 261 360   |

Source: Black Sea Commission, Reports of the 7<sup>th</sup> Meeting, 8<sup>th</sup> Meeting, 9<sup>th</sup> Meeting of the Commission on the Protection of the Black Sea Against Pollution, Minutes of the 10<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution.

## APPENDIX D

### IMPLEMENTATION OF BS-SAP

Table D.1: Implementation of BS-SAP at National Level

| Policy Actions                                                                                    | Deadline                        | Developments                                                                                                                 |
|---------------------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>A. Reduction of Pollution</b>                                                                  |                                 |                                                                                                                              |
| <i>Land-based Sources of Pollution</i>                                                            |                                 |                                                                                                                              |
| <b>High Priority Point Sources</b>                                                                |                                 |                                                                                                                              |
| Development of a List of Hot-spots                                                                | -                               | Developed for all; Published only for Turkey and Ukraine, needs revision.                                                    |
| National Strategies and Timetables for Reductions of Inputs of Pollutants from Hot-Spots          | -                               | -                                                                                                                            |
| National Progress Reports in Addressing the Identified Hot-Spots                                  | in 2000                         | -                                                                                                                            |
| <b>Regulation of Point Sources</b>                                                                |                                 |                                                                                                                              |
| National Studies on the Discharges of Insufficiently Treated Sewage                               | January 2000                    | -                                                                                                                            |
| Reduction of Inputs of Insufficiently Treated Sewage from Large Urban Areas                       | by 2006                         | -                                                                                                                            |
| Adoption of Laws and Mechanisms for Regulating Discharges from Point Sources                      | by 1999                         | +                                                                                                                            |
| Adoption of Enforcement Mechanisms                                                                | by 1999                         | + (ineffective)                                                                                                              |
| <i>Vessel Source Pollution</i>                                                                    |                                 |                                                                                                                              |
| Installation of Harbour Reception Facilities;<br>a) For Garbage<br>b) For Oil<br>c) For Chemicals | by Decemb. 1999<br>2000<br>2002 | Established in some Black Sea states for garbage and oil but not for chemicals, more investment and modernization is needed. |
| <i>Pollution From Dumping</i>                                                                     |                                 |                                                                                                                              |
| Total Ban on the Disposal of Municipal Garbage                                                    | by Dec. 1996                    | Done by all Black Sea States, not properly addressed at the regional level.                                                  |
| Development of a Plan on Setting Out How the Enforcement of the Ban to Obtain                     | by Dec. 1999                    | -                                                                                                                            |
| <i>Contingency Planning and Emergency Response</i>                                                |                                 |                                                                                                                              |
| Adoption of National and Local Contingency Plans                                                  | by Dec. 1998                    | -                                                                                                                            |
| National agencies are adequately staffed and that the necessary resources are available to them   | -                               | -                                                                                                                            |

Table D.1: Implementation of BS-SAP at National Level (cont.)

