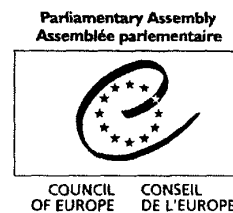


Parliamentary Assembly Assemblée parlementaire



For debate in the Standing Committee — see Rule 15 of the Rules of Procedure

Doc. 10542
4 May 2005

Protection of European deltas

Report
Committee on the Environment, Agriculture and Local and Regional Affairs
Rapporteur: Mr Leo Platvoet, Netherlands, Group of Unified European Left

Summary

The interest of the Council of Europe for the protection of European deltas is the expression of the need to prevent any damage to the environment as a proper means to ensure the environmental security of areas that are particularly sensitive to human interference.

The preservation of deltas is a prerequisite for the safeguard of the biodiversity of the European continent. Balancing the economic development with measures to prevent and diminish ecological threats is still a challenge to be met in the European deltas, as the cases of the Danube, Ebro and Po deltas stand proof to. Sustainable development should no longer be regarded as a mere declarative objective since its implementation may well prove as being the only effective means to ensure the continuous access to natural resources for both present and future generations.

The preservation of European deltas is of utmost importance since traditional human communities and various endemic animals and plants, as well as migratory birds - some of which are rare or endangered - are dependent upon the ecosystems of the deltas and are defenceless against irreversible changes to their habitats.

I. Draft resolution

1. River deltas are part of Europe's natural heritage. Deltas are extremely rich in biodiversity, hosting thousands of animal and plant species that are, in many cases, rare or globally endangered and therefore internationally protected. The preservation of the biological, ecological and scientific values of European river deltas is an issue of concern since deltas are areas particularly sensitive to environmental changes. Some European deltas are threatened by human activity and seriously at risk.
2. For more than a decade, the Assembly has been committed to the sustainable development of European deltas. It recalls *inter alia* its Resolution 1021 (1994) on the preservation and development of the Danube basin, Recommendation 1330 (1997) on the Draft European Charter of the Danube basin as well as Recommendation 1668 (2004) on the management of water resources in Europe and Recommendation 1669 (2004) on transboundary water basins in Europe. It reaffirms its strong belief in and commitment to a responsible use and management of water resources in order to prevent any degradation of the environment and natural habitats of European deltas.
3. Local communities, which are dependent on the traditional use of land and natural resources, should be protected against the threat of damage to their environment. Accordingly, the traditional lifestyle of local communities should be preserved because it guarantees a minimal human intrusion into the deltaic environment. It should therefore be encouraged rather than extensive agriculture, industrial developments or mass tourism that may all lead to strong human interference and disruption of the ecological balance.
4. The Parliamentary Assembly insists on the need to ensure the effective consultation, participation and co-operation of all relevant stakeholders before any decision on human interference in the deltaic ecosystems is taken and implemented. Furthermore, it considers transboundary deltas as a particular case where international responsibility may be engaged. Their management should be based on co-operation between all parties concerned in order to identify the best environmental choices that would ensure their sustainable development.
5. The Danube delta stretches across the territories of Romania (about 90%) and Ukraine and has been included in the UNESCO World Heritage list since 1991. It is also one of the most extended wetlands (626 000 ha) in Europe and a major destination for nesting, staging and wintering birds. In 2000 the Council of Europe awarded the European Diploma of protected areas to the Romanian Danube Delta Biosphere Reserve.
6. The Assembly is concerned by the Ukrainian project to build a deep-water navigation canal on the Chilia arm of the Danube, following the Bystroe channel into the sea, the latter cutting across the Ukrainian Delta Biosphere Reserve. This initiative may yield serious consequences for the entire Danube delta ecosystem. Of course, the Assembly is aware of the responsibility of the Ukrainian Government to improve the economic and social conditions for the inhabitants of the delta but these measures should be taken within the framework of a sustainable development of the Danube delta.
7. Work was carried on in spite of the growing international concern on the environmental impact of the project and in disregard of the relevant environmental conventions that Ukraine is a Party to: the Bern Convention on the conservation of European wildlife and natural habitats, the Bonn Convention on the conservation of migratory species of wild animals, the Ramsar Convention on wetlands of international importance, the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters, the Espoo Convention on environmental impact assessment in a transboundary context, the Sofia Convention on co-operation for the protection and sustainable use of the Danube river and the UNESCO Convention concerning the protection of the world cultural and natural heritage.
8. The Assembly also refers to the requirements of the International Commission for the Protection of the Danube River, the 2004 Report of the joint fact-finding mission of the European Commission and International Organisations and the UNESCO Programme on Man and the Biosphere.

9. However, for a balanced approach, the Assembly wishes to emphasise that the Danube delta is also threatened by other human activities, such as pollution of the river upstream and the yearly dredging of 2.1 million m³ of sediments in the Romanian part of the delta.

10. The Ebro delta (33 000 ha), Spain's second largest wetland, is a natural region that has been transformed over the centuries by human activity. It now has a population of 50 000 people and 65% of the area is dedicated to rice-growing. In 1983 the Catalan regional government set up the Ebro Delta Natural Park, covering 7 800 hectares.

11. The Ebro delta suffers, however, from the impact of measures taken upstream. Some 150 dams, and particularly two of them located in the lower Ebro river, have had the serious effect of keeping back the sediment that used to nourish the delta.

12. The river also carries industrial waste which may endanger the delta and hosts invasive alien species which modify the ecosystems. The delta is also facing subsidence and marine erosion.

13. The Po delta in Italy is one of the largest in the Mediterranean (130 000 ha) and a wide portion of it has been recognised as an internationally important wetland according to the Ramsar Convention and as a Special Protected Area according to the Bird Directive.

14. The Emilia-Romagna Region instituted the Po Delta Natural Park to preserve the park's natural resources, protect the delta's cultural heritage and identify innovative management methods.

15. Even if the Park co-operates with the Emilia-Romagna Region, the Provinces of Ferrara and Ravenna and the European Union, there is not enough co-operation with the neighbouring region of Veneto. Furthermore, the management of the Po delta is the responsibility of a number of political and administrative authorities together with various technical bodies, which makes integrated management difficult.

16. The Assembly invites member states with delta ecosystems to take all necessary and appropriate measures to preserve them and to ensure a sound use of their natural resources, in accordance with the principle of sustainable development, by paying particular attention to accommodating the objectives of economic development with the imperatives of preservation of the environment.

17. The Assembly invites member states and the international bodies dealing with river deltas to co-operate and find the best practices for developing ecotourism as a new economic activity which benefits local communities within the framework of a sustainable development.

18. It also invites member states to take measures in order to reduce river pollution by putting into practice strict controls on the waste dumped into rivers.

19. Concerning the Danube delta, the Assembly encourages Ukraine, Romania and Moldova to co-operate for the best management of the delta and urges Ukraine:

- i. to stop immediately the work on the construction of the deep water navigation canal until an international environmental impact assessment has been conducted and to implement its conclusions;
- ii. to provide a complete documentation on the canal project to all stakeholders;
- iii. to envisage the other alternatives to the construction of the deep water navigation canal;
- iv. to respect the provisions of the international agreements it is party to, in particular:
 - a. the Convention on the conservation of European wildlife and natural habitats (Bern Convention),

- b. the Convention on the conservation of migratory species of wild animals (Bonn Convention),
 - c. the Convention on wetlands of international importance (Ramsar Convention),
 - d. the Convention on access to information, public participation in decision-making and access to justice in environmental matters (Aarhus Convention),
 - e. the Convention on environmental impact assessment in a transboundary context (Espoo Convention)
 - f. the Convention on cooperation for the protection and sustainable use of the Danube river (Sofia Convention),
 - g. the UNESCO Convention concerning the protection of the world cultural and natural heritage;
- v. to observe the recommendations of the relevant international organisations (European Commission, Council of Europe, UNESCO, International Commission for the Protection of the Danube River, etc.) and to effectively co-operate with the international community in order to identify a responsible solution to prevent any further damage to the ecosystem of the Danube delta;
- vi. to fulfil the internal procedures required for the entry into force of the Agreement between the Ministry of environment and territorial planning of Moldova, the Ministry of waters, forests and environmental protection of Romania and the Minister of the environment and natural resources of Ukraine for the creation and management of a cross-border protected area between Moldova, Romania and Ukraine in the Danube Delta and the lower River Prut nature protected areas, the agreement having already been ratified both by Moldova and Romania.
20. The Assembly invites the Supreme Rada of Ukraine to hold a parliamentary debate on the environmental consequences of the project of building the deep water navigable canal through the Danube delta and on other possible alternatives.
21. Concerning the Ebro delta, the Assembly invites Spain:
- i. to take measures to stop the receding of the delta, particularly by allowing the flow of sediments, and to maintain its environmental and cultural values;
 - ii. to create an Agency for the co-operation and coordination of activities in the delta integrating all administrations, authorities and economic sectors concerned;
 - iii. to encourage the Catalan regional Government to consider expanding the Ebro Delta Natural Park to cover the whole delta area, on the understanding that it would allow traditional activities, compatible with the preservation of the delta, to continue.
22. Concerning the Po delta, it invites Italy to consider implementing measures for an integrated management of the delta to include all the relevant administrations and authorities, in order to ensure a better preservation of its environmental and cultural heritage.

II. Explanatory memorandum by Mr Platvoet

Contents

1.	General overview	5
2.	The Danube delta	6
2.1	The Danube delta's current management	6
2.2	The legal framework	7
2.3	Current threats to the Danube delta: the building of a deep-water navigation canal by Ukraine	8
3.	The Ebro delta	16
3.1	Introduction	16
3.2	Fauna and flora	17
3.3	Economic activity	17
3.4	Threats to the delta	18
3.5	Administrative responsibility and legal protection	19
4.	The Po delta	20
4.1	The vegetation	20
4.2	The fauna	21
4.3	Fishing, aquaculture and saltworks	22
4.4	Tourism and industries	22
4.5	Dune degradation and beach erosion	22
4.6	Environmental planning	23
5.	Conclusions	23
Appendices:		
	Map 1: the Danube basin	24
	Map 2: the Danube delta	24
	Map 3: the Danube delta biosphere reserve (Romania)	25
	Map 4: the Danube biosphere reserve (Ukraine)	25
	Map 5: alternatives to the Bystroe canal	26
	Map 6: the Ebro delta	28
	Map 7: the Po delta	29

1. General overview

1. European deltas are facing increasing pressure from human activities that exploit their natural resources in order to achieve economic development. A more cautious approach based on prevention should be adopted as human interference with the ecological balance may yield irreversible alteration of the environment or changes that are difficult to anticipate and, consequently, compensate for. The consequences of human activities are manifold since they may trigger a chain reaction altering the very structure and characteristics of the ecosystems. They range from potential extinction of endangered plant and animal species that deltas are hosting to lacking of perspectives for local communities depleted of their traditional means of living.

2. At the same time, deltas are sites sheltering the remnants of some of the most ancient European cultures and hold a particular significance from the anthropological points of view. Human activities deployed in the deltas should not impede upon the scientific exploration and conservation of this cultural heritage.

3. A sounder and safer use of the natural resources provided for by the river deltas should be envisaged as to diminish the ecological threats they are exposed to. Although many of them are common for most of the European deltas – such as pollution stemming from industrial exploitations along the watercourse -, there are some specific issues to be apprehended in the cases of the Danube, Ebro and Po deltas.

2. The Danube delta

4. The information on the Danube delta was gathered during two fact-finding visits: the first one to the Romanian Danube delta (28-30 October 2004) and the second one to the Ukrainian part of the delta (23-25 March 2005).

5. The Danube delta occupies a huge territory stretched in the territory of Romania (about 90%) and Ukraine, and is one of the Europe's finest natural sites, as being included in UNESCO's World Heritage list since 1991. It also is one of the most extended wetlands in Europe and a major destination for nesting, staging and wintering birds. The entire wetland complex (including many large lakes (limans or former marine bays) and shallow coastal marine waters covers around 670 000 ha.

