UNESCO (Man and Biosphere Programme) and Ramsar Convention

Mission Report

Danube Biosphere Reserve / Kyliiske Mouth Ramsar Site

Ukraine

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PURPOSE OF THE MISSION

- 1. The Government of Ukraine wishes, with the consent of all parties concerned, to establish a navigable waterway through the Ukrainian part of the Danube delta. Several choices have been proposed as to the routing of this waterway. At present, three choices are still under discussion. As requested by the Ukrainian Ambassador to France, and Permanent Delegate to UNESCO, Yuriy Sergeyev (in his letter of 7 July 2003), the purpose of our mission was to examine these choices in view of their impact on the status and functioning of the Ukrainian Danube Biosphere Reserve (Dunaisky Biospherny Zapovidnik) designated by Presidential Decree on 10 August 1998 as part of the transboundary Biosphere Reserve in the Danube delta. The mission took place at the invitation of the State Agency for Protected Areas of the Ministry of the Environment and Natural Resources of Ukraine (issued on 16 October 2003), in collaboration with the Ukrainian National Commission for UNESCO.
- 2. The area covered by the Danube Biosphere Reserve (DBR) was listed by Ukraine under the Ramsar Convention as a Wetland of International Importance on 23 November 1995: the Kyliiske Mouth Ramsar Site (originally designated by the former Soviet Union as Kylijske Gyrlo, on 12 October 1976). The Ramsar Convention gives special attention to assisting Contracting Parties in the management and conservation of listed sites whose ecological character is changing or likely to change as a result of technological development, pollution or other human interference. This is carried out through Ramsar Advisory Missions, a technical assistance mechanism formally adopted by Recommendation 4.7 of the 1990 Conference of the Contracting Parties. The report summarizes the findings of the 53rd Ramsar Advisory Mission.

INTRODUCTION: ALTERNATIVE PROPOSALS FOR A WATERWAY THROUGH THE UKRAINIAN PART OF THE DANUBE DELTA

- 3. Choice A envisages a waterway situated in the "Bystre Gyrlo" branch of the Danube, cutting across the middle of the core zone (Nature Reserve) of the DBR and Ramsar Site – part of the transboundary Danube Delta Biosphere Reserve and Ramsar Site in Ukraine and Romania. The Ukrainian National Academy of Sciences, responsible for managing the DBR through its offices at Vilkovo, considers this proposal unacceptable. Other institutions, including numerous environmental NGOs in Ukraine and abroad, criticised the proposal. During our meeting with NGO representatives in Odesa, all participants speaking in the discussion, except for a representative of the Green Party, criticised this choice and the procedure of its adoption by the Ministry of Transport. Their two main arguments against Choice A are the environmetal damage it would provoke, and its unfavourable impact on the core zone of the DBR and Ramsar Site. However, the Ministry of Transport and the state enterprise Delta Pilot (Delta Lotsman) consider Choice A as the most feasible and most economic solution, claiming that its environmental impact would be minimal. Their view is supported by a State Ecological Expertise, approved by the Ministry of Environment and Natural Resources on 10 July 2003, statements of some scientists from Odesa and Kyiv universities, and by the conclusions of a workshop, specially convened in Odesa on 16-20 October 2003, with scientists from the Ukraine and some other countries, invited by the advocates of Choice A.
- 4. **Choice B** proposes the renewal and modernisation of the hitherto used waterway along the "Ochakivsky Rukav" Danube branch and Prorva canal in the northernmost part of the delta (in the transition area of the Biosphere Reserve, along the northern boundary of the core zone), and of the short "technical canal" linking these Danube branches with the Ust'-Dunaysk port on the Zhebryanskaya bay of the Black Sea. This choice, whose impact on valuable parts of the DBR is claimed to be minimal, is favoured by the Ukrainian National Academy of Sciences, the management office of the DBR and numerous NGOs as a permanent or temporary solution before the materialization of choice C (see below). According to them, choice B can be accomplished relatively easily, in a short time and at a relatively low cost.
- 5. **Choice C** concerns the construction of a sluiced canal in the northern part of the DBR (in the transition area), linking the "Solomonov Rukav" branch of the Danube with the Zhebryanskaya bay of the Black Sea. Choice C is a variant of an earlier proposal, made by engineer Chekhovich at the beginning of 20th century, for a canal running parallelly about 1 km apart. This choice is considered as being feasible and sustainable in the long-term by the Ukrainian National Academy of Sciences, the management office of the DBR, and numerous NGOs. The durability of the canal would, in their opinion, justify its high construction costs (financed from private sources). Geologists and geographers of Odesa University criticise choice C because of its environmental impact on the only ancient dune system in the Ukrainian part of the Danube delta. As the canal would cut only through the edge of the ancient dune system, and as most of the old dunes are planted with non-native black pine, biologists from the Ukrainian National Academy of Sciences and the management office of the DBR regard the environmental impact of choice C as marginal.
- 6. On 13 October 2003 (just prior to our mission), the Ukrainian Government allegedly approved the principle of choice A, proposed by the Delta Pilot state company and the Ukrainian Ministry of Transport. On 27 October 2003, according to the NGO campaign, this decision was cancelled. The Ministry of the Environment and Natural Resources informed the mission that it was now asking for