| Policy Actions                                                                                            | Deadline       | Developments                              |
|-----------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------|
| <b>B. Living Resources Management</b>                                                                     |                |                                           |
| <i>Commercially Exploited Resources</i>                                                                   |                |                                           |
| Development of Pilot Projects for the Restoration of Areas Vital to the Recovery of Black Sea Fish Stocks | by 2000        | +                                         |
| <i>Biological Diversity Protection</i>                                                                    |                |                                           |
| A Ban on the Hunting of Marine Mammals                                                                    | -              | +                                         |
| Strengthening national centers and sanctuaries for the Rehabilitation of Marine Mammals                   | -              | -                                         |
| <i>Protection of Habitat and Landscape</i>                                                                |                |                                           |
| Designation of New Conservation Areas                                                                     | -              | -                                         |
| Adoption of National Laws, Regulations and Planning Instruments for the Protection of Conservation Areas. | by 2000        | +                                         |
| Development of Public Awareness Campaigns                                                                 | -              | +                                         |
|                                                                                                           |                | (Done through TACIS)                      |
| <b>C. Sustainable Human Development</b>                                                                   |                |                                           |
| <i>EIA</i>                                                                                                |                |                                           |
| Adoption of Criteria for EIA                                                                              | by 1998        | +                                         |
| Compulsory Environmental Audits                                                                           | -              | +                                         |
|                                                                                                           |                | (Except Ukraine & Russia)                 |
| <i>ICZM</i>                                                                                               |                |                                           |
| Adoption of the Relevant Legal and Other Instruments for ICZM                                             | by 1999        | +                                         |
|                                                                                                           |                | (not directly addressing ICZM as a whole) |
| Establishment of Inter-sectoral Committees for ICZM                                                       | by end of 1997 | -                                         |
| <i>Development of Sustainable Aquaculture and Tourism</i>                                                 |                |                                           |
| Development of Legislation for Regulation of Aquaculture                                                  | -              | -                                         |
|                                                                                                           |                | (some norms exists in Turkey)             |
| Implementation of Pilot Projects on Eco-tourism                                                           | -              | -                                         |
| Development of Environmental Codes of Conduct in Sustainable Tourism                                      | -              | -                                         |
|                                                                                                           |                | (Except Russia and Ukraine by TACIS)      |
| Development of Training Courses in Sustainable Tourism                                                    | -              | -                                         |
| <i>Involving the Public in Environmental Decision-Making</i>                                              |                |                                           |
| Adoption of Rules on Right of Access to Environmental Information                                         | by 2000        | +                                         |
|                                                                                                           |                | (in some countries not at desired level)  |
| Publication of Popularized Version of BS-SAP                                                              | -              | +                                         |
|                                                                                                           |                | (only in English, Russian and Ukrainian)  |
| Development of an Educational Information Package for Schools                                             | -              | -                                         |
| Preparation of a Mobile Exhibition                                                                        | -              | +                                         |
| Development of a Black Sea CD-ROM                                                                         | -              | +                                         |
|                                                                                                           |                | (needs development)                       |
| Information on State of the Bathing Water                                                                 | in 1998        | -                                         |
| Development and Publication of A Colour Coding System for Bathing Water Quality Maps                      | January 1999   | -                                         |
|                                                                                                           |                | (Except Turkey)                           |

+ = done; - = not done yet.

Source: Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*; Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

