

DOCTORAL THESIS SUMMARY

“The legal regime of the durable management of the Danube-Black Sea ecosystem”

**elaborated under the guidance of Professor Mircea Dutu Buzura,
PhD**

I. The motivation for approaching the theme

In the beginning of the 1970's, at the debut of the “ecological era” it was stated –paraphrasing Malraux, that “the XXIst century will either be ecological or not be at all”.

Reaching the dimension of the millennium, the ecological imperative openly claims supremacy.

Everybody agrees that ecological balance has gradually faded and man's destructive actions are mainly responsible for the current state of the environment, that pollution represents a major contemporary issue from which no component of the environment has escaped.

Equally, everybody agrees that we need ecology, that the environment must be saved, although there are different approaches regarding the manner of salvation, oscillating between “the ecology of constraint” and “the ecology of creativity”. It is thought that “the future would not be one of limitation of freedoms, but it belongs to technical and scientific imagination” and that, at the same time, it is required to have an “ecolegal revolution” for saving the environment.

In order to estimate the capacity and the manner in which the legal can assume and carry out such an important mission, the starting point can be a suggestive statement of epistemologist M. Serres, member of the French Academy, who stated that *“the Law is, maybe, a bad solution for saving the environment, but there is no other”*.

Following the debates in the Stockholm Conference (1972), a conclusion was reached, that *“it is highly necessary that a pack of legal regulations specific to environmental problems is formed”* and the fundamental human right to a healthy environment was proclaimed in an expressed way – which is part of the IIIrd generation of human rights, called “solidarity rights”.

The UN Conference in Stockholm on the human environment was constituted in an impulse that triggered chain regional regulations.

At a European level, the jurisprudence of the European Committee and Court of Human Rights established that the deterioration of the environment can lead to a violation of the rights acknowledged by the Convention, including the right to private and family life, as well as the right of ownership.

In the Maastricht Treaty (1995) there is a direct reference to the fundamental right to a healthy environment amongst the human rights acknowledged and guaranteed at the level of communitarian jurisdictional order.

The preservation in good conditions of all environmental components- species, genetic variability and ecosystems, the complementarity between protecting biological diversity and enrichment of human lives can be accomplished only by rigorous legislation and an adequate environment monitoring.

In the Romanian legislation, prior to the year 1989, the issue of acknowledging and guarantee of the fundamental human right to a healthy environment was not even raised at a theoretical level.

The socio-political and economical transformations that occurred in Romania after 1989 also reflected in the legal regulations, by imprinting new ways of approaching and solving the issues of protection, preservation and development of the environment.

As the Constitution of 1991 did not expressly stipulate the fundamental human right to a healthy environment, this omission was covered by Law no. 137/1995 that made this right known and acknowledged for “every person”.

By the revision of the Constitution, in 2003, the right to a healthy and ecologically balanced environment was elevated at a constitutional rank and the constitutional base of the development of the due legislation was created.

The Emergency Ordinance no. 195/2005, approved by Law no.265/2006 acknowledges for “any person” the right to a healthy environment, without being influenced by the principle of the territoriality of the practice of the law – a unique dimension that expresses the universality of the right to an environment as a fundamental human right.

The right to a healthy environment is a concretization of the acknowledgment of the natural right to existence and survival and *water*-an essential element for life, is an important factor in maintaining the ecological balance the protection of which needs to be achieved by ensuring its durable management, both in the present and in the future.

As a natural resource, water knows no frontiers and pollution does not respect national boundaries.

The awareness of the consequences of water pollution requires an effective framework of cooperation to be achieved for the protection of the waters of the Danube River – inner waterway of the European Union, and also of the Black Sea – a unique marine ecosystem, the most isolated sea of the planetary system.

The scientific approach starts from the necessity of the analysis of the implementation and transposition, at a national level, of the European and international regulations regarding the protection of the Danube river waters and those regarding the protection of the marine and inshore environment, as well as the manner in which the numerous regulations in this area can be effectively systemized at a national level.

Because of the dynamic character of the communitarian regulations regarding environmental protection, but also due to the increase of the European interest for the region of the Danube and the Black Sea, I appreciate and consider that the harmonizing of the legislation that governs the legal regime of the Danube- Black Sea ecosystem is and will be a current subject.