6. The Danube delta is an extraordinary valuable asset in terms of its fauna and flora. It stretches between the river catchments comprising numerous freshwater lakes interconnected by narrow channels with great expanses of aquatic vegetation and is developing in its own dynamics¹. It is estimated that it hosts more than 3 448 species of fauna (of which more than 300 bird species and more than 90 species of fish) and 1689 species of flora. The Danube delta is likely the widest reed bed expanse in the world, but it also encompasses a wide variety of species ranging from forests (Letea and Caraorman) to plant floating islets on the surface of the multitude of channels linking the arms of the Danube. Among the rare species of birds hosted by the Danube delta are the roseate pelican, the Dalmatian pelican, the spoonbill, the great white egret, the avocet, the shell drake, the ruby shell drake etc. The Danube delta is home for 80% of European waterfowls, to the only breeding colony of pelicans in Europe, to half of the world's pygmy cormorants and to almost three quarters of the world's white pelican population. These figures should be striking but they are hardly picturing the importance of the Danube delta as a habitat for the 178 strictly-protected species of birds that are nesting, staging or wintering there. Various species of fish live in the Danube delta and some of them are rare as the sturgeons – an economic resource due to their fine black roe – and the Danube shad that migrate through Danube in their route to the Black Sea.

7. The first steps towards the conservation of the Danube delta can be traced to the first half of the 20th century when the Letea Forest² was first declared a nature reserve. Later on, other areas were added and they acquired international recognition upon the designation of the Rosca-Letea Biosphere Reserve (1979). Although the former communist regime in Romania intended for the Danube delta to be fitted for intensive agricultural use³, these projects have fortunately never come into being as they were abandoned in 1990.

2.1 The Danube delta's current management

8. Currently, the Danube delta has the status of a Biosphere Reserve (both in Romania and in Ukraine). It is considered as part of the world's natural patrimony as it was enlisted on the World Heritage List since 1991.

9. Established in 1990, the Romanian Danube delta Biosphere Reserve Authority is meant to ensure an ecological management of the Biosphere, a sustainable use of the renewable resources of the Danube delta and ecologic restoration of area previously enclosed in the Economic Development Plan of the Danube delta. The Danube delta Biosphere Reserve Authority is a public institution coordinated by the Romanian Ministry for environment and water management and it holds authority over all institute, agency and inspectorate, including the Environment agency of the county, involved in the administration of the natural patrimony of the Danube delta. It is the main institution

¹ The "youngest land" in Europe is estimated to increase by 40 cm each year due to the alluvia carried by the Danube River.

² This status was acquired due to a 1938 Decision of the then Romanian Council of Ministers.

³ The 1983 Decree on the Economic Development of the Danube Delta was abolished in 1990.

responsible for the implementation of the Management Plan for the Danube delta Biosphere Reserve, designed in early '90's with international assistance, mainly from UNESCO, Ramsar Secretariat and the World Bank, the latter providing for financial support.

10. The Authority holds oversight competences over the social systems in the area, but also regulatory and control attributions in what concerns the use of natural resources, and management ones over the strictly protected areas in the Biosphere Reserve. It has also been endowed with the proper means to ensure the conservation of the biodiversity, protection of the coastal area, restoration of damaged ecosystems and international cooperation for a better preservation of the Danube delta.

11. The Romanian authorities have asserted to envisage even further measures to strengthen the authority of the Danube delta Biosphere Reserve and to extend its competencies to some areas previously listed as polders or for agriculture use.

12. In 2000, the Romanian Biosphere Reserve (which also covers the Razelm-Sinoe complex consisting of several large brackish lagoons separated from the sea by a sandbar) received the Council of Europe "European Diploma for Protected Areas".

13. In Ukraine, the Danube Biosphere Reserve Authority in Vilkovo, which is subordinated to the National Academy of Sciences of Ukraine, deals with the management of the Ukrainian part of the Danube delta. It was created in 1998 and is managed by a special administration. The Ministry of Environment, its local departments and other duly authorised State bodies monitor adherence to environmental legislation in the Danube Biosphere Reserve.

14. In 2002, a project financed through the TACIS Program of the EU created the opportunity for the authorities of the protected areas and representatives of the local authorities from the neighbouring districts in Romania, Ukraine and Moldova (under the aegis of the Lower Danube Euroregion) to cooperate in formulating the first joint management plan for the natural reserves in the Danube delta and lower Prut area. Based on broad consultation among a large number of specialists and stakeholders from the three countries, the joint management plan establishes the objectives needed to ensure harmonised action for nature protection and sustainable use of the natural resources, to achieve better communications with local communities as well as local communities' involvement in implementing the concept of sustainable development.

2.2 The legal framework

15. There are three main reasons to account for the particular status of the Danube river and of the Danube delta:

- Danube is **an international river**. It flows in the territory of ten European countries⁴ and crosses four of its capitals⁵. Ever since the 19th century, navigation on the Danube river has been placed under international regulation. Currently, it is the Belgrade Convention on the regime of the navigation in the Danube river that sets out the international norms enforceable to the Danube river and Sulina canal as its outlet into the sea. Furthermore, under the Sofia Convention on cooperation for the protection and sustainable use of the Danube river, the Danube river is subject to international management, regulation and monitoring, that the International Commission for the Protection of the River Danube (ICPDR) is set to carry out.
- Danube is a **shared resource**. It is a border water between neighbouring countries in some of its segments and, upstream its flowing into the sea, between Romania and Ukraine (Chilia Arm). The international environmental law has consecrated the principle of **sustainable and equitable use** as well as the obligation not to damage the environment of other states that has emerged as a **duty to cooperate** adjoining the imperative of prevention. The bilateral conventions on the border regime are also enforceable.

⁴ Germany, Austria, Slovakia, Hungary, Croatia, Serbia and Montenegro, Romania, Bulgaria, Moldova, Ukraine.

⁵ Vienna, Bratislava, Budapest and Belgrade.

- Danube Delta is subject to **special protection status**. It is listed among the world heritage sites and falls under the scope of number of international agreements on environmental protection and preservation, including:
 - the Council of Europe Convention on the conservation of European wildlife and natural habitats (the Bern Convention);
 - the Convention on wetlands of international importance especially as waterfowl habitat (the Ramsar Convention);
 - the Convention on environmental impact assessment in a transboundary context (the Espoo Convention);
 - the UNESCO Convention concerning the protection of the world cultural and natural heritage;
 - the Convention on the conservation of migratory species of wild animals (the Bonn Convention),
 - the Convention on access to information, public participation in decision-making and access to justice in environmental matters (the Aarhus Convention);
 - the Convention on cooperation for the protection and sustainable use of the Danube river (the Sofia Convention).

2.3 Current threats to the Danube delta: the building of a deep-water navigation canal by Ukraine

16. The main cause of concern for the future of the Danube delta is the Ukrainian project of building a deep-water navigation canal on the Chilia Arm of the Danube, following the Bystroe canal into the sea - the latter being an inland watercourse belonging to Ukraine, within the Ukrainian Danube Delta Biosphere Reserve. On 11 May 2004, the Ukrainian authorities started the works of adjustment for navigation of the Bystroe canal. The route of the already accomplished part of the canal on Bystroe begins from a point on the Romanian-Ukrainian river border, situated upstream the junction of the Chilia and Musura arms of the Danube. Besides the dredging works on the Bystroe mouth into the sea carried out during the first phase of the project, its accomplishment entails embankments and further dredging and deepening works both on Bystroe and on the Chilia Branch, which is a border water between Romania and Ukraine.

17. The Bystroe canal cuts straight through the core zone of the Ukrainian Delta Biosphere Reserve. The Bystroe canal itself is only 8 km long, but the new navigation way, as intended by Ukraine, would include the Chilia branch of the Danube and would thus be 164 km long.

18. A report prepared by the Ukrainian Government⁶ affirms that "*the absence of the deep-water navigable channel causes Ukraine a serious economical, strategic and social damage that attests objective necessity of its creation*".⁷ Since Ukraine has no deep water outlet to the Black sea, vessels coming from the EU-countries in the direction to the Black and Caspian seas are using the Sulina canal (which, as shown above, is an international waterway on which apply the international norms set by the Belgrade Convention on the regime of the navigation in the Danube river). As the report continues: "*The creation of the deep water ship course of its own for Ukraine is considered now as one of the most urgent problems of geopolitical and economic significance without the decision of which Ukraine will finally lose one of the branches of the transport corridor, and the shipping line of the Danube with the Black Sea will be completely monopolized by Romania. Such a situation has lead to large economic losses not only for Ukraine, but also for countries of Europe, first of all for the Danube ones.*"⁸

19. However, Romanian and international experts have underlined that the economic argument does not hold to close scrutiny. The latter have underlined the high maintenance costs far more expensive than on other routes that could have been envisaged for the construction of the canal,

⁶ "Environmental Assessment (EA) within the framework of the project "Creation of the Danube – the Black Sea deep-water navigable passage in the Ukrainian part of the delta. Stage 1" - Ministry of Ecology and Natural Resources of Ukraine, Ukrainian Scientific Research Institute of Environmental Problems – 201 pages, Kharkov, 2003

⁷ Page 194.

⁸ Page 38

while the Romanian authorities have stressed that charges and dues on the Sulina canal are only levied in order to finance the works to ensure safe navigation depths, profitable ends being expressly interdicted by the Belgrade Convention⁹.

20. Further on, vessels coming from the European inland would be obliged to make an important detour if they wish to sail through the Chilia Arm and the Bystroe canal. As for the Ukrainian vessels sailing each year through the Sulina branch, their number is only 70 (from a total of around 1800 vessels).¹⁰

21. The main issue to be addressed is, however, the likely strong ecological impact of the project and the much sought after economic benefits must be compared against the ecological imbalance the project may cause.

22. The Ukrainian Ministry for the environment declared that *"the accomplishment and the use of the navigation canal will not have influence on the environment and the documents concerning the project allow us to declare that its accomplishment will not negatively influence the transboundary area and will not have negative consequences on neighbouring countries"*.

23. Neither the Ukrainian study nor the conclusions of the Ministry for the environment mention anything about the status of the area crossed by the Bystroe canal: a biosphere reserve, actually a transboundary biosphere reserve with the Romanian part and a wetland protected under the Ramsar Convention. In fact, through a presidential decree, on 2 February 2004, the status of the area was changed and the Bystroe canal was moved to the group of anthropogenic lands, thus *"cancelling the last basis for forbidding the construction"*.

24. The Ukrainian project has caused ever growing concern for international organisations (the Council of Europe, the European Commission, the International Commission for the protection of the river Danube etc.), for Ukrainian and international environmental NGO's, for independent experts and Romanian authorities, which all fear the project to hold a significant, negative, impact on the ecosystem of the Danube delta. It has to be stressed that the Danube delta is a single ecosystem and the damage inflicted to its Ukrainian side endangers the system as a whole. The likely consequences that most fear include:

- alteration of the hydrological balance and the pollution which may, in turn, jeopardize the biodiversity of the area;
- degradation of the plant and animal habitats and of the wetlands;
- risks of spills of oil and other toxic substances;
- serious impact on the economic conditions of the local communities, whose subsistence is dependent upon traditional fishing.

25. As the experience of the Sulina branch (which was made navigable for large sea ships between 1857 and 1902) has shown, navigation strongly affects the ecosystem in the immediate vicinity of a canal in an irreversible manner, due to the anthropic factors: stone dykes, navigation with its components (noise, accidental pollution, human settlements development etc.). As an example, on a distance of 10 km on both sides of the Sulina canal, no birds colonies settled down since its construction.