environmental impact assessments of all three choices, and possibly others, to be submitted by May/June 2004. Only then will the Ministry adopt a final view with respect to these choices.

7. The respective locations of the proposed alternative waterways, and of existing ones, are shown in the attached map of the DBR (Figure 1). The dotted line no. 1 is the canal proposed earlier by Chekhovich, no. 2 is the present proposal of a sluiced canal (choice C), no. 3 is the existing, but narrow and unsuitable irrigation canal Danube-Sasyk Lake, nos. 4, 5, 6 and 7 denote the possible routings of restored waterways using mainly the Ochakivsky branch (choice B), no. 8 is the Bystre branch (choice A), with a dotted line indicating the necessary proposed construction of a leveed canal cutting across the sand bars at the mouth of Bystre into the Black Sea. Nos. 9 and 10 are the Cyganka Gyrlo and Starostambulske Gyrlo branches.

GENERAL OBSERVATIONS AND EVALUATION OF THE CHOICES

Improving the functioning of the Biosphere Reserve

- 8. In the context of the examination of the question concerning the construction of a waterway across the Ukrainian part of the Danube Delta Biosphere Reserve, a new Presidential Decree was issued on 10 June 2003, on the improvement of the functioning of the DBR. Besides the subject of the location of the waterway, it addresses the following issues: the improvement of the zonation of the DBR and the necessity to create additional reserves, the maintenance of traditional forms of land use by local inhabitants, the need to make local development compatible with national and international commitments, the need to reinforce legal measures in view to implement the Seville Strategy for Biosphere Reserves (cf. www.unesco.org/mab/docs/stry-5.htm), and the need to set up a montoring programme in view of potential environmental impacts of the waterway.
- 9. The maps of the DBR do not yet show a **zonation** as required for a UNESCO Biosphere Reserve which specifies a core zone (existing, the Dunaiskie Plavni Nature Reserve), a surrounding buffer zone (not yet delimited), and a transition area (not clearly identified). They show, however, the strictly protected zone (apparently corresponding with the "core zone" in MaB terminology) and some maps also show areas of economic use or zone of anthropogenic landscapes (probably corresponding with the "transition zone"), located predominantly in the surroundings of Vilkovo and along the Ochakivsky branch towards Ust'-Dunaisk. The remaining part of the DBR is identified as its buffer zone or zone of regulated protection regime: it may thus be regarded as the "buffer zone" sensu MaB (see the attached map, Figure 1). Scientists from Odesa Mechnikov National University pointed out the biodiversity values to be found in the NW part of the DBR (Stensovskye Plavni), mainly composed of freshwater ponds and lakes surrounded by extensive reedbeds, cut through by the irrigation canal bringing Danube freshwater to Sasyk Lake. With regard to the requirements of the Presidential Decree of June 2003, it is suggested that i) the core zone be expanded to include all priority areas for biodiversity (thus providing a full gradient from saline coastal marine habitats to inland freshwater habitats, as suggested by scientists of Odesa Mechnikov National University), ii) a buffer zone be delimited adjacent to the core zone to help protect it, and iii) the economic use area be identified including indications on land uses acceptable in accordance with the Biosphere Reserve principles.
- 10. The Ramsar Convention has elaborated guidelines for **management planning** for Ramsar Sites and other wetlands (Resolution VIII.14), on wetland **restoration** (Resolution VIII.16), and for establishing and strengthening **local communities' participation** in the management of wetlands (Resolution VII.8). They are accessible at www.ramsar.org/index_key_docs.htm#res . It is