II. The Objectives followed in the elaboration of the thesis.

Given that until now there are only isolated bibliographical references that highlight the issue of the management of durable development of the Danube- Black Sea ecosystem, this thesis mainly followed *the identification* of the legal framework instituted for the protection of the three components of the ecosystem (the Danube, the “Danube Delta” Biosphere Reservation and the Black Sea), *the analysis*

of the legal framework and the determination of existent relations between different instrument categories, respective to the level of assumption and their finality.

Also, by presenting the legal regime of the durable management of the Danube- Black Sea ecosystem from the perspective of the three legal orders: *national, European and international*, the point followed was the creation of a complete image of the current issues that the global society is facing in the field of water protection, as well as the measures taken with the purpose of implementing a durable water management in general and the of Danube- Black Sea ecosystem in particular.

Starting from the detailed analysis of the Danube Management Plan, of the “Danube Delta” Biosphere Reservation Management Plan and the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea, this thesis follows actual actions already developed for meeting the objectives of the Plans, as well as the identification of new measures of improvement of the durable management of the ecosystem, the proposal of legal measures to be taken at a national level for the completion of the laws, implementation of international and regional documents that were not yet approved, but also the way to effectively systemize the numerous regulations in this field, internally.

III. The content of the thesis

The thesis is comprised of six chapters, structured in multiple subchapters in the summary of which a vast analysis is made in the field that is scientifically researched.

The thesis is accompanied by “Conclusions and proposals” – which complete the scientific research made by identifying and presenting the

legal framework, by synthesizing the opinions expressed by the doctrine and proposed by the jurisprudence.

Chapter I entitled – **“Water – natural, renewable, vulnerable, limited resource”** in structured into four subchapters.

In subchapter 1.1- *“Water, an essential element for life”*, after short references to the legal regime in the consecration given by Water Law no. 107/1996 – which transposed the framework Directive no.2000/60/EC into internal Law, an analysis is made of the particularities of water consumption and the criteria of classification of different water categories are presented.

“The sources and the types of water pollution” are identified in the summary of subchapter 1.2. A suitable space is granted for ecological policies for accomplishing water and ecological systems protection, the general principles for the development and management of water resources.

“The effects of water pollution on the environment and human health” are briefly analyzed in the subchapter 1.3, in the summary of which there were distinctly analyzed the premises and the effects of rendering constitutional the right to a healthy and ecologically balanced environment.

Finally, in the subchapter 1.4, different aspects regarding *“the durable management of water resources”* are highlighted, with special attention for the legal framework in which a supervision monitoring and an operational one are made in Romania.

Chapter II – **“The legal regime of protection and durable utilization of water”** is structured into four subchapters:

In the summary of the subchapter "*Water protection at a national level*" (2.1), I exhibited the evolution of Romanian legal regulations in the field of water protection and management, I continued by analyzing the current legal framework in the consecration given by the framework Water Law no.107/1996, with subsequent modifications and the Emergency Ordinance 195/2005, approved by Law no.265/2006 regarding environmental protection.

There are then listed the legal instruments for ensuring the durable water management, in the consecration given by Law no.107/1996, the role of the monitoring program realized according to the requirements of the Law, in the correct and complete evaluation of water bodies, as well as the role of planning in the field of management and improvement of waters.

After the brief presentation of the judicial-administrative instruments used for ensuring the quantitative and qualitative management of water resources (directory schematics of basins or groups of basins, improvement plan and management of the hydrographic basin plan, measures programs, local scheme, etc) special attention was granted for the methods of preliminary control of polluting activities by means of making notices, notifications and administrative authorizations compulsory, which constitutes an effective instrument of prevention and fighting water pollution, their consecration being expressed both in the framework Law and in the subsidiary legislation.

"The legal regulations in the water field at a European level" (2.2) are presented in subchapter two, which debuts with the presentation of the way directives approved at a European level are grouped (directives that define quality objectives or other water requirements for specific

utilization; those that regard certain industries or some specific segments and directives that regard the issues of eliminating dangerous substances) and with highlighting some of these.