26. The Rapporteur wishes to underline that nowadays there still are activities in the Romanian part of the delta which are a threat to the ecological quality of the delta. It is necessary to keep the depth of the Sulina branch, which forms a vital link between the Danube seaports and the Black Sea, at 24 feet (7.32 m). The total yearly quantity to be dredged in the Romanian part of the Delta is therefore estimated at around 2.1 million m³ of sediments, of which the major part has to be dredged on the Sulina branch¹¹.

⁹ Both Romania and Ukraine are parties to.

¹⁰ Information from the Romanian Danube delta Biosphere Reserve Authority.

¹¹ "Dredging on the lower Danube in Romania" by Nico J. van Drimmelen

27. In 1996 the Romanian government decided that no other dredging operations but the ones necessary to maintain the required water depth were to be executed.

28. Among the other short, medium and long term environmental damages potentially caused by the construction of a new navigation canal by Ukraine, the following ones (as admitted by Ukrainian specialists¹²) can be mentioned:

- due to the dredging works on Bystroe canal the sediments will be deposited at 5 km in the Black Sea and consequently *"in this case it could arise unwanted consequences like the affectation of the natural processes of bottom relief formation and the movement of the sediments that lead among other things to the building of the sand strip Ptuhina (Ptaşina), under water relief shapes instability"*;
- increasing the water flow in this canal *"could lead to the step by step erosion of the channel banks, the loss of the alternative branches of the delta and the worsening of the aquatic conditions of the floating reed beds that are hydrolically connected to these"*;
- *the change of the hydrologic and hydrodynamic regime from the branches through which the navigation canal will cross, the entering into the water of some polluting substances, diluted or compact, due to the disturbance of the sediments from the bottom during the accomplishment and the use of the navigation way, the entering into the water of the polluting substances due to the violation of the ships navigation regime and in the case of some damages ;*
- the water quality: *"affecting the oxygenation conditions, increasing the processes of atrophying only of the part where are done works using the excavating techniques... and through the directly destruction of the organisms of the benthos from the bottom which is deepening, that will lead to the slowing down of the processes of water selfcleaning on a long period of time ... All the described processes ... can lead to the change of the moving environment of the hydrobionts, partly destruction of them, the affection of the conditions of the ichthyofauna reproduction"*;
- *"From the point of view of the terrestrial and aquatic fauna composition, the Bystroe region is included in the category of the highest valuable from ecological and scientific point of view... Taking into account this fact, the most essential influences on the hydrobiont can rise as a result of the works for the acces channel as a result of the oppression and destruction of the plankton and benthos organisms, that means the feeding base for fish, during the deepening works, as well as a result of the entering of the salted water in the branch bed"*;
- serious consequences are anticipated on the natural resources and especially on the fish resources: *"the existence of the navigation channel will bring about real damages for fishing".* The Ukrainian study even admits *"irreparable damages done to the sea ichthyofauna as a result of the works"*.

29. According to the World Wildlife Fund (WWF), there has been no detailed social and environmental study impact of the canal and the one hurriedly carried out by the Kharkov University fails to comply with the principles of objectivity, scientific validity, publicity, complexity, considering public opinion and transboundary effects. The assessment of the canal impact on fisheries and birdlife has not been conducted either.

30. Nearly 5000 fishermen belonging to four countries (Romania, Ukraine, Bulgaria and Serbia and Montenegro) depend economically on the lower Danube river fishery. Dredging and operation of the canal are supposed to decrease the population of fish species such as herring. The construction and maintenance of the canal will also impact the vital sturgeon populations (the Danube is the last river of the Black Sea basin where natural spawning of passing sturgeons remains).

¹² "Scientific assessment of the ecological examination of the Work Project "The accomplishment of a navigation way of high depth Danube – Black sea in the Ukrainian part of the Danube delta, phase I"" (30 pages), published on 19 August 2004

31. The canal is supposed to also impact Romanian wetlands and the Romanian Delta Biosphere Reserve. The deepening of the existing riverbed of Bystroe will inevitably increase river flow in that channel. Additionally, the Ministry of Transport of Ukraine intends to construct a "dam" (turning vane) for water flow regulation at the place where Starostambulskoye mouth branches off from Bystroe mouth. This is intended to result in reduction of water flow downstream in Starostambulskoye mouth – water that is shared with Romania and its part of the bilateral Danube Delta Biosphere Reserve. Those activities of Ukraine are supposed not only to affect the water resources of Romania, but also to cause negative consequences for flora and fauna biodiversity depending on these wetlands.

32. The WWF recalled that the Institute of Geological Studies of the National Academy of Sciences of Ukraine confirmed that the waters and bottom sediments (both in Danube and shelf) are polluted by pesticides, heavy metals, radionuclides, and oil products that have been accumulated there for many years from the Danube upstream. Huge amounts of dredged soils (contaminated by heavy metals, pesticides etc.) will be removed to the sea dumping ground far away from the shore in the Black Sea. At the sea-dumping site, intensive long-term local pollution of sea bottom and waters will take place. The consequences of such dumping will be the loss of bottom biocenosis, deterioration of oxygen conditions, toxic influence on biological forms. In addition, there is a real threat of pollution of artesian waters during the removal of upper slimy ground, which serves as a filter.

33. The changes caused in water circulation are supposed to have a bad influence on the ecosystem. Through the deepening of the Bystroe branch, the water flow is accelerated to the sea and the drainage of the surrounding area will increase. Due to the reinforcement of the banks, the lateral water flow from the branch to the neighbouring area would diminish or be interrupted which will interrupt the important ways for short migratory fish to their spawning places, as was proven by rectification works in the Romanian part of the Danube Delta.

34. Since no environmental monitoring of the works was provided during the dredging of the Bystroe canal, it is very difficult to evaluate the immediate impact of the works. However, isolated observations have identified examples of environmental consequences: the death of tern colonies (sandwich tern and common tern) that nested near the Bystroe estuary.

35. As far as the National Science Academy of Ukraine is concerned, it has always been against the construction of the Bystroe canal, favouring an alternative proposal for a waterway through the Ukrainian part of the Danube delta.

36. According to the Report of the on-the-spot appraisal prepared by Mr Lethier, expert working for the Bern Convention, three of the alternative routes are worth considering in closer detail. All are located in the northern part of the delta, outside its active area, technically realistic and financially more costly than the Bystroe canal option - but likely to entail substantially lower environmental costs (see appendices: map 5).

37. The Ukrainian environmental NGO "Ecopravo" has drawn attention to the various impacts that building the new navigation canal would have on migratory birds, on fish resources, on increasing the Black sea pollution (effects underlined by the Institute of Geological Studies of the National Academy of Sciences of Ukraine).

38. The Ukrainian Union for Bird Conservation, which is the BirdLife International partner organisation in Ukraine, warned that the works on the canal "will destroy the nesting and staging sites of tens of thousands of birds, including six species on the IUCN Red List of Globally Threatened Species and 38 on the Ukrainian Red List"¹³.

39. Concrete effects of the works have already been identified. According to the Ukrainian Society for the Protection of Birds, in the summer of 2004 "the colony of terns disappeared on the Ptashyna (The Bird) spit near the Bystroe estuary. The most possible case of the colony vanishing was the overwhelming disturbance coming from dredging fleet and service scooters working at the

¹³ The World Conservation Union (IUCN):<http://www.iucn.org/news/may03/ens200503.pdf>

Bystroe estuary. This fact comes in controversy with the cheerful statement of the Ukrainian Foreign Affairs Ministry: "The canal construction [...] does not affect the ecological balance of the Danube delta."¹⁴.

40. A study carried out at the request of the Romanian Ministry of Environment and Water Management has identified another major environmental impact in the movement of the large amounts of sediments resulted from the dredging operation in the Bystroe canal and thrown in the coastal area of the Black Sea. The North–South coastal current is drifting the sediments towards the mouth of the Sulina canal and the Romanian coastal zone.

41. Romanian officials asserted their concern with the Ukraine's compliance to international conventions providing for its proper information, consultation and involvement in the decision-making process concerning the project undertaken in the Ukrainian Danube delta and for the comprehensive environment impact assessment. However, information concerning the Bystroe canal project was partially provided by the Ukrainian authorities since August 2004¹⁵, during international meetings held on or touching this subject: the Geneva International Meeting on the Bystroe canal and the 18th session of the International Coordination Council of the "Man and Biosphere" Programme, as well as to the experts participating in the Joint Mission of the European Commission and other international organisations in the Ukrainian Danube delta.

i. International reactions

42. While the Ukrainian project still lacks a comprehensive environment impact assessment, the reports of international organizations concluded so far lead toward the conclusion of a negative ecological and transboundary impact.

43. Thus, the Report of the **Joint Ramsar Convention and Unesco Man and Biosphere Programme Mission** in the Ukrainian Danube Delta (October 2003) found the Bystroe route as the most environmentally damaging alternative that could have been foreseen for the deep-navigation canal.

44. The **Report of the on-the-spot appraisal (22-24 July 2004) of the Bern Convention on the Conservation of European Wildlife and Natural Habitats** (published on 31 August 2004) questioned the lawfulness of the Ukrainian authorities in respect to the provisions of the Bern Convention¹⁶, stating that there were no sufficient grounds to justify the project as an exception from the general obligation to conserve the habitats of wild flora and fauna.

45. It stated that *"such a project would have both direct and indirect effects, linked to the construction of the installations and their use¹⁷. In the case at hand the impact will be all the greater in that the infrastructures are located at the heart of the active part of the delta, in the Ukrainian sector which is the most dynamic in hydraulic terms, the most interesting and the most sensitive as regards biological and landscape diversity.*

46. A **Joint Fact-Finding Mission of the European Commission and International Organizations** in the Ukrainian Danube Delta (6-8 October 2004) that followed the International Meeting in Geneva on the Bystroe Channel held upon Romania's initiative, publicly delivered its report on 17 November 2004. The Report of the Joint Fact-Finding Mission provided for a general picture of the Ukrainian project although it warned against the difficulties of such a task since a concise description of the project in its entirety was still missing, causing confusion to the full extent of the project and to the extent to which particular activities related to the project were included in

¹⁴ Ukrainian Society for the Protection of Birds: "Ukrainian conservationists strive to save the Danube Biosphere Reserve" <http://www.utop.org.ua/eng/news23.htm#3>

¹⁵ Works to build the canal started on the 11th of May 2004.

¹⁶ Articles 4 and 9 of the aforementioned Convention according to which Ukraine, as party, is bound to ensure the conservation of the habitats of the species listed in Appendices I and II and exceptions are only allowed to the extent that there is no other satisfactory solution and unless is not detrimental to the survival of the species concerned.

¹⁷ For further information see the Code of practices for the introduction of biological and landscape diversity considerations into the transport sector (Nature and environment series, no. 131, Council of Europe publishing).

Phase I, Phase II or some future project phase. The report found the decision-making and implementation of the project to have been conducted in an unsatisfactory manner as the Ukrainian authorities failed to properly and promptly inform their own public and the interested international organizations and to engage in consultations with the stakeholders or the potentially affected parties.

47. The **International Commission for the Protection of the Danube River (ICPDR)** has twice expressed (by resolutions adopted in December 2003 and September 2004) its concern with the potential negative impact of the building of the Ukrainian canal and unfaithful observance of international conventions.

48. The Final Report of the 18th session of the **International Coordination Council of the UNESCO "Man and Biosphere" Programme**, held in Paris, during 25-29 October 2004, expresses concern with the unilateral revision of the zonation of the Ukrainian Biosphere Reserve, with the lack of cooperation with the Romanian authorities in the framework of the Danube Delta Transboundary Biosphere Reserve and with the disregard of the role of the Ukrainian Dunaisky Biosphere Reserve.

49. The European Union and member states individually have also showed their disapproval for the implementation of the Ukrainian project in disregard of international norms and procedures.

50. The **European Commission** has called on Ukraine during the EU – Ukraine Summit¹⁸ to conform to international norms and stop the works until an environmental impact study is completed. The European Union has also expressed its regret for the inauguration of the first stage of the canal and reiterated its request that an impact assessment should be performed in accordance with international standards.

