

Navigation and Wetlands

Follow Up to Ramsar Advisory Mission 53

Danube Delta / Kyliiske Mouth Ramsar Site, Ukraine

Mission of 28-31 July 2008

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The Danube and its delta – socio-economic and environmental importance

The Danube river is a source of life for 83 million people. Danube waters irrigate the fields along its course, feed the surrounding population on fish and serve as an important transportation route, carrying people and goods between different destinations in a dozen different countries along a 2,400 km course. The Danube delta on the Black Sea forms one of Europe's largest wetland areas (c.700,000 ha) in a culturally and geographically unique region, situated at a strategic place. The natural Danube floodplain and delta area, together with the floodplains of the lower Siret and Prut rivers entering the Danube downstream of Braila, the lakes north of the Kilija Danube branch, and the coastal lagoons south of the St. George Danube branch, support uniquely rich biodiversity and outstanding landscapes of European interest. Those characteristics represent an irreplaceable asset for the development of local cultures and economies, and globally for the welfare of the different populations living in this region.

The Danube has a great transportation capacity as an international waterway, recently referred to as the Pan-European Transport Corridor VII. International inland waterway transport on the Danube developed significantly since the end of the Crimean War in 1856, when the European Danube Commission was established to provide a framework for international navigation of goods and passengers. This led to the opening of a deep water navigation channel through the delta at the beginning of the 20th century. The completion of this international waterway heavily modified and shortened the Sulina Danube branch in the Romanian part of the delta. In parallel, the little modified Kilija Danube branch also served as a waterway for navigation. This river arm forms an international border; currently between Romania (European Union) and Ukraine, earlier between Romania and the USSR, and before between the Ottoman and Russian Empires. During the time of the USSR, the Kilija waterway was connected to the Black Sea through the Ochakivsky river mouth and linked to Zhrebryanskaya bay at the northern end of the delta, where the Ust-Dunaysk harbour facilities were established, accessible via the technical Prorva canal. However, towards the end of the Soviet period, this waterway was no longer used, and without regular dredging its connections to the Black Sea rapidly silted up.

At the beginning of the 21st century, Ukraine decided to restore deepwater navigation along the Kilija Danube branch in order to support the socio-economic redevelopment of the region, notably of the small Ukrainian port towns of Vilkovo, Kilija and Izmail in ascending order along the Danube. Strategic objectives of this decision being to create conditions for important industrial development on the Ukrainian side and to become a competitive provider of inland waterway transport infrastructures along the entire Ukrainian part of the Danube, up to the port of Reni and the Moldovan port of Gjurjulesti under construction further upstream, and possibly beyond.

Environmental problems at different scales

In October 2003, a joint UNESCO-Ramsar mission visited Ukraine to examine different choices to re-establish a deep waterway through the Ukrainian part of the Danube delta (cf. its report at www.ramsar.org/ram/ram_rpt_53e.htm). It advised Ukraine to undertake an impartial study to assess biodiversity impacts (on species and natural habitats) of the three choices still under consideration and the need for ecological compensation measures (as requested by Article 4.2 of the Ramsar Convention).

The report stressed the transboundary nature of the Biosphere Reserve and the Wetlands of International Importance (“Ramsar sites”), and strongly advised to undertake a Strategic Environmental Assessment on navigation through different parts of the entire Danube delta area.

The UNESCO-Ramsar mission considered the choice, eventually made by Ukraine, to connect the Kiliya waterway through the Bistre mouth with the Black Sea, as “the worst solution [...] because of the damage [it] would afflict on the natural environment and the costs and time associated to undertake the necessary compensation measures required by the particular protection status of the area afflicted.”

The international context – and the development of coordinated approaches

The start of the dredging and construction works for the waterway through the Bistre mouth in May 2004 created much international concern. Therefore, the Ramsar Secretary General invited Ukrainian and Romanian experts and the international organizations concerned to an ad hoc meeting on 21 September 2004, hosted by UNEP in Geneva. This was the starting point for cooperation among the international organizations to follow the development of the issue and to propose actions in a coordinated way. A few weeks later, the European Commission led a joint mission to Ukraine (cf. its report at http://ec.europa.eu/environment/enlarg/bystroe_project_en.htm).