suggested that they be consulted when modifying and implementing the management plan for the Biosphere Reserve.

- 11. In the context of the sustainable management of the Biosphere Reserve, the future of the, currently derelict, **Ust'-Dunaysk port facilities** in Zhebryanskaya bay is of importance. The mission recognizes the socio-economic importance of these facilities in terms of prerogatives for local development. However, it is essential that any industrial infrastructure of this size does not have negative environmental impacts on the core zone of the Biosphere Reserve. A consequence of the re-opening of a waterway through the Ukrainian Danube delta will be the renewed need for port facilities. A Strategic Environmental Assessment plan for the entire Danube delta region should therefore evaluate alternative locations for Danube port facilities, preferably outside the Biosphere Reserve and Ramsar Site (e.g., a location upstream near Kyliya was mentioned by Delta Pilot).
- 12. With the opening of a waterway through the DBR, the need to monitor key environmental indicators will arise. The elaboration of a **monitoring programme** and its implementation should be prepared in close cooperation between the navigation authorities (supposedly Delta Pilot) and the DBR management experts in Vilkovo.
- 13. The opening of a visitors' centre for the DBR in Vilkovo with support from WWF was noted with satisfaction, as well as the joint projects under way between the DBR and Flevoland Province in the Netherlands. However, the development of **environmentally friendly forms of nature tourism**, as a source for local income, remains a socio-economic priority for the benefit of local people in Vilkovo (in terms of providing accommodation, food, transport, guidance, etc. to paying visitors) and should be seriously planned. The unique beauty and setting of Vilkovo, the "Venice of the East", merits more attention than it currently receives.

Navigation versus biodiversity

- 14. The objective to re-establish a waterway through the Ukrainian part of the Danube delta was accepted by all parties. Delta Pilot assured the mission that state-of-the-art technology and safety standards would be applied to the waterway and its operation to avoid unnecessary damage to the natural environment and to prevent accidents by large scale vessel navigation, as demonstrated by their operations (and supporting infrastructure) in the Dnipro and Yuzhny Bug estuary. In this particular area, near Ochakov, the waterway through the Dnipro-Bug Liman is clearly separated from the Chornomorsky Biosphere Reserve and Tendrivska Bay Ramsar Site situated further south; although the waterway crosses further upstream right through the Dnipro River Delta Ramsar Site.
- 15. The geographical separation of the waterway from areas with important biodiversity would indeed provide the ideal solution. Unfortunately, such a solution is not really possible in the case of the Ukrainian Danube delta. The construction of a potential navigation canal connecting the Kyliiske Danube branch with the Black Sea, avoiding built up areas and those important for biodiversity (including the DBR and the Sasyk Lake Ramsar Site), seems to be prohibitively complicated and expensive. Therefore, the remaining waterway choices for the Ukrainian Danube delta will affect existing protected areas in some way. By proposing to separate the waterway from the dynamic part of the delta area, **choice C** (to construct a sluiced canal from the Solomonov Danube branch to Zhebryanskaya bay), comes close to this ideal goal of separating the waterway from the areas important for biodiversity.
- 16. Choice C is critized because of its cutting through the only intact geomorphological area of **former coastal dunes** in the Ukrainian part of the Danube delta (there are more extensive areas on the Romanian side). These ancient dunes are now planted in their largest part with non indigenous