51. There is a growing international awareness and concern amidst civil society with NGO's repeatedly protesting against Ukraine's failure to comply with its international commitments and the requirements of national legislation on environmental matters. The Resolution of the **Forum of the NGO's from the Danube River Basin** (6 October 2004, Odessa) reiterated the request of the civil society to stop the works of the canal on the Bystroe channel and for fully observance of environmental norms.

ii. Mechanisms provided by international environmental conventions for the settling of the issue

52. Several international organisations with a mandate to preserve the environment had been seized to look into the matter:

- a) the **Report of the Joint Fact-Finding Mission of the Experts of the European Commission and International Organizations in the Ukrainian Danube Delta** (issued on 17 November 2004) found that Ukraine should stop the implementation of the project until sufficient information is gathered from additional monitoring of the area which should extend at least one year before the decision to carry on with Phase II is made. It also called on Ukraine to engage in a public debate "that may even lead to the reversal of the decision and to the selection of another option if it turns out that the other option is more sustainable, in economic, social and environmental terms" and in consultations with Romania on the project in its entirety, providing for complete and adequate information. The Expert Team also considered that a decision on the implementation of Phase II of the project should be pending upon the conclusions of the monitoring of the area to extend at least over one year.
- b) the Compliance Committee of the **Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters** considered Romania's submission and the communication of an Ukrainian NGO – "Ecopravo –Lviv" concerning the non-compliance by Ukraine with the provisions of the Convention during its 6th Meeting (Geneva, 15-17 December 2004). The Report drafted by the Compliance Committee found Ukraine to have breached various provisions of the Convention safeguarding the public's rights while implementing the project and

¹⁸ Held on 8 July 2004 in The Hague.

recommended that Ukraine should bring its legislation and practice in line with the Convention and should adopt a strategy with a view towards implementing the Conventions and designing appropriate mechanisms for that. The report shall be submitted to the approval of the Meeting of the Parties to the Convention to be held in Almaty, during 25-27 May 2005.

- c) the **Secretariat of the Espoo Convention on the Environmental Impact Assessment in a Trans-Boundary Context** was seized by Romania with the request to set up an inquiry commission to assess the likelihood of a significant transboundary impact. The inquiry commission, chaired by the Dutch professor, Joost Terwindt, has already started its works and is likely to deliver its conclusions no later than 26 July 2005. Should it reach the conclusion of a "potential significant transboundary impact", Ukraine shall be legally bound to inform, consult and involve Romania in the decision-making concerning the subsequent stage of the project.
- d) the Standing Committee of the Bern Convention considered the Report of the Mission of the Bern Convention Secretariat during its 24th meeting (29 November - 3 December 2004) and adopted Recommendation 111 (2004), acknowledging Ukraine's failure to completely fulfil its obligations stemming from the Bern Convention. It asked Ukraine to suspend works and not to proceed with Phase 2 of the project until an environmental impact assessment is undertaken to international standards. A file on the Bystroe issue was opened and it will further be under scrutiny.
- e) a decision on organising **two workshops** on issues related to the Bystroe project has been taken by the representatives of the international organizations and the Romanian and Ukrainian authorities during the **preparatory meeting** for the **International Conference for the Conservation and Sustainable Development of the Danube Delta** (15 March 2005, Kyiv). One should assess the environmental impact documentation yet to be completed and the other should offer a sound basis for the establishment of the international monitoring group. The results of both workshops are to be reported to the International Conference to be held in September 2005, in Odessa.

iii. The Ukrainian point of view

53. During his study visit in Ukraine in March 2005, the Rapporteur took note of the point of view of the Ukrainian political deciders, of the Delta Pilot enterprise (which builds the canal) as well as of the opinion of the National Academy of Sciences.

54. He regretted that no direct contacts with Ukrainian environmental NGOs were organised, in spite of his request.

55. The Rapporteur considers that it is the responsibility of the Ukrainian government to improve the economic and social conditions for the inhabitants of the delta, but stresses that no measures should be taken outside the framework of the sustainable development of the Danube delta.

56. The Ukrainian Ministry of the environment and natural resources, while fully agreeing that the environmental assessment already done has not been performed in accordance to international standards and in respect to the international agreements Ukraine is part of, still considered it as enough proof that no major environmental damage would result from building the deep water navigation canal through the Danube delta. It strongly supported the Bystroe canal alternative as being the best among all alternatives taken into consideration.

57. The Committee on environmental policy, natural resources utilisation and elimination of the consequences of the Chernobyl catastrophe, of the Supreme Rada of Ukraine, showed concern on the effects on the environment of building the Bystroe canal and was in principle favourable to analysing alternative solutions. While regretting the authoritarian manner used by the former government to decide on the issue, the Deputy Head of the Committee showed scepticism as far as the organisation of a possible parliamentary debate was concerned. Such a debate would be improbable since the majority of the members of the Parliament were not considering environmental

issues as important enough to decide on the very holding of such a debate. Moreover, the Committee on the environment itself considered that the Danube delta issue should not raise more concern than many other current environmental issues in Ukraine.

58. According to the Ukrainian authorities, works performed in the last century in the Romanian side of the Delta had a big influence on the distribution of water between the Romanian (more) and Ukraine part (less) of the delta. Therefore, the current Ukrainian works would only restore the "natural" state of fact as far as water distribution is concerned.

59. The Ukrainian authorities also informed that the estimated charges for ships which would be using the new deep water navigation canal would be 8 times lower than the charges and dues currently paid to Romania for using the Sulina canal (*see §19*). It appeared, however, that the Ukrainian estimations were only based on the prices and taxation system used in the Soviet era.

60. The representatives of the National Academy of Sciences (including the staff of the Delta Biosphere Reserve) were, as mentioned above, strongly in favour of alternative solutions to the Bystroe canal. Two alternatives, both north of the city of Vilkovo, were in particular described as bringing more advantages as compared to the Bystroe canal (the widening an already existing navigable arm, the possibility of using an already existing harbour etc.) in addition to much less harm done to the deltaic ecosystem. The director of "Ust - Dunaisk" Sea Harbor, the director of the Ukrainian Danube Steamship Line and the director of the Project Institute of Marine Transports, when participating to a round table in Odessa on 27 March 2005, also pronounced themselves in favor of one of these alternatives.

61. Pressure seems to have been exercised on the Ukrainian Delta Biosphere Reserve by the Ukrainian authorities. In November 2004, the Danube Transport Prosecutors Office in Odessa confiscated the computers and archives of the Reserve and have still not returned them.

62. The Rapporteur took note of the agreement of the Ukrainian authorities on the fact that the environmental impact study done in accordance with the Ukrainian legislation does not comply with international criteria. He was therefore surprised to notice that Ukrainian authorities still relied on this study when insisting on the non-existence of environmental consequences of the project. He also took note of the declarations on the transparency foreseen for any further activities linked to the project and on the willingness of Ukraine to provide all information needed for an international environmental impact study, as well as of its wish to organise an International Conference in Odessa in September 2005. However, he was disappointed not to receive a clear reply when asking if Ukraine has the intention to accept the conclusions of this Conference and the results of the international impact study.

iv. Action to be taken

63. An appropriate response to the question "what has to be done?" is to be found in the international commitments that European states, including Ukraine and Romania, have undertaken in the field of environmental protection. International organisations concerned should coordinate efforts towards ensuring the compliance with international norms in the field and the effective cooperation between Ukraine and Romania as a potentially affected country.

64. However, adequate measures to address the consequences entailed by the works deployed during the first stage of the project as well as the obligation to observe the international procedures for the subsequent stages are to be taken and their effectiveness rests upon the immediate suspension by Ukraine of the ongoing works

65. The mitigation of the effects of the already accomplished works may be ensured by devising and implementing appropriate compensation measures both in the Romanian¹⁹ and Ukrainian Danube delta and by international ecological monitoring of the area.

¹⁹ The Romanian authorities have already expressed their intention to take the compensation measures that the international experts or the internal study conducted by Romanian Research Institutes shall identify as necessary to abate the ecological impact of the construction of the Bystroe canal on the Romanian Danube delta.

66. Transborder cooperation between Romania, which will become member of the European Union in 2007, and Ukraine, which has a stronger orientation towards the EU, should also be based upon the European Water Framework Directive.

67. Romania has already envisaged the possibility to take measures in the Romanian part of the Danube delta in order to compensate the negative consequences for the environment of the building of the Bystroe canal. Among the measures considered are:

a. restoring the system of channels in order to improve water circulation:

- partial unclogging of certain canals and lakes within the natural aquatic systems;
- opening / calibrating / shutting certain canals linking the river branches to the lakes, in order to preserve a high water level in the lake systems when Danube has a low water debit;
- stone consolidation of the river banks in the areas affected by the vessel traffic or by storms;
- planting trees specific to wet ecosystems on the banks of the canals, in order to protect the banks;

b. restoring and improving the deteriorated lands by bringing back to nature certain areas that can no longer be used for their economic destination – agricultural and fishing works:

- restoration, by flooding, of the initial wetland situation. It is considered for 79 541 ha of current agricultural and fishing areas to be flooded (through works to be carried out in two distinct stages, the first one ending in 2008 and the second in 2015) in order to reinstate the initial wetlands. The research team stressed that the ecologic reconstruction consists of small scale hydro-technical works, which have a diminished impact on the environment and costs estimated at about 1,5 – 2 millions euro per year, in the 2005 - 2008 period.

3. The Ebro delta

3.1 Introduction

68. The information on the Ebro delta was gathered during a fact-finding visit on 3 and 4 March 2005, in the course of which the rapporteur met representatives of authorities with responsibility for management of the delta: the Spanish government (Ministry of the Environment), the regional government (Generalitat de Catalunya), supra-municipal authorities (Montsià Local Council) and Ebro Delta Natural Park management. He also met local elected representatives from the municipalities in the delta (mayors and municipal councillors) and representatives of the various sectors concerned (farmers, fishers, hunters and environmentalists, etc).

69. The Ebro delta covers an area of 330 km² (the submerged part covering approximately 2 000 km²). Like all deltas, it is the result of the accumulation of sediment borne by the river. The period in history during which the delta grew most was that following the discovery of America, because of the expansion in shipping and the navy. Shipbuilding led to major deforestation upstream the Ebro river in the 16th and 17th centuries, resulting in major soil erosion and higher sediment levels which favoured more rapid growth of the delta. Sediment levels have declined sharply since the 1950s, however, with the construction of some 200 dams on the Ebro and its tributaries. Nowadays, only 5% of the sediment reaches the delta.

70. The Ebro delta is a natural region that has been transformed over the centuries by human activity. It now has a population of 50 000, with farming being the main activity. 65% of the area is given over to rice growing, which was introduced at the end of the 19th century. In 1983, the regional government established the Ebro Delta Natural Park (7 800 ha) to protect this outstanding region.

3.2 Fauna and flora

71. The Ebro delta is Spain's second largest wetland and one of the most important in the western Mediterranean. The Natural Park has been a Ramsar site since 1993; its 7 800 ha on the delta coastline form part of a special protection area of 11 500 ha to be developed under the European Union's Natura 2000 Network. It includes several lagoons, small lakes, islands and peninsulas. Over 500 species are listed, including a number of brackish water species. The coastline is made up of long sandy beaches and dunes.

72. The development of rice growing and rice fields (which are flooded for several months a year) has also contributed to the biodiversity of the delta and, in particular, to the presence of very many bird species, especially aquatic birds (for example great egret, squacco heron, glossy ibis, greater flamingo, shelduck, red-crested pochard, collared pratincole, Audouin's gull, slender-billed gull, Sandwich tern, etc.). 350 of the 600 species of birds known in Europe have been sighted there. Around a hundred species nest there and approximately 200 000 birds hibernate there, not counting the migratory species that stop over.