The current European conception in outlining the environmental policy regarding water protection, reflected in the *framework Directive 2000/6/EC for establishing communitarian action framework in the water policy field* is a distinct point of the analysis, granting the corresponding attention to the purpose of this directive and also to the novelty elements, of essence, that it brings to the previous regulations, one of these being water management in hydrographic basins, measure that was assumed from the Helsinki Convention in 1992, signed by the EEC (European Economic Community).

The main action instruments for meeting the objectives are listed and in the preamble to the Directive and the consecration of "the polluter pays" principle is highlighted.

In the subchapter "*The international legal regime in the water field*" (2.3) the international regulations regarding fresh waters are identified (2.3.1), then the international legal framework of the river Danube protection and of the river Rhine is determined, with referrals to the new premises of international cooperation for utilization of rivers for navigation, after creating the single course of water Black Sea- Danube- Rhine- Main- North Sea (2.3.2- 2.3.3).

"*The legal regime for marine environment protection*" has a specific section and it presents the issue of marine environment protection (enlisted amongst the preoccupations of the international cooperation by the recommendations assumed by the Stockholm UN Conference, then in the 21st Agenda of the Rio de Janeiro Conference) in

the consecration given by the Convention on Sea Law (signed on the 10th of December 1992) in the summary of which a distinct section is reserved for the protection and preservation of marine environment.

In this subchapter, I also presented a few famous cases of prejudice of the marine environment (“Amoco Cadiz”, Erika, the case of the Rhine pollution).

The object of analysis of subchapter 2.4 is “*The durable management of waters*”. Starting from the history of the evolution of the durable development concept, a few definitions of it are reminded, from the content of which we can affirm without fearing failure that it reflects, in legal terms, the essence of the Indian percept according to which “we do not inherit the land from our forerunners; we borrowed it from our successors”.

A special place is reserved for the durable management or water resources principles in the consecration given by the regulations of the 21st Agenda of the Rio Conference (1992): the basin principle, the unitary quantity-quality management principle, the solidarity principle, “the polluter pays” principle, the economical “the beneficiary pays” principle.

Chapter III, entitled “The preservation and durable utilization of the river Danube” debuts with preliminary information on the river Danube and continues with aspects regarding the legal protection of the Danube, meaning of those that target the preservation and durable utilization of the Danube strategy.

The doctrinarian approaches of the Danube protection legal framework are presented, the categories of documents and legal sources that have completed the current protection and durability of the river Danube framework, reminding some regulations developed by the two

framework conventions – *the Convention for using cross border streams and international lakes (Helsinki, 1992)* and *the Convention for the right to use water streams for other purposes than navigation (New York, 1997)*. Special attention was granted to the presentation of the core principles that need to stand at the base of the measures taken for the protection of the river Danube, consecrated by the *Sofia Convention (1994)*.

There are identified and analyzed the functions and legal instruments at the disposal of the International Committee for Protection of the River Danube – established with the purpose of meeting the objectives and regulations of the Sofia Convention, that states as core principles “the polluter pays” principle and the precaution principle, rounded by two complementary application principles: the use of the best available techniques and the use of the best environmental practices.

The preservation and durable utilization of the Danube strategy is widely analyzed in a distinct section, with special attention to “the Strategy of the European Union for the Danube region” assumed in the European Council, on the 24th of June 2011.

After listing the four priority axes of the Strategy: *connectivity* (intermodal transportation, culture and tourism, energy networks); *environment protection* (water resources management, biodiversity protection and risk management); *Danube region prosperity increase* (education, research, competitiveness) and *governing system improvement* (institutional capacity and internal security), the objectives of the Action Plan, the priorities and environment objectives of the EU Strategy for the Danube region are presented.

Chapter IV presents “The legal regime of the Danube Delta Biosphere Reservation”.

Structured in six subchapters, dedicated to the specific issue of the “Danube Delta” Biosphere Reservation, the chapter debuts with the presentation of the concept of *“Biosphere Reservation and presentation of the preoccupations history in the protection and preservation of the “Danube Delta” Biosphere Reservation field (4.1).*

“The legal regulations for the protection and preservation of the Danube Delta” are presented in subchapter 4.2.