black pines, currently starting to form a closed canopy, interspersed with remaining open areas and dune slacks. This provides appreciated leasure and pic-nic areas for the local population (mainly from Vilkovo), especially during the hot summer months. Some scientists are concerned about the possible impacts of the canal construction on rare species (mainly plants and insects) dependent on and restricted to these particular dune habitats. If Choice C were to be chosen, a specific study would need to assess the environmental impact of the canal construction on these species. Independent of a possible canal construction or not, management prerogatives should be elaborated for this area (as part of an overall management plan for the Biosphere Reserve), providing guidance for forest management with regard to the closing of the pine canopy, and its negative impact on the specific dune biodiversity.

17. Furthermore, this sluiced canal would cut in its northern part through valuable fens and the shallow Zhebryanskaya bay that is constantly silting up. Some scientists fear that the construction of the canal would isolate the Solonyi Kut lake from Zhebryanskaya bay (currently connected to the shallow bay) and seriously alter underground water flows in the delta area.

Navigation versus delta dynamics

18. By their very nature, river deltas are dynamic and unstable in geo- and hydromorphological terms. Processes of sedimentation (mainly carried downstream by the river, but also provoked by coastal currents) and of erosion (mainly through marine currents, wave action and subsidence) are making navigation a difficult task in these areas. The best long-term option is to avoid dynamic delta areas when planning waterways. The core zone of the DBR and its surroundings represent the most dynamic part of the Danube delta as a whole (including the larger Romanian part) and should therefore, in principle, be avoided when planning a waterway.

19. With regard to the constraints evoked above (paragraph 15), **choice C** comes closest to the goal to avoid the most dynamic part of the Ukrainian Danube delta. The long-term efforts needed for dredging the waterway to maintain the required depth for large scale vessels are clearly minimal for the proposed constructed canal, except at its entrance to the Zhebryanskaya bay. In this case, low dredging costs in the long term are an economic trade-off for the heavy initial investment needed for the construction of the canal. Any waterway using a natural river arm would need continuous dredging on a significant scale. Delta Pilot presented hydrological river models demonstrating that the dredging effort for choice A (Bystre) would be less than for choice B (Ochakivsky).

The need for compensation of ecological damage

20. The Convention on Wetlands (Ramsar, Iran, 1971) obliges Contracting Parties to "designate suitable wetlands within [their] territories for inclusion in the List of Wetlands of International Importance" (Article 2.1). "The inclusion of a wetland in the List does not prejudice the exclusive sovereign rights of the Contracting Party in whose territory the wetland is situated." (Article 2.3). "Any Contracting Party shall have the right ... because of its urgent national interests, to delete or restrict the boundaries of wetlands already included by it in the List ..." (Article 2.5). "Where a Contracting Party in its urgent national interest, deletes or restricts the boundaries of a wetland included in the List, it should as far as possible compensate for any loss of wetland resources, and in particular it should create additional nature reserves for waterfowl and for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat." (Article 4.2). General guidance for interpreting "urgent national interests" under Article 2.5 and considering compensation under Article 4.2 is provided in Resolution VIII.20, adopted by COP8 in 2002 (accessible under www.ramsar.org/key_res_viii_index_e.htm).