Table D.2: Implementation of BS-SAP at Regional Level

| Policy Actions                                                                                                                         | Deadline     | Developments                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------|
| <b>A. Reduction of Pollution</b>                                                                                                       |              |                                                                         |
| <i>Land-based Sources of Pollution</i>                                                                                                 |              |                                                                         |
| <i>Rivers</i>                                                                                                                          |              |                                                                         |
| Development of a Black Sea Basin Wide Strategy on Eutrophication                                                                       | -            | Developed; not adopted                                                  |
| <i>Airborne Pollution</i>                                                                                                              |              |                                                                         |
| Assessment of the Magnitude of Airborne Pollutants in Transboundary Movements                                                          | by 1999      | -                                                                       |
| <i>High Priority Point-Sources</i>                                                                                                     |              |                                                                         |
| Development of a Regional Progress Reports in Addressing the Identified Hot-spots                                                      | in 2001      | -                                                                       |
| <i>Regulation of Point Sources</i>                                                                                                     |              |                                                                         |
| Harmonization of Water Quality Objectives                                                                                              | mid-1998     | Draft was developed in needs elaboration and adoption.                  |
| Harmonization of Procedures used for Monitoring the Discharge of Effluent at Point Sources                                             | mid-1998     | -                                                                       |
| <i>Vessel Source Pollution</i>                                                                                                         |              |                                                                         |
| Effective implementation of MARPOL 1973/78                                                                                             | by 2002      | -                                                                       |
| Adoption of a Memorandum of Understanding on Port State Control                                                                        | by Dec. 1998 | Adopted in 2000. (Russia and Ukraine didn't signed)                     |
| Adoption of a Harmonized System of Enforcement to Control Illegal Discharges                                                           | by Dec. 1998 | -                                                                       |
| In-Depth Study on Measures to Avoid any Further Introductions of Exotic Species into the Black Sea through the Deballasting of Vessels | in 1997      | A feasibility project proposal is expected to be submitted for support. |
| <i>Pollution from Dumping</i>                                                                                                          |              |                                                                         |
| Measures to Control Dumping Activities                                                                                                 | -            | -                                                                       |
| Determination of Concentration Levels for Trace Contaminants in Dredged Spoils                                                         | by Feb. 1998 | -                                                                       |
| Revision of Dumping Protocol                                                                                                           | -            | -                                                                       |
| <i>Waste Management</i>                                                                                                                |              |                                                                         |
| Development and Implementation of Environmentally Sound Waste Management Policies                                                      | -            | -                                                                       |
| <i>Transboundary Movement of Hazardous Wastes</i>                                                                                      |              |                                                                         |
| Adoption of a Protocol Concerning the Transboundary Movement of Hazardous Wastes and Cooperation in Combating Illegal Traffic Thereof  | A.S.A.P.     | -                                                                       |
| <i>Contingency Planning and Emergency Response</i>                                                                                     |              |                                                                         |
| Adoption of a Black Sea Strategy for Contingency Planning and Emergency Response                                                       | by Dec. 1997 | +                                                                       |
| Adoption of a Black Sea Contingency Plan                                                                                               | by Dec 2000  | Adopted on 27 October 2003.                                             |
| <i>Assessment and Monitoring of Pollutants</i>                                                                                         |              |                                                                         |
| Publication of a "State of Pollution of the Black Sea" Report                                                                          | in 1996      | -                                                                       |
| Establishment of a Black Sea Monitoring System                                                                                         | by 1998      | Established; fully in force by 2005.                                    |
| Development of a Uniform Measurement Technique for Bathing Water Quality                                                               | 1997         | -                                                                       |
| Compilation of Data on Discharge Measurements for Point Sources, Rivers and Diffuse Sources                                            | in 1996      | -                                                                       |
| <b>B. Living Resources Management</b>                                                                                                  |              |                                                                         |
| <i>Commercially Exploited Resources</i>                                                                                                |              |                                                                         |
| Adoption of Fisheries Convention                                                                                                       | A.S.A.P      | -                                                                       |

Table D.2: Implementation of BS-SAP at Regional Level (cont.)

| Policy Actions                                                                     | Deadline     | Developments                          |
|------------------------------------------------------------------------------------|--------------|---------------------------------------|
| <i>Biological Diversity Protection</i>                                             |              |                                       |
| Adoption of Protocol on biological diversity and Landscape Protection              | by 2000      | Adopted in 14 June 2002.              |
| Preparation and Publication of a Regional Black Sea Red Data Book                  | by Dec. 1998 | +<br>(needs revision)                 |
| Regular Assessment of Population of Marine Mammals                                 | in 1998      | -                                     |
| Development of a Strategy for the Reduction of By-Catches of Marine Mammals        | -            | -                                     |
| <i>Protection of Habitat and Landscape</i>                                         |              |                                       |
| Adoption of a Regional Strategy for Conservation Areas                             | Mid-1998     | -                                     |
| Development of Public Awareness Campaigns                                          | -            | -                                     |
| <b>C. Sustainable Human Development</b>                                            |              |                                       |
| <i>EIA</i>                                                                         |              |                                       |
| Harmonization of Criteria for EIA                                                  | by 1999      | -                                     |
| <i>ICZM</i>                                                                        |              |                                       |
| Development of a Regional Black Sea Strategy for ICZM                              | by Dec. 1998 | Developed; needs revision             |
| A Survey of Coastal Erosion Problems                                               | by 1998      | -                                     |
| <i>Development of Sustainable Aquaculture and Tourism</i>                          |              |                                       |
| Development of Common Norms for Development of Sustainable Aquaculture and Tourism | by 1999      | -                                     |
| Conduct of Feasibility Study on Sustainable Aquaculture                            | -            | -                                     |
| Promotion of Eco-tourism                                                           | -            | -                                     |
| <i>Involving the Public in Environmental Decision Making</i>                       |              |                                       |
| Involvement of Municipalities in Implementation of BS-SAP                          | -            | -                                     |
| Cooperation with Municipalities                                                    | -            | -                                     |
| Involvement of NGOs in Regional Policies                                           | -            | +<br>(however financial difficulties) |
| Participation of NGO Forum to Black Sea Commission as an observer                  | -            | +                                     |
| Preparation of a Black Sea Position Paper on Public Involvement to Decision-Making | -            | -                                     |

+ = done; - = not done yet.