Registered on the world heritage list in December 1991 and declared a Biosphere Reservation, the Danube Delta was ensured a protection regime, instituted by the regulations of the *UNESCO Convention of 1972* which, in its entirety, consecrates the principle according to which all natural assets that concern the entire human kind must be conserved in the interest of humanity and that a social assistance program must help the countries in need, competent from a territorial standpoint and that are a sort of “depository” of the assets that are part of the universal heritage.

The concept of *biosphere reservation* is presented- introduced in the year 1970 by the International Committee for Coordination of the “Man and Biosphere” program (M.A.B.) of UNESCO.

Amongst the international regulations for the protection and preservation of the Danube Delta, with the UNESCO Convention (1972) there is also *The internationally important wetlands, specially as a habitat of water birds Convention of Ramsar, 1971 and entered into force in 1975.*

The registration of the Danube Delta on the list of this Convention (a consequence of its identification as one of the most spread wetlands in the world, with only 9% of the territory covered by ground) constituted an important step in establishing the new protection and preservation of the deltaic environment regime, Romania joining the Convention by means of Law no.5/1991.

By transposing the international regulations of the two Conventions into internal Law, at a national level a special law was elaborated – Law no.82/1993 for the constitution of the “Danube Delta” Biosphere Reservation, which is also the establishment act of the Danube Delta Biosphere Reservation Administration (DDBRA), a public institution with legal personality, subordinated to the central public authority for protection of the environment and the forests.

According to the law of establishment, the DDBRA fulfils duties of administration of the natural heritage of the national interest public domain of the Reservation and protection and preservation of the environment attributions on the entire territory of the Reservation, regardless of the holder of the ownership or administration right of the different areas of the Reservation.

I have presented the modifications and completions to Law no.82/1993 by Law no.136/2011, capturing the novelty elements brought by the modification and completion law regarding the zoning of the Reservation, as well as those referring to the management of the Reservation Administration, to the skills and attributions established by law, to the regulations for expropriation for public utility cause, derogatory from the regulations of Law no.33/1994, this case concerns ecological reconstruction.

Twenty areas of full protection from the Danube Delta Biosphere Reservation perimeter were identified, as they were established by Government Resolutions 248/1994 and 1066/2010 for instituting the protected natural area regime on some areas of the Danube Delta Biosphere Reservation.

I have presented in the summary of a distinct section the legal sanctions regime instituted according to Law no.136/2011 of modification and completion of Law no.82/1993 and derogatory from the special law regarding the regulations of Government Ordinance 2/2001, the framework law that regulates the legal regime of contraventions.

The study continues with the analysis of the aspects regarding *“The access on canals and inner lakes of the perimeter of the “Danube Delta” Biosphere Reservation”* (subchapter 4.3), of those regarding *“Legal facilities established for persons living in the Reservation’s perimeter”* (subchapter 4.4).

The interdictions and limitations of exerting the ownership right on lands and of the right to build in the “Danube Delta” Biosphere Reservation perimeter – set by the framework Regulation of town planning approved by Government Resolution no.1516/2008 were presented in subchapter 4.5 entitled *“Legal regulations for exerting the right of ownership in the “Danube Delta” Biosphere Reservation”* and subchapter 4.6 presents the regulations instituted by law for *“Practicing domestic fishing in the “Danube Delta” Biosphere Reservation perimeter”*.

In Chapter V – “Present and perspective of durable protection of the Black Sea” there is a short foray into the issue of polluting seas and oceans, with expressed referrals to the particularities of pollution of

the Black Sea and the state of the Black Sea waters (points 5.1.1 and 5.1.2).

The legal regulations of the protection of the marine environment are widely analyzed (subchapter 5.2), the approach being distinctly realized for national regulations (5.2.1.) and international ones (5.2.2.-5.2.4).

Internally, the current legal regime for the protection of the marine environment is mainly represented by Law no.17/1990 for the legal regime of inner maritime waters, territorial sea, contiguous area and economical area exclusive to Romania, the regulations of this law being subject for analysis.