- 21. Resolution VIII.20 lists (in paragraph 3 of its Annex) twelve issues that Contracting Parties may take into account when invoking their right to restrict the boundaries of a Ramsar Site in the case of urgent national interest. Those most relevant to **take into account** in this case seem to be:
 - "3.1 the national benefits of maintaining the integrity of the wetlands system and its related benefits;
 - 3.3 whether the proposed change is consistent with national policies;
 - 3.6 all reasonable choices to the proposed action, including the "without project" option, finding an choice location, introducing buffer zones, etc.;
 - 3.8 the particular value of habitats harbouring endemic, threatened, rare, vulnerable or endangered species;
 - 3.11 the choice that will best minimize harm to the site in question; and
 - 3.12 transboundary effects."
- 22. Choice A to construct a waterway through the Bystre branch would need to open the river mouth towards the Black Sea and undertake substantial continued dredging in this area. The mission was told by Delta Pilot that the construction of dykes in this area would replace sediment deposition patterns towards the open sea in a way to minimize the dredging effort needed to keep the waterway functional. However, the managers of the DBR fear that this would result in substantial disturbance and loss of vital habitat for breeding and staging waterbirds using the sand banks situated in this area, as well as result in damage to the fish spawning area in the shallow coastal waters (with possibly disastrous consequences for the local fisheries). The mission was not shown substantial results of an environmental impact assessment study concerning this choice, but believes that these fears are well founded. It follows therefore that specific habitat for fish and migratory birds lost at the Bystre mouth would need to be created elsewhere in the Danube delta, possibly in front of the mouth of the Ochakivsky branch, or in Zhebryanskaya bay. In order to make this compensation valid, it would need to be accompanied by the removal of the Ust'-Dunaysk port facilities (cf. paragraph 11) and large scale habitat restoration works.
- 23. Such **habitat compensation** would need to be effective at the latest by the time the Bystre branch mouth would be damaged when starting the waterway works, in order to fulfil its compensatory role for the species affected. The creation or rehabilitation of fragile habitats in dynamic ecosystems such as these is likely to take several years. This will require quality control measures of the works undertaken, i.e. a quantitative monitoring programme of key species affected by the waterway works that would show how they would make use of the compensation habitats. Given this constraint imposed by the obligations inherent in the Convention on Wetlands, choice A does not seem to provide a rapid solution to create a waterway through the Danube delta.
- 24. **Choice B** to re-open the former waterway using the Ochakivsky branch was not considered ideal by the engineers (Delta Pilot) because of the lesser depth of this river branch compared to the Bystre. This would require more dredging efforts downstream of Vilkovo. Also, most probably works to re-design the technical canal connecting the Prorva branch with the Zhebryanskaya bay would need to be undertaken to make the waterway operational again. Given the former use of this route for navigation, large parts of the pristine delta habitats have already earlier been degraded or disturbed. Engineering works to re-open this waterway would therefore have much less environmental impact than those needed for choice A (Bystre) which would take place in a pristine natural part of the delta. Again, the mission argues that a comprehensive environmental impact assessment study should be undertaken for choice B. It should also identify possible needs and opportunities for compensation of natural ecosystems, through habitat restoration measures in this area.

The need for transboundary cooperation

25. The Danube Delta Biosphere Reserve was declared a transboundary protected area in 1998 with parts in Romania and Ukraine. The Wetland of International Importance, i.e. the Ramsar Site, covers the area of the transboundary Biosphere Reserve. Article 5 of the Ramsar Convention mentions that "Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavour to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna." The mission was not presented with any substantive information that such consultation, coordination and support of respective policies and regulations does indeed occur. It is therefore strongly advised that such bilateral processed be engaged and a **Strategic Environmental Assessment on navigation** through the different parts of the Danube Delta be undertaken (cf. paragraph 11). Bilateral consultation and coordination on these aspects is also required by other international and bilateral treaties signed by both states.

SUMMARY AND CONCLUSIONS

- 26. There was a general agreement by all Ukrainian parties on the need for the construction of a waterway through the Ukrainian part of the Danube delta. Analyses of earlier investigations show that no ideal solution is possible. The Government of Ukraine is to be supported in its continued efforts to find the best possible solution, taking the unique situation of this area into account, as demonstrated by its recognition as being of international importance by the UNESCO Man-and-Biosphere Programme and the Convention on Wetlands.
- 27. In the short time it had available, the mission learnt about the positions of all major stakeholders at national and local level, regarding the three alternatives proposed for the location of a waterway: choice A through the natural Bystre Danube river branch, choice B to re-open the formerly used Ochakivsky Danube river branch, and choice C planning the construction of a sluiced canal from the Solomonov Danube branch to the Zhebryanskaya bay of the Black Sea. In order to make a well-informed decision, the Government of Ukraine needs to have at its disposal the results of a **comprehensive environmental impact assessment comparing all three choices**. It is therefore recommended that an impartial study be undertaken rapidly, covering not only socio-economic, navigation and geomorphological aspects, but also those related to biodiversity (species and natural habitats). The reports already established and presented to the mission do not yet fulfil this need.
- 28. As it is not feasible to construct a waterway outside of the Danube Biosphere Reserve (for its excessive costs), all three remaining choices will afflict some environmental damage on the highly dynamic natural ecosystem. An illustration of the delta dynamics is provided in the attached map of mean annual land advance or retreat (in metres per year) along the Black Sea coast in the Kyliya delta area (Figure 2). It is therefore important to restrict those impacts to an utmost minimum and to compensate for inavoidable damage. **Preventing damage** rather than repairing it *ex post*, is the cheaper option when taking all environmental aspects into account. Ecological compensation measures need to be planned and executed in parallel with the planning for the construction of a waterway. Their success in terms of the protection of indicator species and natural habitats and processes needs to be monitored.

