

## **Theme 1 – Modern Day Dilemmas**

### **Presentation: International River Basin Management for the Protection of the**

#### **Danube River**

*Presenter: Dr Wolfgang Stalzer*

The development of an international water resources protection strategy in the Danube catchment area became possible after the political changes of the late 1980s. Two strategies were chosen. On the basis of the United Nations Economic Commission for Europe (UN/ECE) Framework Convention on the Protection and the Use of Transboundary Waters (the Helsinki Convention), a corresponding agreement for the Danube Basin was developed which related to international law: the Convention on Cooperation for the Protection and Sustainable Use of the Danube River, or Danube River Protection Convention (DRPC) as it is more commonly known. The body charged to implement it is the International Commission for the Protection of the Danube River (ICPDR).

During the same period in which the DRPC was developed, existing environmental problems caused the European Community (today the EU) and other internationally active donors such as the United Nations Development Programme/Global Environment Facility (UNDP/GEF) and international financing institutions such as the World Bank and the EBRD, to initiate and implement the protection of the Danubian water environment via an Environmental Programme for the Danube River Basin (EPDRB). This involved experts from all the Danubian countries and from EU Member States initiating activities via Sub-Groups under the EPDRB, such as the Accident Emergency Warning System Sub-Group, responsible for setting-up and operating an early warning system, and the Monitoring, Laboratory and Information Management Sub-Group, responsible for in-stream quality monitoring. Other undertakings covered applied research, pre-investment studies, regional studies and river basin management. A Strategic Action Plan, which was approved at government level at a ministerial conference in Bucharest in early December 1994, addressed core goals such as the improvement of aquatic ecosystems and of biodiversity in the Danube catchment area, the reduction of pollutants reaching the Black Sea, the safeguarding and improvement of water quantities and quality in the Danube catchment area, accident prevention and the development of broad cooperation in the field of water management.

At the end of June 1994, in the interim period of 90 days after the deposit of the necessary ninth ratification, signatories of the DRPC agreed to cooperate in order to prepare the ground for the implementation of the DRPC as soon as it came into force. This allowed the legal existence of the “interim ICPDR”, which in May 1995 agreed to set up its Emissions Expert Group (EMIS/EG) with responsibility for creating a register of emission sources in the Danube catchment area and other related issues. In order to avoid duplication of efforts, it also proposed that the Sub-Groups under the EPDRB be its own Expert Groups with responsibility for the same type of tasks.

The River Danube Pollution Reduction Programme (RDPRP) was started in 1997 via UNDP/GEF funding, in order to undertake a transboundary diagnostic analysis and a corresponding choice of transboundary measures for water protection. Auxiliary instruments, for example, the Danube Water Quality Model, were developed to aid decision-making on technical and economic priorities.

Within the comparatively short time since the opening of the Iron Curtain, increased cooperation within the Danube Basin has led to an increase in knowledge about the relationships between river corridors, river waters and receiving river conditions. Today, however, the relationship between land utilisation, emissions and in-stream conditions, as well as the transport of matter to and its accumulation in the Black Sea, make new approaches for water protection necessary. These will eventually have to fully link the “wider Black Sea” and its total catchment area. At a later point in time, cooperation between all states and all relevant

international authorities in the River Danube Basin and all other areas of the “total Black Sea Basin” will become necessary.

### **Regulations in the European Community - the EU Water Framework Directive**

After an extremely long negotiation process, the EU Water Framework Directive entered into force on 22 December 2000. Its aim is to establish a framework whereby good status in European waters can be achieved in order to avoid further deterioration and to ensure the protection and improvement of aquatic ecosystems and of the terrestrial ecosystems directly dependent upon them. Through it, sustainable use of water and long-term protection of existing resources is to be promoted, and the effects of floods and droughts reduced.

The EU Water Framework Directive defines the term “good status” to mean the comprehensive protection of water resources. In surface waters this means good ecological status (measured by quality of structure and functioning of aquatic ecosystems), and good chemical status that meets a required quality. The criterion for good status in ground water is quantitative and physico-chemical quality.