73. There are also eight species of endemic plants (like the water fern marsilea, the sea daffodil, the white water-lily or the bean-caper) as well as invertebrates, insects, shellfish, fish (55 species, including six endemic, like the freshwater blenny, the Valencia and Spanish cyprinodonts or the three-spined stickleback), amphibians, reptiles (like the European pond turtle or the Hermann's tortoise) and other vertebrates (mainly birds).

3.3 Economic activity

74. The Ebro delta is a region that has been shaped both by the river and by human activity for centuries. The region now has a population of 50 000, with 15 000 living in the delta itself and 35 000 in the surrounding area, in eight municipalities. It is therefore necessary to take account of the needs of the population and strike a fair and sustainable balance between the various activities pursued (farming, fishing and tourism, etc) and preservation of the environment. There is some need to curb municipalities' desire to build (blocks of flats, roads and amenities) and develop tourism with a view to generating jobs and new activities. It is crucial to adopt a cautious approach and respect the unique environment by promoting forms of tourism such as eco-tourism and agri-tourism.

75. The primary sector (farming, fishing, aquaculture and hunting) concerns approximately 6 000 families and generates approximately € 100 million a year. Farming, covering 75% of the area of the delta, is a characteristic feature and helps preserve it. The regular flooding of the rice fields (main crop introduced around 1860), which cover an area of 20 000 ha, helps manage the delta and contributes to the presence of many animal species (mainly birds such as herons, egrets, flamingos and ducks, etc). Annual rice production amounts to 120 000 tonnes (a third of the Spanish total). The development of rice growing has led to the establishment of a vast network of irrigation and drainage channels which help maintain the delta.

76. For several years, fewer agrochemical substances have been used in rice growing. The regular irrigation regime for the rice fields and the controlled flow of water mean that it is constantly refreshed, while inflow of seawater is prevented. In addition, a marked improvement in water quality has been noted in recent years, leading to the presence of larger numbers of birds and growth in fish species.

77. The total catch of fish is approximately 9 000 tonnes a year, on top of which come 3 000 tonnes from shellfish farming (mussels and oysters). Fishing is one of the oldest activities in the delta (the fishers' guild is a thousand years old) and fishers have always helped with the upkeep of the lagoons and pools in the delta. As a result of the improvement in water quality, output has increased (good examples here being eels, at around 50 tonnes a year, and prawns).

78. The only industry in the delta is the extraction of sea salt (Trinitat saltworks) with a production level of approximately 70 000 tonnes a year.

79. Tourism is growing (approximately 800 000 visitors a year).

80. In view of the limited employment opportunities in the delta region (mechanised farming, limited development of the construction sector, lack of industry and restrictions on economic development because of environmental protection), it is important to maintain the existing primary activities, which are the delta's main source of income and also guarantee the preservation of its environment.

81. Given that rice growing is crucial to the survival of the delta (there is a network of irrigation and drainage channels, and the rice fields serve as a filter, improving water quality) and in view of its high production costs, the farmers suggest that rice growing should be deemed to be of benefit to the environment and should receive the subsidies needed to ensure that it can be continued as part of a policy to promote sustainable, multi-functional agriculture of the type advocated by the European Union.

82. Given the review of the CAP in 2007 and in the framework of the WTO liberalisation of agricultural markets, and in order to ensure acceptable levels of profitability for their activity, they wish rice growing to be subsidised in protected areas such as deltas.

3.4 Threats to the delta

Lack of sediment

83. The Ebro delta suffers under the impact of measures taken upstream. For instance, the river's flow is regulated by the Ebro Hydrographic Confederation (Spain's first river basin agency, set up in 1926). Since the 1950s, some 200 dams have been built on the river and its main tributaries, whose catchment basin covers 89 000 km², both to regulate flooding and establish water reserves and also to irrigate land and generate electricity. Indeed, the river flow regime is apparently often determined on the basis of electricity-generation needs established by the electricity companies operating the dams rather than of environmental requirements downstream, in particular in the delta. There therefore appears to be a need to introduce a minimum flow rate to meet environmental requirements.

84. Moreover, the dams (especially the Ribarroja and Mequinença dams) have had the serious effect of keeping back the sediment that used to accumulate in the delta (nowadays, only 5% reaches it) and reducing river flow (which is also much more regular and no longer subject to substantial seasonal flooding, which benefited the delta). Whereas between 1860 and 1960, for instance, the delta experienced sedimentation of 50 cm, it is now in decline.

Marine erosion

85. The delta is also facing problems of subsidence (sinking) and marine erosion, directly affecting beaches and dunes, which are aggravated by the lack of new inputs of sediment, with the result that 50% of the delta is already 0.5 m below sea level (polder). The medium-term forecasts for global warming and rising sea levels show a heightened threat here (forecast of an additional 0.5 m during this century).

Other dangers

86. The Ebro also carries industrial waste, which is gradually accumulating, while Ascó nuclear power station draws its cooling water from the river (70 m³/sec). Invasive alien species (American crayfish, zebra mussels, silurids, etc) have been introduced and are changing the ecosystems. Navigation, mainly in connection with tourism, is also causing serious erosion of the river banks.

87. Spain's 2001 draft national hydrological plan has been drastically amended insofar as it provided for major transfers (up to 1 000 hm³/year) from the Ebro to other catchment basins with shortfalls, which would have further worsened the delta's ecological position. However, the plan did include protection measures (minimum flow rate of 100 m³/sec and the development of a comprehensive plan for protection of the Ebro delta), while at the same time providing for the building of 100 new dams and the irrigation of a further 400 000 ha.

88. In the revised Plan, these various measures are now being replaced by measures to save water, treat and reuse waste water and modernise irrigation facilities, as well as by the construction of seawater desalination plants to avoid transfers between catchment basins, which are extremely expensive and environmentally questionable.

Envisaged measures

89. The envisaged measures for protecting the Ebro delta and its environment range from the building of artificial, planted dunes or concrete piers or dykes along the shore or at sea to the comprehensive protection of the delta with a barrier of dykes all around it. However, the latter solution would not appear to be viable, as the main erosion actually occurs 5 km from the coastline at the underwater sedimentation shelf. Apart from the huge costs involved, any dykes built near the coastline would not therefore have solid foundations and would be destroyed by the effects of marine erosion in the long term.

90. It seems that the only real guarantee of long-term survival for the delta and the only viable solution would be to restore, if only in part, the input of sediment, which would compensate for the erosion and subsidence of the delta. To this end, some of the sediment trapped in the dams would have to be allowed to pass through to the delta. However, that would require a new approach to managing the dams upstream. As the cost of building the dams has already been recouped, consideration should be given to an integrated ecological management system for the entire river basin and to transferring the private companies' operating licences (mainly for electricity generation) back to the public sector.

3.5 Administrative responsibility and legal protection

91. While the Spanish Ministry of the Environment is responsible for the coastline on land and at sea, natural parks are the responsibility of regions, in this case, the Catalan regional government (Generalitat). It was on this basis that the regional government established the Ebro Delta Natural Park in 1983. The park mainly covers the coastal edge of the delta.

92. In recent years, legislation has been passed in order gradually to step up the protection of the delta by limiting urban and residential development and introducing agro-environmental measures to reduce the use of fertilisers and pesticides in rice growing.

93. The regional government, in particular at the request of the European Union (Natura 2000 Network), intends expanding the natural park in order to protect it more effectively (currently 11 500 ha protected, including the 7 800 ha of the existing natural park).

94. The municipalities in the delta and the two relevant local councils (Montsià and Baix-Ebre) also have water management powers, which are more limited, as does the Ebro Hydrographic Confederation.

95. To allow integrated management of the delta, it is necessary to promote comprehensive and integrated management of the river in accordance with the European Water Framework Directive so as to ensure a regular minimum flow rate and adequate sediment levels.

96. With regard to the delta itself, it is necessary to set up an agency including both the relevant authorities and economic sectors, which would have the powers and financial resources required for ensuring comprehensive management of the delta and adopting an overall plan for its development and preservation, about which there has been unsuccessful discussion for years.

97. It has been suggested that the natural park be expanded (possibly to cover the entire delta), on the understanding that it would not be a nature reserve in the strict sense and that it would allow the continuation of traditional activities (rice growing, fishing and tourism, etc), which themselves help the delta to survive.

98. The authorities concerned all want to preserve the delta. The local elected representatives drew attention to their limited powers and resources, as well as their concern to ensure employment for the local population and preserve their quality of life. The population are also helping to protect the delta by means of more sustainable farming methods and through water regulation: in the absence of seasonal flooding, water regulation in the delta currently depends on rice growing, through regular flooding of the rice fields.

99. In the interest of the delta and of the local population, who depend on it, it is necessary to strike the best possible balance between the preservation of the Ebro delta and the continuation of their traditional activities.

4. The Po delta

100. The information on the environmental challenges for the Po Delta was gathered during a fact-finding visit of the Rapporteur to the Headquarters of the Emilia-Romagna Po Delta Regional Park in Comacchio (Italy), which took place on 22 September 2004.

101. With a surface of about 1300 square km, the Po delta is one of the largest in the Mediterranean and consists of reclaimed lands, fresh- and saltwater lagoons, low sedimentary shores and emerging sandy banks. A wide portion of it has been recognised as an internationally important wetland, according to the Ramsar Convention and as a Special Protected Areas (SPA), according to the Bird Directive, while it has been entirely designated as an Important Bird Area (IBA) by BirdLife International. The protected area covers 13 regional parks and is one of the most complex protected areas in that it has coastal, terrestrial and river features.

102. According to Mr Cencini²⁰, of the Department of Economics of the University of Bologna, the concentration of population, settlements and economic interests along the Po delta has resulted in a drastic change in existing ecosystems, together with a general decrease in the standards of environmental quality, such as beach erosion, dunes degradation, land subsidence and pollution.

103. Today the greater part of the delta lies under sea level and, in order to prevent flooding of the land by the sea, several defence structures protect the deltaic coastline. The fauna too has been severely threatened by the reduction of ecological niches, by water pollution caused by the excessive agricultural use of pesticides and fertilizers and by hunting.

104. In recent decades the delta has been retroceding even if the Po continues to be the greatest carrier of sediments into the upper Adriatic. During the period 1954-1978 there was a retreat of 250 m (more than 10 m/year) particularly evident among the different outlets of the delta. In the modern delta, between Albarella island and the Volano outlet, there are practically no beaches. Here the erosional trend was dominated by large-scale land subsidence, as a consequence of the extraction of water and gas undertaken between 1938 and 1961. The present main deltaic outlet, the Po di Pila which supplanted the Po di Tolle, is an exception to the general trend. Due to the extensive embanking of the river, sediments are transported directly in proximity to the outlets, where have resulted in gains of depositional land, together with the formation of adjacent spits and elongated barrier islands. During 1934-1979 a pronounced triangular-shaped sandbank developed, indicating fair sedimentation at the river-mouth. The beaches south and north to the delta are all eroding and it has been necessary to protect them with artificial defences.

4.1 The vegetation

105. The Po delta shows a highly varied vegetation pattern that is influenced by some environmental factors, such as distance from the shoreline, soil type and ground-water level. In spite of the alterations due to anthropogenic influences, several plant communities are clearly characterized from the floristic viewpoint and well defined in their ecology. Their distribution confirms the importance of the Po delta salt marshes as a transition between the Atlantic and the Mediterranean vegetation complexes.

²⁰ Carlo Cencini: "Physical processes and human activities in the evolution of the Po delta"

106. Three main vegetation complexes have been recognized: the sand dune vegetation, the coastal mudflat and salt marshes vegetation, and the wood vegetation.