Source: Black Sea Commission, *Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea*; Black Sea Commission, *Report of the 7<sup>th</sup> Meeting of the Black Sea Commission on the Protection of the Black Sea Against Pollution*.

## APPENDIX E

### STATUS OF RATIFICATION OF SELECTED MULTILATERAL ENVIRONMENTAL AGREEMENTS BY THE BLACK SEA STATES

Table E.1: Status of Ratification of Selected Multilateral Environmental Agreements

| International Conventions                                                                                    | Bulgaria | Georgia | Romania | Russia | Turkey | Ukraine |
|--------------------------------------------------------------------------------------------------------------|----------|---------|---------|--------|--------|---------|
| 1982 UNCLOS                                                                                                  | +        | +       | +       | +      | -      | +       |
| <b>Marine Pollution</b>                                                                                      |          |         |         |        |        |         |
| 1973/78 MARPOL Convention (Annex I/II)                                                                       | +        | +       | +       | +      | +      | +       |
| 1973/78 MARPOL Convention (Annex III)                                                                        | +        | +       | -       | +      | -      | +       |
| 1973/78 MARPOL Convention (Annex IV)                                                                         | +        | +       | -       | +      | -      | +       |
| 1973/78 MARPOL Convention (Annex V)                                                                          | +        | +       | +       | +      | +      | +       |
| 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties | +        | +       | -       | +      | -      | +       |
| 1972 London Dumping Convention                                                                               | -        | -       | -       | +      | -      | +       |
| 1996 London Convention Protocol                                                                              | -        | +       | -       | -      | -      | -       |
| 1990 OPRC                                                                                                    | +        | +       | +       | -      | -      | -       |
| 2000 HNS Protocol                                                                                            | -        | -       | -       | +      | -      | -       |
| 2004 International Convention for the Control and Management of Ships' Ballast Water and Sediments           |          |         |         |        |        |         |
| <b>Maritime Safety</b>                                                                                       |          |         |         |        |        |         |
| 1974 SOLAS                                                                                                   | +        | +       | +       | +      | +      | +       |
| 1966 LL                                                                                                      | +        | +       | +       | +      | +      | +       |
| 1972 Convention on the International Regulations for Preventing Collisions at Sea                            | +        | +       | +       | +      | +      | +       |
| 1972 International Convention for Safe Containers                                                            | +        | +       | +       | +      | -      | +       |
| 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers         | +        | +       | +       | +      | +      | +       |
| 1979 International Convention on Maritime Search and Rescue                                                  | +        | +       | +       | +      | +      | +       |

Table E.1: Status of Ratification of Selected Multilateral Environmental Agreements  
(cont.)