The UNESCO MaB International Coordinating Council requested Ukraine, during its session in October 2004, to provide the official version of the new proposed zonation for the Biosphere Reserve (removing the Bistre mouth from the core zone), together with the results of the Environmental Impact Assessment of Phase II of the project.

In December 2004, the Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats (“Berne Convention”) opened a file on the Bistre mouth and adopted Recommendation N°111 making a number of specific recommendations to Ukraine, and also to Romania and Moldova.

An international seminar on the monitoring of environmental impacts of Phase I of the re-establishment of the Danube-Black Sea deep water navigation waterway was organized by Ukraine in Odesa in April 2005, followed by an on-site visit (cf. the Ramsar report providing an update of the situation and hyperlinks to the decisions mentioned above at www.ramsar.org/ram/ram_rpt_53e_update.htm).

In May 2005, the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (“Aarhus Convention”) adopted Decision II/5b, endorsing the findings of its Compliance Committee that Ukraine failed in its implementation of the Convention with regard to Articles 3, 4 and 6 (cf. for details www.unece.org/env/pp/mop2.htm).

An important milestone, underlining the need for better international cooperation in the delta region, was the international conference hosted by Ukraine in Odesa, in February 2006, on the Conservation and Sustainable Development of the Danube Delta (cf. the Ramsar report and the formally adopted conference conclusions at

www.ramsar.org/mtg/mtg_danube_conference2006.htm).

The UNECE Convention on Environmental Impact Assessment in a Transboundary Context (“Espoo Convention”) established an Inquiry Commission and published its report on the likely significant adverse transboundary impacts of the Danube-Black Sea navigation route at the border of Romania and the Ukraine in July 2006 (cf. www.unece.org/env/cia/inquiry.htm). The report lists six likely significant adverse transboundary impacts resulting in the loss of floodplain habitats, important for fish and birds, habitat loss by coverage of riparian dump sites, increase of suspended sediments, turbidity of marine waters, hampering the recovery processes of affected areas for fish in the long term and cumulative impact of loss and/or disturbance of habitats and by shipping traffic on fish and bird life on a large scale and long time.

The coordinated approach by the international organizations, to support Ukraine and its neighbours in their efforts to find sustainable and mutually acceptable solutions (triggered during the ad hoc meeting, hosted by UNEP on 21 September 2004, cf. above), was reinforced during an informal consultation meeting among these organizations, hosted by UNECE on 18 April 2008, and followed up with the invitation by the Council of Europe to the other participating organizations to join the on-the-spot appraisal visit to Ukraine on 28-30 July 2008.

Inland navigation on the Danube

In part triggered by the Bistre case, the International Commission for the Protection of the Danube River (ICPDR) coordinated, together with the Danube Navigation Commission and the Sava Commission, a process to address environmental issues of inland navigation, leading to the adoption in 2007 of a “Joint Statement on Guiding Principles for the Development of Inland Navigation and Environmental Protection in the Danube River Basin” by all Parties concerned (available at www.icpdr.org/icpdr-pages/navigation_and_ecology_process.htm).

The Statement recognizes that large river systems such as the Danube are highly complex, multi-dimensional, dynamic ecosystems, and that hydromorphological alterations caused by navigation, hydropower generation and flood defense are among the main factors affecting the ecological integrity of the Danube river basin.

Engineering measures with most environmental impact are those that impair bed load transport, morphodynamic developments of the channel network, exchange processes between rivers and floodplains, groundwater regimes and their flows and the natural composition of ecological communities (e.g. through barriers for migratory fish or destruction of riverbank and riverbed habitats and spawning places). Locally increased bed load transport and consequent downstream output of bed material caused by channel construction for the improvement of navigation can in many cases be intensified by a substantial reduction of the bed load input from the upper catchment. Since lateral erosion of originally braiding or meandering rivers is limited by channel stabilization, these processes can no longer balance out the natural aggradations (sediment deposits) of the alluvial floodplains. This results in stabilized, single thread, ecologically uniform river channels, lacking natural in-stream structures with their gentle gradients and connectivity with the adjacent floodplain.