- the vegetation of sand dunes has been strongly modified by man's impact and coastal erosion. Only few sites show the natural zonation from the foreshore communities to the fixed dune communities. The typical foreshore community is characterized by sea rocket and the prickly saltwort. The development of the first rank of low dunes is the result of the colonization and establishment of the sand couch, i.e. the grass *Agropyron junceum*. The second rank of higher dunes is colonized by a community dominated by the marran grass. Fixed dunes are very rare in the Po delta region as they have been largely destroyed by man. Near the recreational areas the few remaining dunes are often covered by plantations of pines.
- the coastal mudflats and saltwater marshes are colonized by some communities dominated by the glassworts (*Salicornia* species) which very slowly bring about the raising of the level of the soil. Inland they are followed by the communities formed almost exclusively by the saltmarsh-grass. In permanent flooded areas, the plant communities are dominated by the sea-club rush and the reed.
- the coastal woods are important relics of mixed oak woods, characterized by a complex mosaic of plant communities, settled on ancient fixed dunes which date back at least to the Medieval age. Within small areas, the landforms are cause of a high spatial turnover of species. The Po delta region is at the boundary between the Central European and the Mediterranean phytogeographic region, therefore it's possible to observe a very original mixture of species, either from the phytogeographic viewpoint or from the ecological one. These woods contain Central European species, as the penduncolate oak, the hornbeam and the eastern hornbeam, as well as Mediterranean species such as the holm oak, the southern ash and the fragrant clematis.

4.2 The fauna

107. A wide portion of the Po delta has been recognised as an internationally important wetland, according to the Ramsar Convention and as a Special Protected Areas (SPA), according to the Bird Directive, while it has been entirely designated as an Important Bird Area (IBA) by BirdLife International.

108. These habitats are rich ecosystems, containing the main breeding bird colonies (especially terns, gulls, cormorants, herons, ducks) together with some priority species at national level (for instance the spoonbill colony on some islets of the Valli di Comacchio). The biodiversity level of this area is one of the highest in the entire Mediterranean. Over 350 bird species are present in the area, with high numbers of wintering waterfowl numbering over 100,000 individuals.

109. The fauna is typical of the various environments, and includes numerous species. Characteristic wild mammals include: the badger, polecat, weasel and fox. The woodland also contains fallow deer and deer. However, the particular beauty of the Po Delta lies in the presence of various species of rare birds, both migratory and non-migratory. Some of the most important are the great crested grebe, cormorant, night heron, little egret, great white egret, shelduck, gadwall, pintail, garganey, coot, black-winged stilt, avocet, herring gull, great reed warbler, and various raptor, including the characteristic marsh harrier. The breeding of rare species such as the pygmy cormorant, bittern, squacco heron, purple heron (over 100 nest in just one colony), glossy ibis, spoonbill, ferruginous duck, mediterranean gull, slender-billed gull, gull-billed tern and sandwich tern deserves special mention.

110. Among other fauna it is worth mentioning the last abundant colonies in Northern Italy of both terrestrial and aquatic tortoise, while in the largest lagoons linked with the open sea, such as the Sacca di Scardovari, it isn't rare to see dolphins and turtles.

111. The fauna too has been severely threatened by the reduction of ecological niches, by water pollution, caused by the excessive agricultural use of pesticides and fertilizers and by hunting (hunting associations are favourable to the conservation of the natural environment, but often contrast with prohibitions and constraints).

4.3 Fishing, aquaculture and saltworks

112. Traditional fishing - in particular eel farming - has been one of the most important economic resources of this area for centuries. Salt marshes were transformed into fishing lagoons (the so called "valli") by bringing in seawater through artificial canals (some of them were excavated many centuries ago), in order to keep the lagoon mouths active and to favour the circulation of the water. The tidal range is ca. 80 cm (average) and marshes were regulated in order to obtain favourable condition for fish breeding. Salinity varied considerably in connection with management. The average values were 15-25% in winter and spring, 25-35% in summer and fall. Now little remains of this ancient and poor economy. The old building ("casoni") and the eel traps ("lavorieri") are a rare tourist attraction. The development of new techniques of mollusc cultivation allows intensive fish-farming, in particular eel and mullet in some basins of the Valli di Comacchio and of the Venetian sector of the delta, clam and other shellfish in the Sacca di Goro, Sacca di Scadovari and other smaller lagoons.

4.4 Tourism and industries

113. Tourism has been one of the main factors which has most incisively transformed the beaches of the delta in the last fifty years. After World War II the spread of mass tourism transformed the flat coast south of the Po delta (the "Adriatic Riviera"), into the most extensive coastal conurbation of the country. By the 1960s, with the saturation of the "riviera", the urban growth involved the nearby beaches, mainly in the south side of the delta.

114. The flux of tourists towards sea-side resorts has developed on a mass scale during the last thirty years. Currently tourism is mainly related to the beaches. A future reevaluation of some activities not strictly combined to seaside tourism could induce the recovery of the local identity of the delta, where wilderness alternates with a discrete civilisation.

115. Since 1960s some industries have been settled near or on the delta, and in particular the oil and chemical industry near the Ravenna harbour, the activities connected with energy production, such as off-shore extraction of methane from the deep strata and lastly (1978) the building of a huge thermoelectric power station at Porto Tolle. These industries have often produced heavy local pollution and small integration with the deltaic socio-economic structure. Other activities present in the delta are connected with fish-harbours, fish and mollusc-farming, sugar refinery, dock- and repair-yards and so on. More recently several new small industries, craftworks and tertiary enterprises, linked to the beach tourism, have taken place along the Romea road, such as food supplies, building, furniture production, shopping centres etc.

4.5 Dune degradation and beach erosion

116. The concentration of population, settlements and economic interests in the Po delta, has resulted in a drastic change in existing ecosystems, together with a general decrease in the standards of environmental quality.

117. The recent spread of tourist development has stimulated a very heavy demand for waterfront land. Buildings and roads were located directly over back dunes, which were thus removed from the coastal system. In order to provide space for the bathing establishments and other recreational facilities, front dunes were also levelled. Dunes not directly involved with housing also suffered from human activities: many were mined, scarred by footpaths and vehicular traffic, devegetated by uncontrolled camping and parking and excavated to provide sand for concrete. At present, relict foredunes are lowered and affected by numerous breaches and rarely provide a good protection for the shore. Even where it still remains, the dune front has lost its continuity and does not offer any protection, either against winds or sea flooding related to phenomenon of "acqua alta" (high tide).

Since, in the delta, dunes can no longer supply any sand to the system and part of the sand irreversibly disappears into the sea during storm. This process results in erosion until a new equilibrium has been established.

118. Another form of human impact on environment is related to beach erosion. Shoreline recession, due to general processes discussed previously, has been particularly severe in the Po delta and on the adjacent beaches. In ignorance or in disregard of this trend, tourist development was concentrated very close to the beaches and in some cases upon them, even if in presence of clear evidence of erosion.

4.6 Environmental planning

119. The maintenance of the delta equilibrium requires non-stop hydraulic management and periodical addition of new structures protecting the territory from coastal erosion and from the risk of flooding by sea. These works, if carried out in a disorganized way, can have a heavy impact on the environment, to the point of destroying its morphological equilibrium.

120. The complexity and the diversity of the problems which affect the Po delta would clearly require a unified approach. Experience has shown that it is impossible to successfully protect the territory by applying sectorial and fragmentary measures at local level. On the contrary it can be managed only by well-organized territorial policies based on national and regional acts.

121. After various proposals, in 1988, Emilia-Romagna Region passed a regional act instituting the Po Delta Natural Park, obviously limited to the regional territory, south to the Po di Goro branch. The relative territorial plan, carefully defining the characteristics of the park and its boundaries, came into force in 1991.

122. The main tasks of the Emilia-Romagna Regional Park are to preserve the park's natural resources, protect the delta's cultural heritage and identify innovative management methods, particularly in the light of the climate changes which are affecting the coastal areas. In order to finalise these strategies for the active protection of the area, the Po delta section of the Emilia-Romagna Regional Park co-operates with its partners (the Region of Emilia-Romagna, the Provinces of Ferrara and Ravenna and the European Union) and has devised a "Master Plan for the Coast of the Po Delta Regional Park".

123. However, the Po delta extends beyond Emilia-Romagna and the fact-finding mission revealed that there is no co-operation between the two regions concerned, namely Emilia-Romagna and Veneto. Furthermore, the management of the Po delta is the responsibility of a whole host of political and administrative authorities together with various technical bodies (including central government, two regions, four provinces, at least 15 municipalities, the Ministry of Public Works, the regional civil engineering body and other private organisations). This poses one of the major obstacles to integrated management.

5. Conclusions

124. All European countries should further strive to ensure a better conservation and preservation of their natural assets. Although the international environmental law has consecrated the obligation for a sound and wise use of natural resources, much more needs to be done for the sustainable use of the river deltas.

125. The equilibrium balance of the European deltas is threatened by increased pollution and by human interference that may, in some cases, unravel incomplete observance of environmental norms.

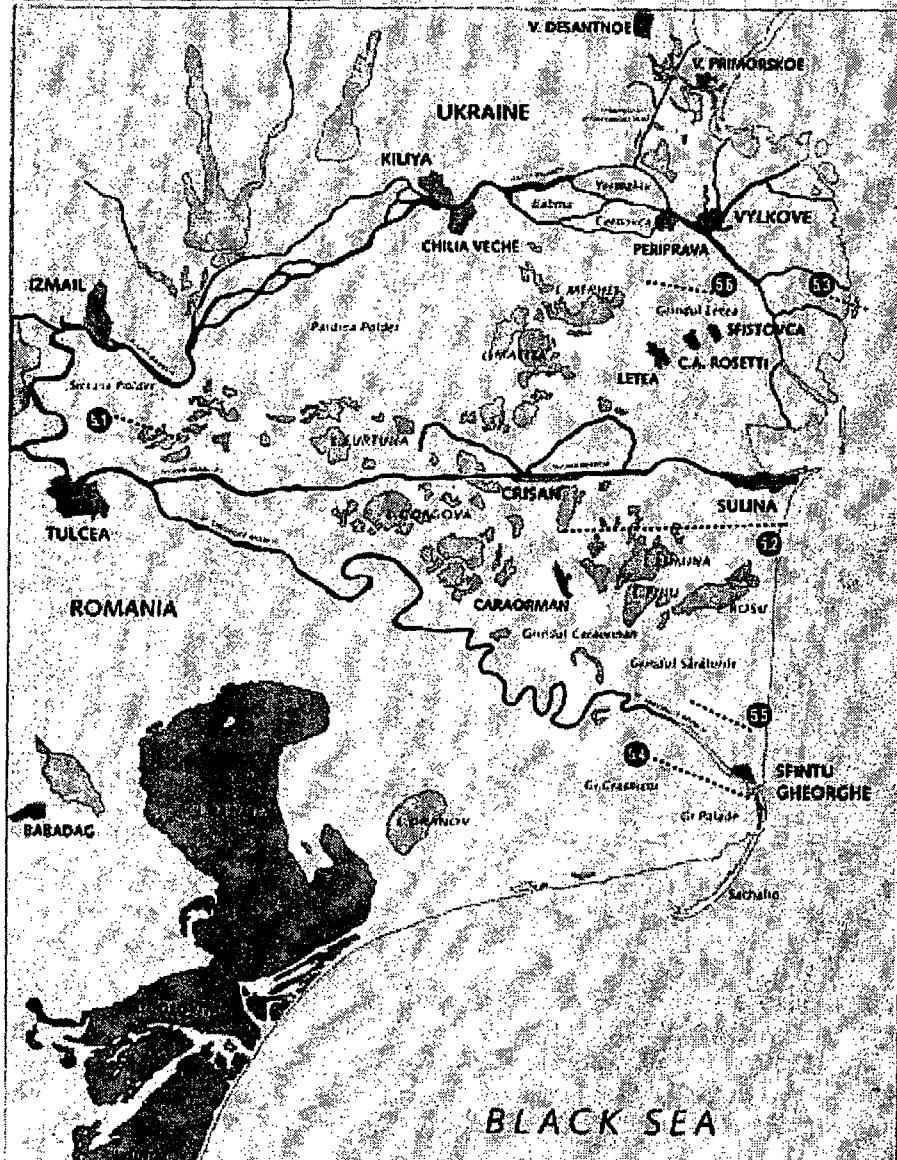
126. Prevention and cooperation are the two consolidated principles of the international environmental law that all Council of Europe member states must be aware of. All countries must take measures to ensure the observance of these principles by respecting the international practice and, when needed, take steps with a view of further developing the legal framework meant to contribute to preserving, from the perspective of sustainable development, European deltas.