- 29. Based on these premises, and comparing the three choices outlined above, the mission considers that choice A (Bystre) would represent the worst solution. This is because of the damage choice A would afflict on the natural environment and the costs and time associated to undertake the necessary compensation mesasures required by the particular protection status of the area afflicted.
- 30. Among the three alternatives analysed, choice B (Ochakivsky) proves to be the most feasible and most widely accepted solution for the short to middle term. It would provide rapid socioeconomic benefits by repairing and using existing infrastructure of the Ust'-Dunaisk port facilities. However, in the long term, it is preferable to remove these port facilities outside of the Danube Biosphere Reserve, as advocated by many stakeholders.
- 31. In the long term, the most sustainable solution is to construct a waterway outside of the dynamic part of the delta area. To this end, choice C (sluiced canal), or an improved variant (cf. paragraphs 16, 17), can provide a feasible proposal with minimal environmental impact. The mission was told that its heavy investment costs could be borne by private sources. In any case, there is a trade-off to be gained through lower maintenance costs in the long run, compared to the other two choices.
- 32. In addition to the **ecological compensation measures** needed for each of the choices, mentioned above, additional measures to improve the functioning of the Danube Biosphere Reserve need to be undertaken, notably to define its zonation according to the MaB guidelines, to prepare and implement an integrated management plan with the participation of the local communities, to monitor key ecological indicators of the Reserve and to develop its visitor and tourist infrastructure in the context of the local socio-economic development of Vilkovo.

ACKNOWLEDGEMENTS

Our special thanks are due to our two guides, Mr. Komarchuk of the Ministry of the Environment and Natural Resources, and Captain Syzov of the state enterprise Delta Pilot, who provided transport, covered our subsistence costs, and looked after us with friendly care during our whole stay in the Ukraine and substantially facilitated the implementation of our mission. Our sincere thanks for their hospitality are also due to Dr Voloshkevich and his collaborators from the DBR, Mr. Tymoshchenko, mayor of Vilkovo, Mr. Bezdolnyi, director of the Delta Pilot state company, and Mr. Orel and his collaborators from the Ukrainian Commission for UNESCO. The Ukrainian national committee for Man and Biosphere, and especially its vice-chairman Professor Voloshyn, are acknowledged for their care about the implementation of the Seville strategy in the Ukrainian Biosphere Reserves. We greatly appreciate the access that was provided to us with respect to all information we asked for. We also acknowledge the friendliness with which we were received and the frankness with which our guides, hosts and discussion partners presented their standpoints.

ITINERARY OF THE MISSION - OUR DISCUSSION PARTNERS

Mon. 27 Oct.

Arrival at Odesa airport in the afternoon. Welcome by *Sergiy Komarchuk*, deputy head of the State Agency for Protected Areas within the Ministry of the Environment and Natural Resources, Kyiv, and Captain *Konstantyn Syzov*, deputy director on technical exploitation of canals and fleet of the state enterprise Delta Pilot, Mykolaiv, both of whom accompanied us during our whole mission in the Ukraine and acted as our main guides, and by Dr *Aleksandr Voloshkevich*, director of the Danube Biosphere Reserve (DBR).