In addition to these hydromorphological impacts, navigation can also have other impacts on the water environment, such as pollution, either accidentally, or provoked by regular activities, including non-reported and illegal ones. Ship traffic causes waves, which can disturb the reproduction habitats of fish, benthic invertebrates and other biota, as well as de-root aquatic plants. Ship engines can also cause an unnatural suspension of fine sediments, leading to reduced light for plant and subsequent biomass growth.

In order to develop mutually acceptable solutions, the basic needs of inland waterway transport and ecological integrity of river basins must be clearly defined. The Statement lists those needs and stipulates that they should be delivered through integrated concepts and plans based on a basin-wide ecosystem approach and monitoring. A common language across disciplines and a culture of communication and discussion are needed to guarantee an interdisciplinary approach and broader acceptance of the planning process. Ministries responsible for environment, water management and transport, scientists and experts in river engineering, navigation, ecology, spatial planning, tourism and economics as well as other stakeholders, including NGOs and the private sector, need to be involved.

The Statement then recommends to focus particularly on river stretches requiring fairway development and the associated effects on their ecological quality and water status, and on river stretches requiring ecological preservation or restoration and the associated effects on their navigability, and recalls that Strategic Environmental Assessments are required by EU regulations (SEA and EIA Directives), assuring public participation and integrated planning leading to sustainable solutions. Finally, integrated planning principles and a number of criteria for river engineering are provided.

Recommendations to maintain the ecological character of the Ramsar sites

As underlined in the introductory paragraph, the wetland area of the Danube delta is composed of many interacting ecosystems and functional sub-units, under the custody of different administrative and political authorities. It is therefore essential to take into account the functional links with the water catchment basin when searching for sustainable solutions on local issues. Regional development has to be planned and undertaken at a functional scale and to take into account ecological limitations and existing sensitivities, to be based on a common vision and on active cooperation between the three countries sharing the area: Moldova, Romania and Ukraine. The signature in December 2007 of the “Joint Declaration to work towards a River Basin Management Plan for the Danube Delta supporting Sustainable Development in the Region” provided the three countries with the necessary framework to cooperate for the good ecological status of the Danube delta and to meet the objectives set by the European Union Water Framework Directive.

Recommendation 1: To implement the “Joint Declaration to work towards a River Basin Management Plan for the Danube Delta supporting Sustainable Development in the Region”, it is strongly suggested that regular trilateral expert meetings start, still in 2008, to provide a follow-up to the recommendations adopted by the international conference in February 2006 in Odesa.

Ramsar’s 9th meeting of the Conference of the Parties (COP9 in November 2005) adopted Resolution IX.15 on “The status of sites in the List of Wetlands of International Importance”, asking Ukraine to respond to five specific points, in respect of the deep water Bistre navigation channel in the Danube delta, notably to:

a) suspend further works pending a full environmental impact assessment being conducted and its findings acted upon;

b) make available full documentation including the findings of the environmental impact assessment for Phase II of the project to all stakeholders, including the government of Romania as a potentially affected state;

c) ensure that compensatory provision is made for any damage to the ecological character of designated Ramsar sites and other wetlands caused by the works which have already been carried out;

d) establish, in cooperation with relevant international organizations and the government of Romania, a programme of international monitoring of the ecological character of the Ramsar sites and Danube Delta Biosphere Reserve, in line with the Convention's guidance on wetland monitoring (annex to Resolution VI.1; Ramsar Wise Use Handbook 8); and

e) in line with Article 5 of the Convention, apply international norms in the provision of information, consultation and involvement in decision-making processes of all stakeholders concerning Phase II of the project.

To this request, the First Deputy Environment Minister, S. Lyzun, replied to the Ramsar Secretary General on 5 June 2008. By that time, an international on-the-spot appraisal to Ukraine by the Council of Europe was already announced for 28-31 July 2008. It was therefore agreed to analyze the situation and Ukraine's responses, based on the results of this mission.

On 11 June 2008, the Ukrainian Ministers of Foreign Affairs, Transport and Communications and Environmental Protection repealed for further consideration the earlier decision (of 28 December 2007) to complete the works on Phase II for the renovation of the deep water navigation route Danube-Black Sea. This confirmed an earlier message addressed to the UNECE Executive Secretary by the Ukrainian Deputy Prime Minister, H. Nemyrya on 19 May 2008.