I have briefly presented a few laws from the subsidiary legislation-orders issued by line ministers, in consideration of some regulations of the European Agreement instituting an association between Romania, on one side and the European Communities and the member countries, on the other, signed at Bruxelles in 1993, approved by Romania by means of Law no.20/1993, as being examples through the purpose of their assumption, that is: the drastic reduction of the number of substandard ships that navigate Romanian waters (Order 256/2006) and diminishing the unload of waste generated by ships and merchandize residue in navigable national waters, especially illegal unload from ships that use Romanian harbors, by improving the availability and usage of port equipment for collecting ship generated waste and merchandise residue, for the improvement of marine environment protection (Order 322/2006).

Presenting the international regulations, after a brief foray into the first stage of making a Sea Law Code, which took place with the

assumption of the four conventions of Sea Law of Geneva, 1958, the creation of a global legal framework is captured – as a response to the international right to the offensive of marine pollution, by assuming the United Nations Convention on Sea Law, from Montego Bay, 10.12.1982, approved in Romania by Law no.110/1996.

The Convention on Sea Law, which concludes the second stage in the process of making a Sea Law Code, establishes a fundamental legal framework that regards the aspects of the protection of marine and oceanic environment, starting with the sovereignty and jurisdiction, utilization of the rights and obligations of the countries, but has as a major shortage not taking into consideration the geographical and oceanographic particularities of the determined areas.

The creation of a regional legal framework, but destined to a particular ecosystem, allows the ensemble of pollutions that affects a certain area to be taken into account and conjugated prevention and fighting measures to be taken.

The modification of the United Nations for the Environment Program, by launching the “regional seas” program, had as a consequence the cooperation of over 130 countries in 11 areas of the world with the purpose of preservation and protection of the seas and their resources, was noted in the enumeration of international conventions with regional character, special attention being granted to “the Convention for the protection of the Black Sea against pollution”- Bucharest, 1992, approved by Romania by means of Law no.98/1992.

In their content, the regulations of the Convention for the protection of the Black Sea establish quality and quantity objectives, set

the demands that environmental factors and natural resources must meet from an ecological standpoint.

The merit of the Convention is that it succeeded to institute an interstate cooperation with permanent character, to capitalize the experience of assumption and application of the other international documents in this field, the complex and dynamic character of the conventions ensemble also being emphasized on by the possibility of its enrichment with new regulations imposed by concrete realities.

I have highlighted the importance of the approval by Romania, by means of the Law no.68/1999, of the Organization for Economical Cooperation of the Black Sea Chart, signed at Yalta, on the 5th of June 1998, presenting the principles and objectives instituted by the Chart in order to be promoted in the activities regarding cooperation in the Black Sea field.

Chapter VI – “The durable management of the Danube-Black Sea ecosystem” is actually the essence of this doctoral thesis, which aims to bring into the attention of decision makers, competent authorities that can realize a coherent legal framework, the necessity of the intervention of the administration through measures that can allow the objectives of the durable management of the Danube- Black Sea ecosystem to be met.

The management of the Danube- Black Sea ecosystem is not made under the shield of a single management plan, but three plans, one for each component of the ecosystem, that were treated distinctly, in three subchapters.

“The management plan of the hydrographic basin of the Danube” constitutes the object of analysis of subchapter 6.1.

cycle, I have realized a presentation of the current state of river waters quality – related to the portion of the hydrographic basin that is contained in Romania’s territory, starting from the data provided by the “2009 Report on water quality in Romania”, as well as the document – “2011 Synthesis of water quality in Romania” elaborated by the National Administration.

The study showed that the quality objective, represented by the good ecological state was not met by all the water bodies evaluated, critical areas exist that need the water to be ecologically improved, being affected by the main polluters in the basin, commercial enterprises that operate improper activities in the field of collecting and processing waters.

In the summary of this Chapter, there is a case study regarding accidental pollutions in Romanian waters, presenting two of the 73 accidental pollutions recorded in 2009 – according to statistics provided by the Ministry of Environment Report on the Quality of Romanian Waters. There were also mentioned the causes of the 45 accidental pollutions from 2011, according to the statistics provided by the document “Synthesis of water quality in Romania”.

“The Danube Delta Biosphere Reservation Management Plan” is covered in subchapter 6.2.