Appendices

Map 1: the Danube basin



Map 2 : the Danube delta



Map 3

THE DANUBE DELTA BIOSPHERE RESERVE (ROMANIA)

Establishment: 1990

Total surface: 5800 km² = 580,000 ha

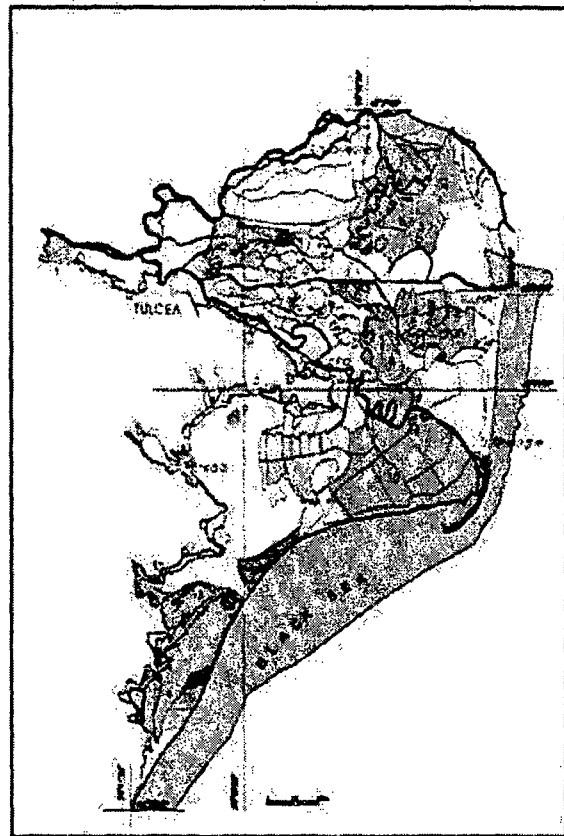
Strictly protected areas:	50,600 ha
Buffer zones:	223,300 ha
Economic zones:	306,100 ha
- ecological restoration:	11,425 ha
- agriculture polders:	39,974 ha
- fish ponds:	39,567 ha
- artificial forests:	6,442 ha

BIODIVERSITY

Total number of species: 5,500 sp.

Flora:	1,689 sp.
Fauna:	3,811 sp.
- birds	315 sp.
- mammals:	28 sp.
- fish:	125 sp.

THE DANUBE DELTA BIOSPHERE RESERVE



Map 4

THE DANUBE BIOSPHERE RESERVE (UKRAINE)

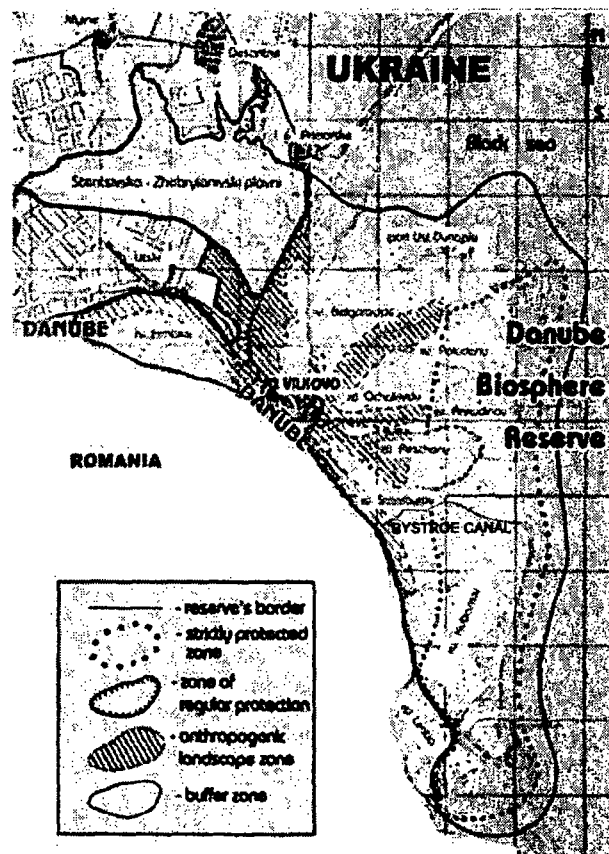
Establishment: 1998

Total surface: 464km² = 46,400 ha

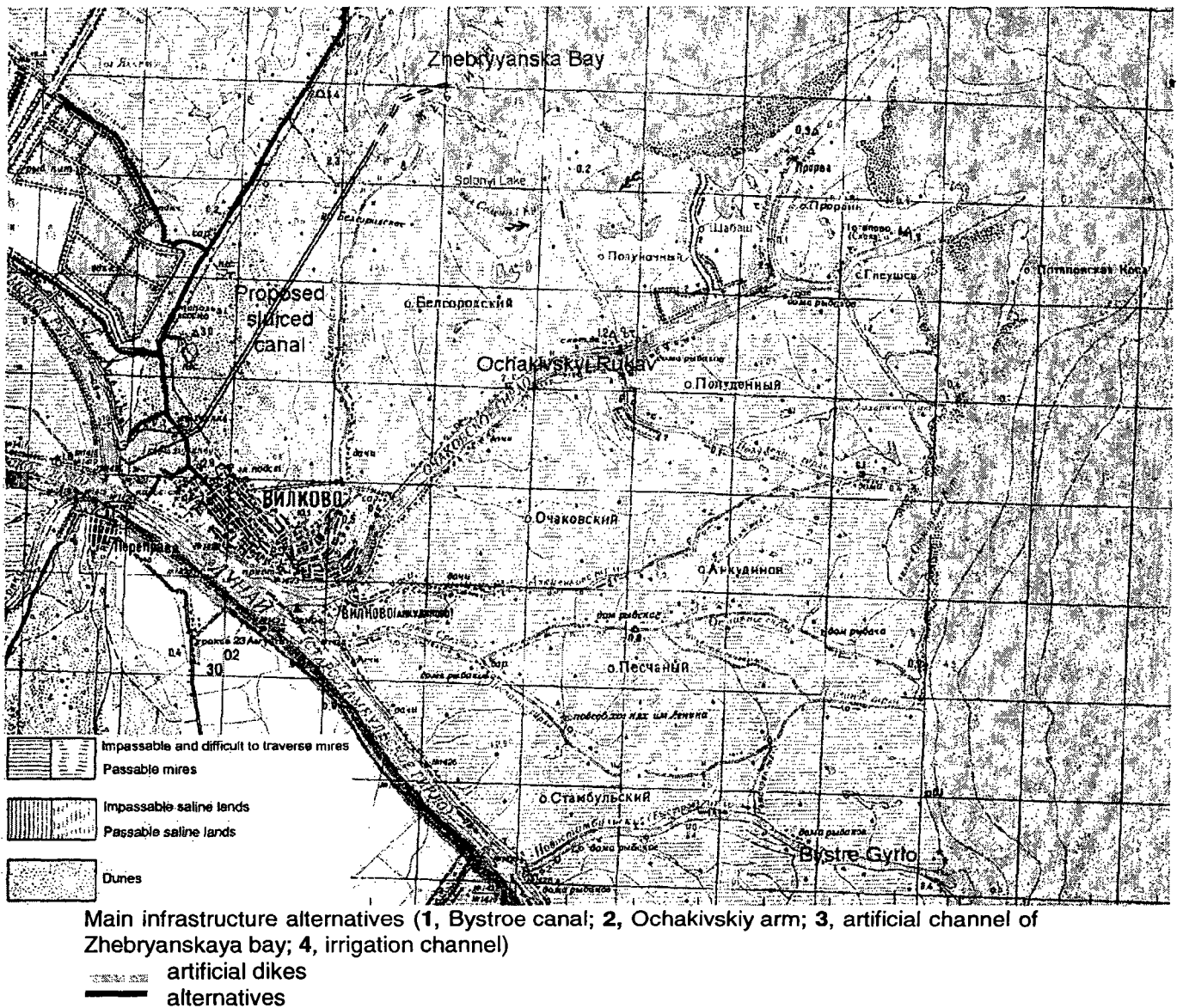
BIODIVERSITY

Total number of species: 3,331 sp.

Flora:	950 sp.
Fauna:	2,337 sp.
- birds :	255 sp.
- mammals:	39 sp.
- amphibians:	10 sp.
- reptiles:	5 sp.
- fish:	91 sp.
- insects:	1,937 sp.



Map 5: alternatives to the Bystroe canal



- **option 2:** this would involve widening an existing navigable arm, the Ochakivsky arm, over a distance of 18 km. This arm lies immediately south of Vilkovo, within the transit area and just at the northern limit of the core area of the biosphere reserve; the waterway reaches the sea in the north-east, flowing into Zhebryanskaya bay, close to old port infrastructures, although in a sector used as a spawning ground by *acipenseridae*;
- **option 3:** an artificial channel with locks would be created, linking the Chilia arm in the south-west to Zhebryanskaya bay, following a route from south-west to north-east of comparable length to the previous option, and located a few kilometres north of Vilkovo. This appears to be the preferred option of the Academy of Sciences, the reserve's administration and the local NGOs and it could receive private funding²¹. While keeping adequate control of the construction and operation of the infrastructures²², it opens the way for more harmonious development of the Vilkovo region, clearly distinguishing the active delta, with its natural role, from a zone of economic activity close to the town and oriented towards the lower reaches of the Danube; this would preserve both the interest of the biosphere reserve and the delta's natural habitat of

²¹ Unofficial statement by the engineer who designed the project.

²² Cf Johannesburg summit (2002) and 5th Ministerial Conference "an environment for Europe", (Kyiv, 2003).

European interest, without really compromising the ecological characteristics of the wetland. In this connection, the argument put forward by the Ministry of the Environment²³ that this option would affect part of the wetland and dune habitats of ecological interest must be seen in the relative context of the seriously damaged state of these areas as a result of past forestry activities²⁴ and strong pressure from human activity²⁵. Ecological restoration of these areas could even be undertaken on this occasion, by way of measures to compensate for the infrastructure works. Finally, while the cost of widening the channel would be double that of work on the Bystroe canal, maintenance costs would be about only one third of the Bystroe project - a definite economic advantage in the long term, which is where such a project must be situated.

- **option 4:** this would use an existing irrigation channel, about 60 m wide and currently about 2 m deep, located a little further north than the previous option and linking the Chilia arm to lake Sasyk. The project to develop this channel could form part of an overall development plan for the area, including the rehabilitation of lake Sasyk, where there are major conservation problems apparently linked to the present dike separating it from the sea. The lake is close to an area where large-scale seaside tourism is being developed and, through such a scheme, could have its ecological balance restored and constitute a major asset for local fishing and tourism business, while making it possible to organise rational river transport activity, where appropriate, including adequate portuary infrastructures which would not be possible with the Bystroe canal option. While it is financially more costly than the previous alternatives²⁶, this option is the most ambitious and most economically integrated, founded on a global sustainable development approach for the Vilkovo region, where shipping business, among others, can play a significant role. Like the previous two options, it has the benefit of sparing the active part of the delta and preserving the integrity of its ecological assets, which might be enhanced by other more acceptable ways and means, such as environmentally-friendly tourism.