| International Conventions                                                                                                        | Bulgaria | Georgia | Romania | Russia | Turkey | Ukraine |
|----------------------------------------------------------------------------------------------------------------------------------|----------|---------|---------|--------|--------|---------|
| <b>Liability and Compensation</b>                                                                                                |          |         |         |        |        |         |
| 1969 CLC                                                                                                                         | -        | +       | -       | +      | -      | -       |
| 1992 CLC Protocol                                                                                                                | -        | +       | -       | +      | -      | -       |
| 1971 FUND                                                                                                                        | -        | -       | -       | +      | -      | -       |
| 1992 FUND Protocol                                                                                                               |          | +       | -       | +      | +      | -       |
| 1971 Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material                                | -        | -       | -       | -      | -      | -       |
| 1974 Athens Convention relating to the Carriage of Passengers and their Luggage by Sea                                           | -        | +       | -       | +      | -      | +       |
| 1976 Convention on Limitation of Liability for Maritime Claims                                                                   | -        | +       | -       | -      | +      | -       |
| 1996 HNS Convention                                                                                                              | -        | -       | -       | +      | -      | -       |
| 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage                                                 | -        | -       | -       | -      | -      | -       |
| <b>Other Issues Related to Marine Environment</b>                                                                                |          |         |         |        |        |         |
| 1969 International Convention on Tonnage Measurement of Ships                                                                    | +        | +       | +       | +      | +      | +       |
| 1988 Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation                                   | +        | -       | +       | +      | +      | +       |
| 1989 International Convention on Salvage                                                                                         | -        | +       | +       | +      | -      | -       |
| <b>Atmospheric Pollution</b>                                                                                                     |          |         |         |        |        |         |
| 1979 LRTAP Convention                                                                                                            | +        | +       | +       | +      | +      | +       |
| 1992 UN Convention on Climate Change                                                                                             | +        | +       | +       | +      | +      | +       |
| <b>Conservation of Ecosystem</b>                                                                                                 |          |         |         |        |        |         |
| 1971 RAMSAR Convention                                                                                                           | +        | +       | +       | +      | +      | +       |
| 1992 Biological Diversity Convention                                                                                             | +        | +       | +       | +      | +      | +       |
| 2000 European Landscape Convention                                                                                               | +        | -       | +       | -      | +      | -       |
| <b>Others</b>                                                                                                                    |          |         |         |        |        |         |
| 1989 Basel Convention                                                                                                            | +        | +       | +       | +      | +      | +       |
| 1998 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters | +        | +       | -       | +      | -      | +       |

+ = Contracting Party, - = not a Contracting Party

Source: <http://www.biodiv.org/world/parties.asp>; [http://ramsar.org/key\\_sitelist.htm](http://ramsar.org/key_sitelist.htm);

<http://unfccc.int/resource/country/index.html>;

<http://conventions.coe.int/Treaty/Commun/ChercheSig.asp?NT=176&CM=8&DF=&CL=ENG>

## APPENDIX F

### MULTILATERAL ENVIRONMENTAL AGREEMENTS RELATED TO PROTECTION OF MARINE ENVIRONMENT TO WHICH EC IS A PARTY

Table F.1: Selected Multilateral Environmental Agreements to which EC is a Contracting Party

| Agreements                                                                                                                                                                                      | Contracting Parties                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Convention on the Protection of the Rhine                                                                                                                                                       | Germany, France, Luxembourg, Netherlands, Switzerland, EC.                                                                                                                                                   |
| Convention on the International Commission for the Protection of the Oder Against Pollution                                                                                                     | Germany, Poland, Czech Republic, EC.                                                                                                                                                                         |
| Convention on Cooperation for the protection and sustainable use of the Danube River                                                                                                            | Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Moldova, Romania, Slovak Republic, Slovenia, Ukraine, EC.                                                                                      |
| Convention for the Protection of the Marine Environment of the North-East Atlantic                                                                                                              | Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, UK, EC.                                                                 |
| Convention on the Protection of the Marine Environment of the Baltic Sea Area                                                                                                                   | Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, Sweden, EC.                                                                                                                           |
| Convention on the International Commission for the Protection of the Elbe                                                                                                                       | Germany, Czech Republic, Slovak Republic, EC.                                                                                                                                                                |
| Cooperation Agreement for the Protection of the Coasts and Waters of the North-East Atlantic against Pollution                                                                                  | Spain, France, Morocco, Portugal, EC.                                                                                                                                                                        |
| Convention between the Federal Republic of Germany and the EEC, on the one hand, and the Republic of Austria, on the other, on cooperation on Management of Water Resources in the Danube Basin | Germany, Austria, EC.                                                                                                                                                                                        |
| Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful substances                                                                                        | Belgium, Denmark, France, Germany, Netherlands, Norway, Sweden, UK, EC.                                                                                                                                      |
| Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region                                                                                           |                                                                                                                                                                                                              |
| Convention for the Protection of the Mediterranean Sea Against Pollution                                                                                                                        | Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Morocco, Serbia and Montenegro, Slovenia, Spain, Syria, Tunisia, Turkey, EC. |

Source: European Commission, *Multilateral Environmental Agreements to which EC Is a Contracting Party*, 13 October 2003,

[http://europa.eu.int/comm/environment/international\\_issues/agreements\\_en.pdf](http://europa.eu.int/comm/environment/international_issues/agreements_en.pdf)