The management of the Danube Delta Reservation has the purpose of ensuring the status of favorable conservation of habitats and populations of species on their territories and the Danube Delta Biosphere Reservation Administration is the institution responsible for the creation of an adequate legal administration regime for the

The presentation of the measures established in the Strategic Action Plan for the Rehabilitation of the Black Sea, with the purpose of accomplishing an integrated coastal management- issue that has a distinct section in the Plan, allows the conclusion that these refer to the national Black Sea strategy for integrated coastal management, to the efforts that each sea adjacent country must make for assuming and applying, according to their own legal system, the legal instruments to facilitate the integrated coastal management.

In a distinct section, there is a presentation of the projects for the preservation of the marine ecosystem and promotion of the durable utilization, conducted at the Ministry of the Environment level, between 2006-2008 and 2010, as well as the objectives of some international and national ongoing projects.

A scan of "The State of the marine and coastal environment" is made in section 6.3.2, where I have highlighted the main problems of the Romanian marine and coastal environment, starting from the statistic data in the document elaborated by the line Ministry, entitled "Report on the state of the marine and coastal environment in 2011".

The restoration and improvement of the environment, the development of a rehabilitation program and works for protection and prevention of erosion of the coastal area, the protection of the economical infrastructure and the social objectives affected by marine erosion are the Objectives of the Master Plan for the Protection and Rehabilitation of the Coastal Area, elaborated in 2011, after a Strategic Environmental Assessment (SEA) which aims to reconstruct the coastal area of the Romanian seaside.

I have pointed out the topics that were approached in this Master Plan, with expressed references to those that regard: the implementation of an integrated monitoring program for coastal areas with the purpose of supporting maintenance works, the elaboration of the Integrated Management Plan in the field of protection against coastal erosion, defining some priority areas for rehabilitation and protection.

Special attention was given to the environmental conclusions and objectives comprised in the Report elaborated in July 2012 by the National Research and Marine Development Institute "Grigore Antipa", entitled "The determination of the good ecological state for the Romanian waters of the Black Sea".

By means of the document written in accordance with the requirements of the Directive no.2008/56/EC of the European Parliament and of the Council, transposed into the national legislation by the Emergency Ordinance no.71/2001, approved with modifications by Law no.6/2011, the initial assessment of the current ecological state of the territorial waters and of the impact of human activities on the environment was accomplished.

The framework Directive - "Strategy for the marine environment" which covers the obligation of the member countries to assume the necessary measures for reaching a good ecological state for the marine environment until 2020- is the main pillar of the Integrated Maritime Policy (IMP) of the European Union.

The conclusions of the study carried out and finalized with the elaboration of the Report, the content of which I have analyzed, are the result of taking into consideration the 1st descriptor- "Biological Diversity", the 5th descriptor- "Eutrophication" and the 8th descriptor-

“Contaminants”, qualitative descriptors identified for the determination of good ecological state, in Annex 1 of the framework Directive.

The environmental objectives identified by the Report elaborated by the NRMDI “Grigore Antipa” researchers, established according to the mentioned descriptors were presented and the stages of the action plan that must be taken into account when implementing the marine strategy, established by the Emergency Ordinance no. 71/200, were analyzed.

The program of monitoring with the purpose of continuous assessment and periodical update of the objectives identified in the initial assessment is to be elaborated by the Ministry of Environment and Climatic Changes until the 15th of June 2014, and the program of measures destined to ensure the accomplishment or maintenance of a good ecological state must be elaborated until the year 2015 at the latest, as it is provisioned by art.5 p.3 of the Emergency Ordinance no.71/2010.

The efficiency of the measures that are meant to lead to meeting the objective of the Directive depends in great part by the joining of the efforts of national government structures with those of regional and international organizations in this line.

The implementation of the framework Directive could be facilitated by the development at the European Union level of the cross-sectors instruments with the help of which public authorities and interested parties can assume a coordinated and integrated approach, the integrated maritime policy identifying these instruments as being represented by the development of the maritime space and the integrated management of coastal areas.

It is my opinion that, just as the durable management Plan of the Danube was elaborated as a request of the framework Directive regarding water no.2000/60/EC, the framework Directive “Strategy for the marine environment” could constitute the premise for the elaboration of a durable management Plan of the Black Sea.

The analysis performed in the six chapters has as its corollary the **“Conclusions and proposals”**.