Transport to the offices of the DBR at Vilkovo. Dinner with our guides and host plus Dr *Mykhailo Zhmud*, senior researcher - ornithologist of the DBR, and *Vilemir Zizak*, director of Proectgidrostroy consulting and engineering company, Odesa. Overnight accommodation in the building of the DBR in Vilkovo.

Tue. 28 Oct.

Reception by the mayor of Vilkovo, *Ivan Tymoshchenko*, at the town hall. Visit of the exhibit in the visitors' centre of the DBR at Vilkovo. Boat trip with the Coast Guard to the sites of choice A (Bystre Gyrlo) and choice B (Ochakivsky Rukav branch and Prorva canal). Lunch with our guides, host and the mayor, followed, in the DBR offices, by presentations and a discussion on all three choices with respect to the zonation of the DBR and the state of the Ramsar Site. In the evening, brief visit to the site of choice C with our hosts, including Mr Zizak. Then, departure for Odesa and overnight hotel accommodation in this city.

Wed. 29 Oct.

Discussion with geographer, Professor *Yurii Shuiskyi* at Mechnikov National University, Odesa. Meeting with representatives of NGOs (personally with *V. Osipov* of the South Ukrainian Ecological Union, Odesa; *Yu. S. Romanov*, vice-rector of Mechnikov National University; Dr *I. Rusev*, president of Wildlife Conservation Fund, Odesa; Dr *A. Korzyukov*, assistant professor of zoology at Mechnikov National University, Ms *S. Slesarenok*, director of "Mama-86-Odessa" NGO, and *Yu. E. Gerashchenko*, president of the Ecological Centre for Sustainable Development of the Ukraine, Odesa). Visit to the head of the Odesa regional office for the Environment and Natural Resources, *P.M. Chabanenko*. Departure from Odesa for the navigation monitoring and supervision centre of the Delta Pilot company at Ochakov in the Dnipro and Yuzhny Bug estuary. Transfer to Mykolaiv and visit to the training centre of Delta Pilot company. Overnight accommodation at the Delta Pilot training centre.

Thu. Oct. 30

Early morning drive to Kyiv. Meeting at the Ministry of the Environment and Natural Resources of Ukraine. Discussion with the deputy state secretary of the Ministry's State Agency for Protected Areas, *Anatoly Gritsenko* and invited environmental experts. Meeting at the Ministry of Transport with deputy minister *Sergiy Simonenko*, the director of the Delta Pilot state company, *Viktor Bezdolnyi* and other supporters of Choice A. Lunch with the chairman of the Ukrainian National Commission for UNESCO, Kyiv, *A. Orel*, the Commission's secretary general *Olexander Maznychenko*, the director of Delta Pilot, the chief advisor of the Foreign Policy Directorate within the Administration of the President of Ukraine, *Oleg Grytsayenko*, and *Sergiy Komarchuk* from the Ministry of the Environment and Natural Resources. Guided tour of the Pecherska Lavra monasterial district (listed under the UNESCO World Heritage Convention). Overnight hotel accommodation in Kyiv.

Fri. 31 Oct.

Meeting with the president of the Ukrainian National Academy of Sciences, academician *B. Paton*, Dr *V.K. Voloshyn*, and several members of the Ukrainian MAB National Committee, as well as several scientists form different institutes of the Academy (e.g., the plant ecologists professors *Yu.R. Shelyak-Sosonko* and *D.V. Dubyna*), all criticising Choice A and supporting Choices B and C. The second secretary of the Ukrainian National Commission for UNESCO, *D. Svystkov*, also attended this meeting. Sightseeing of Kyiv's city centre with a brief guided tour of the Sofievsky Sobor cathedral (on UNESCO's World Heritage list). Brief visit to the US Embassy in Kyiv, which follows the issue with interest, also in view of the obligations of Contracting Parties to the Ramsar Convention. There, brief discussion with Ms *Necia Quast*, councelor for economics, and her assistant. Lunch with our hosts and the director of the Delta Pilot company. Departure for Kyiv airport and hencefrom to our respective home destinations.