Recommendation 2: Ukraine to conduct a full environmental impact assessment and to act upon its findings before reconsidering to start works on Phase II, and to send a brief report in the findings of the environmental impact assessment and how they have been acted upon to the Ramsar Secretariat before starting works on Phase II.

Recommendation 3: Ukraine to briefly report to the Ramsar Secretariat how the findings of the environmental impact assessment for Phase II were made available to all stakeholders, including the government of Romania as a potentially affected state.

Recommendation 4: Ukraine to report on provisions made for any damage to the ecological character of the Ramsar sites in Ukraine, Romania and Moldova and other wetlands caused by the works which have already been carried out or will be carried out.

Recommendation 5: Ukraine to briefly report to the Ramsar Secretariat on its cooperation with relevant international organizations and the governments of Romania and Moldova on a programme of international monitoring of the ecological character of the Ramsar sites in the Danube Delta region, in line with the Ramsar Convention's guidance on wetland monitoring (Ramsar Wise Use Handbook 11).

Acknowledgements and mission itinerary

This report presents the views of the Ramsar Convention Secretariat elaborated during the on-the-spot appraisal visit in Ukraine by the Council of Europe (Berne Convention Secretariat,

Eladio Fernández Galiano, Hervé Lethier) of 28-31 July 2008. The Council of Europe invited the other international organizations to take part in the visit, in order to streamline their approaches and support, in accordance with earlier consultation meetings (cf. above). Consequently, UNECE (Espoo Convention Secretariat, *Wiek Schrage*), UNESCO (Man and Biosphere Programme, World Heritage Centre, *Ms Meriem Bouamrane*), the European Commission (Directorates General External Relations and Environment, *Marcin Stryjecki, Andrzej Januszczyński, Andras Demeter*) and the Ramsar Convention Secretariat (*Tobias Salathé*) participated in the on-the-spot appraisal visit.

The international experts thank in particular *Ms Irina Makarenko*, adviser to the Ukrainian Deputy Prime Minister, for the perfect organization of the visit in Kyiv, Odesa, Vilkoovo and by boat on the Starostambulsky Danube branch and Bistre river mouth.

28 July 2008: Arrival of the international experts (listed above) in Kyiv and informal dinner together with Ms Makarenko and several experts of the Ukrainian Ministry of Environmental Protection.

29 July: Meeting of the international experts in the morning at the Ukrainian Ministry of Environmental Protection chaired by Deputy Minister *Volodymyr Berza*, with the participation of:

- *Ms Maryna Abramovska*, deputy head of the Department of International Cooperation and European Integration,
- *Mykola Babych*, deputy head of the State Committee of Water Management,
- *Volodymyr Buchko*, deputy head of the Legal Directorate and national focal point for the **Espoo Convention**,
- *Oleksandr Dezhiron*, head of the Department of Water Resources,
- *Volodymyr Domashlinets*, head of the Fauna Protection Unit of the Directorate of Biotic Resources,
- *Ganna Gshovska*, main specialist of the Communications and Information Unit of the Department of Communications and Public Relations and national focal point for the **Aarhus Convention**,
- *Sergiy Gubar*, deputy head of the Directorate for Biotic Resources and Econetwork, *Igor Ivanenko*, deputy head of the Directorate for Biotic Resources and Econetwork and national focal point for the **Ramsar Convention**,
- *Sergiy Kalynovsky*, head of the State Ecological Expertise and Control Unit of the Directorate for State Ecological Monitoring,
- *Irina Makarenko*, adviser to the Deputy Prime Minister in the Secretariat of the Cabinet of Ministers,
- *Tetyana Moldovan*, second secretary of the Directorate for Economic Cooperation in the Ministry of Foreign Affairs, and
- *Heorhiy Parchuk*, head of the Scientific Development and Public Relations Unit of the State National Reserves Service.

In the afternoon flight of the international experts, lead by Ms Makarenko, to Odesa. Dinner on invitation by *Peter Khlytsov*, Deputy Governor of the Odesa Regional Administration.

30 July: Bus drive to Vilkoovo and boat visit on the Starostambulsky Danube branch and Bistre river mouth, prior to visit of the *Delta Lotsman* river navigation control facilities in Vilkoovo and a discussion with local authorities and different stakeholders (no name list provided) in their offices. Then return of the international experts to Odesa and informal discussions.

31 July: return of the international experts.