The great scientist G.Antipa said about the Danube that “it is the greatest treasure that nature has bestowed upon our country”, and the relation between Romania and the Black Sea was defined suggestively: “Romania and the Black Sea are, by will of the planetary destiny, inseparable. Without the Black Sea, Romania would be like an unfulfilled stretch of dry land; without Romania, the Black Sea would be like boundlessness without identity”.

Concluding that the European interest for the region of the Danube and the Black Sea is continuously rising, it can be said, without fearing failure, that a more active external policy of Romania is imposed in the support of the projections of the European Union and at the same time a proactive attitude at a bilateral level with the countries from the region.

The presentation of the *Danube- Black Sea* ecosystem pointed out the issues of each one of its three components: the Danube, the “Danube Delta” Biosphere Reservation and the Black Sea. On one hand, they suffer from the effects of pollution, each of them trying by their own measures to solve existing problems, and on the other hand, it is highlighted that there is an opening created by legislation for the measures that can improve their factual situation.

The Danube Hydrographic Basin and the “Danube Delta” Biosphere Reservation have their own *Durable management Plan*; however the Black Sea does not have a Management Plan, but a *Strategic plan of action for its rehabilitation and protection*.

The fact that there is not an Integrated Management Plan of the Danube- Black Sea ecosystem slows down several actions that can be beneficial for it. For example, the most part of the nutrients that pollute the Black Sea come from the river Danube, so that a joint management plan for the reduction of nutrients of the river Danube on one hand, and of the Black Sea, on the other, is necessary.

In perspective, the actions of development of the durable management of the Danube- Black Sea management must be continued, and amongst these measures, in the ending on this thesis, are mentioned:

- The elaboration of an Integrated Management Plan, entitled *The Integrated Management Plan of the Danube-Black Sea ecosystem* that can solve, from an exhaustive and integrating perspective, issues that exist in the ecosystem and protect it from any destructive actions.
- The intensification of diplomatic efforts of Romanian authorities for obtaining a greater involvement of the European Union in the Black Sea area. These actions are justified by the “Resolution of the European Parliament of the 20th of January 2011 regarding a EU strategy for the Black Sea (2010/2087 INI)”, which stated that even if the Black Sea Synergy (BSS) had the merit of acknowledging the strategic importance of the Black Sea region for the EU, the accomplishments of the synergy were fairly limited, the UE being criticized for lack of strategic vision on the region and for applying fragmentary methods in implementing the BSS;

- A legal intervention, which can ensure the elaboration by the Ministry of Public Finances, of several multiannual budgetary estimations, with annual revisions, for the main credit accountants of the state budget, with the purpose of ensuring the financing of the objectives enlisted in the programs and projects initiated for the protection, preservation and ecological reconstruction of the Danube- Black Sea ecosystem;
- The optimization of the communication channels between the scientific environment, NGOs and central and local institutions and the integration of the scientific results obtained in the projects developed in the field of the durable development of the Danube- Black Sea ecosystem, in a unique database, accessible over the Internet.
- The increase in the level of education and awareness of the population regarding the necessity of the reduction and, subsequently, ending of marine pollution. For this purpose, I propose the elaboration of a package of educative information, for school use, which every country will translate in its own language; the preparation of mobile exhibits which present the situation of the ecosystem; the elaboration of a package of multimedia information on CD Rom, for the user from the Black Sea.

In order to obtain durable results in the extensive protection and preservation of water resources process, I consider that the elaboration of an Integrated Management Plan of the entire Danube-Black Sea ecosystem is a fit solution for solving, from an exhaustive and integrating point of view, the problems that exist at the level of the three components of the ecosystem, that currently have different objectives (the main objective of the Danube management is to provide the necessary potable water, the "Danube Delta" Biosphere Reservation objective is to preserve

the unique and extremely precious ecosystem, and the Black Sea management aims for the rehabilitation of the ecosystem).

Considering that many of the projects that were analyzed in this thesis – conducted with the purpose of ensuring a durable management of the water of the river Danube, of the ecological reconstruction of the Danube Delta, and those that follow the preservation of biological resources and the biodiversity of the Black sea and the protection of the coastal area, respectively, are ongoing and their evolution was captured only until the moment of elaborating this thesis, it is my opinion that is a thesis with an open ending, a real basis for new reflection and research subjects.