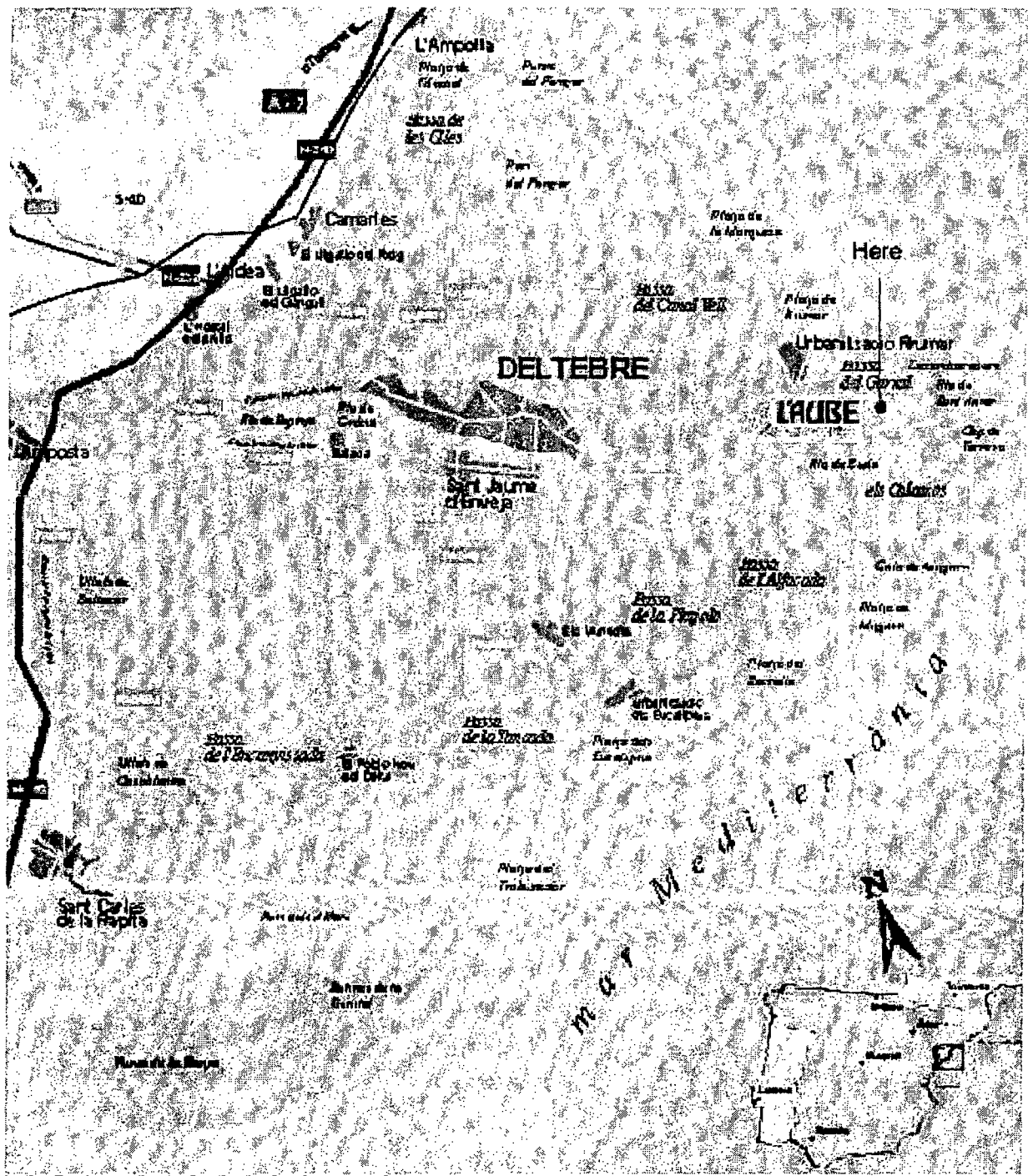
²³ Letter 7196/26-7 of 29 June 2004 of the Minister of the Environment to the Advisory committee for biosphere reserves of UNESCO's MAB programme.

²⁴ Artificial stands of *Pinus nigra*.

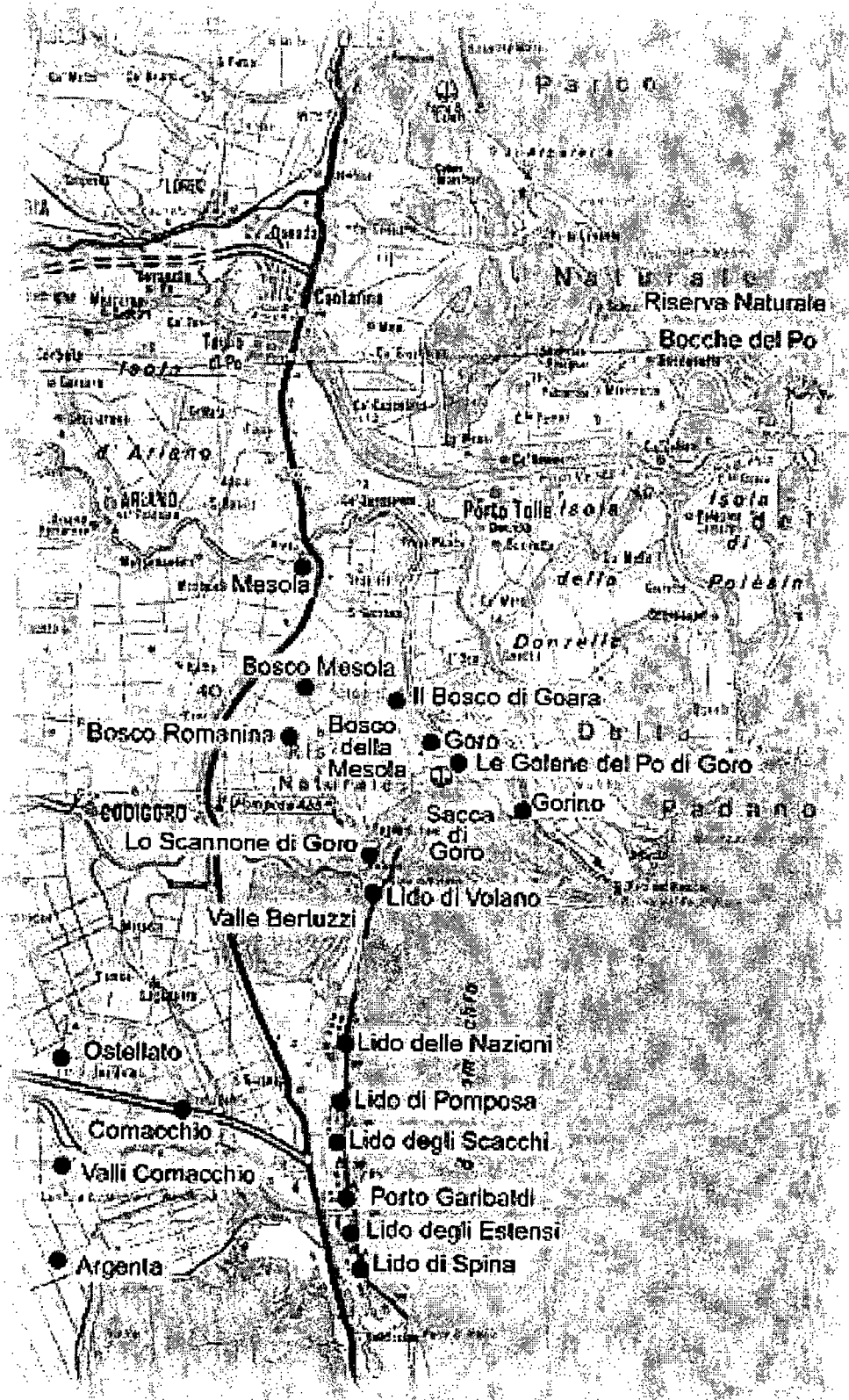
²⁵ Unorganised tourism.

²⁶ This option, like option 3, would require, for example, the building of a canal-crossing facility by the approach roads to Vilkovo

Map 6 : the Ebro delta



Map 7: the Po delta



Reporting committee: Committee on the Environment, Agriculture and Local and Regional Affairs

Reference to committee: Doc. 10194, Reference No. 2980 of 25 June 2004 and Doc. 10090, Reference No. 2938 of 2 March 2004

Draft resolution adopted by the Committee on 26 April 2005

Members of the Committee: Mr Walter **Schmied** (Chairman), Mr Alan Meale (1st Vice-Chairman), Mr Antonio Nazaré Pereira (2nd Vice-Chairman), Mr Renzo **Gubert** (3rd Vice-Chairman), Mr Ruhi **Açikgöz**, Mr Olav **Akselsen**, Mr Gerolf **Annemans**, Mrs Sirkka-Liisa **Anttila**, Mr Ivo Banac (alternate: Mr Miljenko **Dorić**), Mr Jean-Marie Bockel (alternate: Mr Georges **Colombier**), Mr Malcolm Bruce, Sir Sydney **Chapman**, Mrs Pikria Chikhradze, Mrs Grażyna Ciemniak, Mr Valeriu Cosarciuc, Mr Osman **Coşkunoglu**, Mr Alain **Cousin**, Mr Miklós Csapody, Mr Taulant **Dedja**, Mr Hubert Deittert, Mr Adri Duivesteijn (alternate: Mr Leo **Platvoet**), Mr Mehdi **Eker**, Mr Bill **Etherington**, Mrs Catherine **Fautrier**, Mr Adolfo **Fernández Aguilar**, Mrs Siv Fridleifsdóttir, Mr György Frunda, Mr Fausto Giovanelli (alternate: Mr Giovanni **Crema**), Mrs Maja Gojković, Mr Peter Götz, Mr Vladimir Grachev, Mrs Gultakin Hajiyeva, Mr Mykhailo **Hladiy**, Mr Anders G. Högmark, Mr Jean **Huss**, Mr Ilie **Ilaşcu**, Mr Jaroslav **Jaduš**, Mrs Renate **Jäger**, Mr Gediminas **Jakavonis**, Mr Ivan Kalezić, Mrs Liana Kanelli, Mr Karen Karapetyan, Mr Orest Klympush (alternate: Mr Anatoliy **Rakhansky**), Mr Victor Kolesnikov, Mr Zoran Krstevski, Mr Miloš Kužvart, Mr Ewald **Lindinger**, Mr Jaroslav **Lobkowicz**, Mr François Loncle (alternate: Mr Guy **Lengagne**), Mr Theo Maissen (alternate: Mr John **Dupraz**), Mr Andrzej Mańka (alternate: Mr Zbigniew **Jacyna-Onyszkiewicz**), Mr Tomasz Markowski, Mr Giovanni Mauro (alternate: Mr Pasquale **Nessa**), Mrs Luísa Mesquita, Mr Gilbert Meyer, Mr Goran Milojević, Mr Vladimir Mokry (alternate: Mrs Svetlana **Smirnova**), Mrs Carina **Ohlsson**, Mr Gerardo Oliverio, Mr Pieter Omtzigt (alternate: Mrs **Veenendaal**), Mr Mart Opmann (alternate: Mr Toomas **Alatalu**), Mrs Elsa Papadimitriou, Mr Cezar Florin **Preda**, Mr Jakob **Presečnik**, Mr Lluís Maria de Puig, Mr Jeffrey Pullicino Orlando, Mr Maurizio Rattini, Mr Marinos **Sizopoulos**, Mr Rainder **Steenblock**, Mrs Inger Støjberg, Mrs Maria Stoyanova, Mr Gábor Szalay, Mr Nikolay **Tulaev**, Mr Iñaki **Txueka**, Mr Vagif Vakilov, Mr Borislav Velikov (alternate: Mr Latchezar **Toshev**), Mr Geert Versnick, Mr Klaus **Wittauer**, Mr G.V. Wright, Mr Kostyantyn Zhevago

N.B. The names of those members present at the meeting are printed in **bold**.

Secretariat to the Committee: Mr Sixto, Mr Torcătoriu and Ms Lasén Díaz