However, in artificial or considerably changed water bodies, it is good ecological potential rather than good status that has to be guaranteed. Artificial or considerably changed water bodies can be identified as those whose artificial or altered characteristics affect any of the following: the broader environment; shipping and recreational areas; the purposes for which the water is stored (power generation, drinking water supply or other type of use); regulations; flood protection; irrigation; land drainage or human development.

Realistic targets for quality may be formulated with this definition in mind. Thus, for waters characterised by excessive human activity, particularly in areas where there is intensive human use of water resources, improvements in the ecological sector can be made and systematic maintenance or improvement of aquatic ecosystems can be expected as a result.

Every EU Member State is responsible for the implementation of the Water Framework Directive. However, implementation has to be adjusted to suit the relevant river basin and coordinated from within it, and all activities in transboundary river catchment areas have to be harmonised and coordinated. The instruments for coordination may be chosen by the states concerned, but it is possible to rely on existing bilateral or multilateral treaties.

A uniform planning instrument for European water systems will be established via river management plans. These must take into account the characteristics of the river basin unit and include analysis of anthropogenic activities, documentation of protection areas and an account of control and monitoring networks. In addition, measures by which to achieve fixed quality targets must be developed and incorporated within the management plans. The Water Framework Directive also requires that there is public participation in the process of planning water resources management and that competent authorities are documented.

It is essential that the monitoring of surface and ground waters and of protected areas be standardised. The agreed targets must not only meet respective national levels; they must also meet the level specified by the EU. In addition, the principles of cost recovery and polluter-pays have to be incorporated and implemented. Use must also be made of a combined approach: reducing emissions and, at the same time, striving to reach quality targets as steering instruments.

The EU Water Framework Directive is - in practical terms - a forward-looking treaty. Its deadlines for presenting management plans and its targets for good status are intended to guarantee sustainable water resources management for the long-term, which will be characterised by the maintenance of near-natural in-stream quality and a respect for natural water resources conditions.

Development in the Danube Basin is not only supported by legal instruments; it is also supported by politically driven financial aid. Recognising the administrative situation of those states that are striving

towards European harmonisation, the EU aims to support non-members through association agreements and other measures. For example, a range of EU PHARE and TACIS projects have been dispersed via the EPDRB.

### **The Danube Basin and its approach to water resources management and water resources protection**

Water resources protection in the Danube River Basin is now based to a significant extent on the DRPC, which came into force on October 22, 1998. According to the DRPC statute, states with an area in the Danube Basin of more than 2,000 km<sup>2</sup> can become Contracting Parties. Regional economic cooperation organisations can also become Contracting Parties. After respective (national) ratification, the following signatories became Contracting Parties: Austria, Croatia, the Czech Republic, the Federal Republic of Germany, Hungary, Romania, Slovakia, Slovenia and the European Community. In the meantime Bulgaria and Moldova have also become Contracting Parties. If catchment area criteria are respected, the door is also open for Bosnia and Herzegovina, the Federal Republic of Yugoslavia and Ukraine.

At present, two of the Contracting Parties are already EU member states, and six others are associated members. Talks with all six of these associated states are being held with view to EU membership. The result of this arrangement is that in the future, water resources protection in the Danube Basin will be clearly influenced by EU water policy and its aims.

The efforts of single Danubian states, which are at present not yet EU members, to harmonise their administrative and economic structures will become more intensive in the transition periods that are yet to be negotiated. For water resources protection this means that the aims of the European Community are to be developed on the basis of EC Directives, and that there will be systematic adjustment in those states in regard to the existing regulations and to the provisions of the EU Water Framework Directive.

It was decided at the ICPDR's third Plenary Meeting in November 2000 that the ICPDR should be the platform for those issues surrounding implementation of the Water Framework Directive that were in need of international coordination. At the same time, strengthened implementation is promoted via the Programme Management Task Force (PMTF) as the supporting body for the ICPDR.

The transfer of the water-related tasks of the EPDRB to the umbrella of the DRPC became effective at the first meeting of the ICPDR in the autumn of 1998, when the ICPDR was established as the organisation responsible for implementing the DRPC.

At the final meeting of the EPDRB Task Force (the body that had been established to take decisions for the EPDRB, and in which the Danubian countries, the EU, international donors and international financial institutions as well as NGOs were all represented) was transferred to the PMTF.

In supporting the ICPDR, the task of the PMTF is not to take policy-related decisions, but to support the ICPDR on issues relating to its contacts with internationally active donors and financial institutions. This is not only to guarantee the continuity of the work done by the Sub-Groups funded in the past by support from EPDRB, but to avoid duplication of activities in the future and to guarantee targeted implementation of water resources protection. All these developments were given international backing and supported by the EPDRB.

By now, the Danubian states should have developed a "structure of responsibility" for implementation of the requirements. Apart from tried and tested measures, such as preventive and early-warning systems, the monitoring and development of standardised parameters and criteria for quality and the transfer of data and information, concrete steps have to be taken to reduce the noxious substances that make their way into the Danube and are discharged into the Black Sea

The building of sewage treatment plants, the introduction of technologies with low emission rates, and changes in agricultural practices must all now be mobilised. There have been repeated signals that international financial institutions like the EU are ready to help with the funding of such projects but it is essential that the projects become national priorities, too. Only if responsibility is taken by the states

themselves, including those in charge of their municipalities, their industries and their agricultural interests, will it become possible to identify and also finance “bankable projects”, via money from donors and from the states’ own resources.

Such donor interest, linked with the lending of financial resources, has been demonstrated at diverse levels and by many institutions: EU PHARE/ TACIS, ISPA, SAPARD, the World Bank, EBRD, UN/GEF, UN/ECE and SECI among them. We can only advance if all states in the Danube Basin recognise and take responsibility for the tasks in front of them.

### **Challenges for the future**

As a result of an initiative by the German Foundation for International Development, the German Federal Government and the World Bank, recommendations for transboundary water management have been collected within the framework of an international Round Table (Berlin Recommendations, 1998).

From it, we may identify the following challenges which face the Danube Basin in this time of transition:

- Aquatic ecosystems, from the river corridors to the receiving rivers, require new strategies and approaches for the reduction of diffuse loads, in addition to proven water protection measures such as the reduction of point source loads.
- In large river basins like the Danube Basin, the routes and transport mechanisms of pollution loads are active for a long time, sometimes for decades. To aim for sustainability requires planning far into the future.
- Transboundary water management must take into account changes in socio-political values and must allow for the sustainable treatment of water resources. Individual interests, such as utilisation and protection claims, must be dealt with via integral water resources management.
- International water commissions offer themselves as bodies to deal with transboundary water resources management. In order to guarantee the necessary levels of coordination, careful shaping and sustainable financing of the administrative structures are required, as are national and external support.
- International cooperation for guaranteeing sustainable water management requires agreement on the meaning of terms and the use of language so that each partner has an equivalent understanding; it requires trust and openness on the part of all partners in establishing monitoring and information systems; it requires the definition of common criteria for data, data interpretation and the measures to be taken as a result.
- Transboundary water management must be based on standardised targets for sustainability and the safeguarding of natural framework conditions such as quantity and quality. Basic principles like the precautionary principle, the polluter-pays principle and a willingness to cover costs and ensure cost efficiency have to be incorporated. Water resources management itself has to move away from the management of supply to the management of demand.
- A modern water protection policy needs public participation and transparency in its dealings with the public.
- Water protection serves public welfare and is a community issue. Its implementation requires a levelling out of responsibilities and national as well as international support.

### **Reference**

German Foundation for International Development: *Transboundary Water Management*, Berlin 1998.