ICPDR Annual Report 2008

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Kommission

zum Schutz der Donau





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1. Foreword

Besides the immense work done for the development of the Danube River Basin Management Plan, there have been key successes and achievements during the past year, the time I have been proud to serve as ICPDR President.

The first-ever Joint Statement on Guiding Principles for the Development of Inland Navigation and Environmental Protection in the Danube River Basin was finalised and approved in 2008. The interdisciplinary process to create the Joint Statement was led by the ICPDR, the Budapestbased Danube Commission on Navigation and the Zagreb-based International Sava River Basin Commission. Representatives from over 50 stakeholder groups, including 12 basin governments and 22 industry and environmental interest groups, participated in the year-long process. I certainly hope that these principles will be taken as a baseline for any further navigation infrastructure planning in the Danube River Basin.

In June, the ICPDR launched the Business Friends of the Danube Fund, bringing renowned international companies together to protect the Danube. The fund invites businesses operating in direct relation to the Danube River to financially invest into improving sustainability in the Danube River Basin, thereby strengthening cooperation between business and the ICPDR in general.



Saša Dragin Minister of Agriculture, Forestry and Water Management of Serbia and ICPDR President 2008

The final results of the Joint Danube Survey 2 were publicly presented this year during a press conference at the World Water Congress and Exhibition of the International Water Association in Vienna, in September. The results were published in two key documents: a Final Scientific Report and a hands-on public document – The Joint Danube Survey 2: Research Expedition and Conclusions.

Finally, one of the most important events in 2008 was the ratification of the Danube River Protection Convention by Montenegro on October 28, uniting the waters of the entire basin under the Convention. We whole-heartedly welcome the colleagues from Montenegro and look forward to working closely with them to integrate them fully into the work of the ICPDR.

ain Saša Dragin

ICPDR President 2008

^r Crna Gora //// România //// България //// Moldova //// Україна //// Deutschland //// Österreich //// Česká republika //// Slovensko //// Magyarország //// Slovenija ////

2. A structure of support: Operational and institutional framework

Since its creation in 1998, the ICPDR has brought together representatives from the highest ministerial levels, technical experts and members of civil society and of the scientific community to improve the state of the Danube and its tributaries.

The ICPDR is the largest international body of river basin management experts in Europe, with a mission to promote and coordinate sustainable water management for the benefit of all people of the Danube River Basin.

In 2008, Montenegro became the 15th contracting party to the Danube River Protection Convention, ensuring that all countries with territory greater than 2,000 km² are once again part of the institutional arrangements within the basin. Although Montenegro is a part of the Danube family of countries it will take some time to fully integrate experts into the work groups of the ICPDR, and special efforts will be undertaken to ensure that full involvement is possible.

Observers continued to play an important role in the work of the ICDPR and contributed significantly to expert groups. Although no new stakeholder group applied for Observer status, a special Memorandum of Understanding was agreed with the International Sava River Basin Commission to recognise the relationship between the two Commissions and to ensure synergy of efforts.

The efforts of all Danube countries were focused in 2008 on completing the draft Danube River Management Plan. This activity has dominated the working agenda of the ICPDR over the past years and has required intense work by Expert and Task Groups. While the main expert groups (River Basin Management, Pressures and Measures, Monitoring and Assessment, and Flood Protection), remain the place where the ICPDR conducts the majority of its work, the Information Management and Geographical Information Systems ad hoc Expert Group and the Public Participation ad hoc Expert Group were made permanent expert groups at the Ordinary Meeting in December, in recognition of the ongoing nature of their activities.

ICPDR Secretariat						
Expert Groups and	River Basin	Pressures and	Monitoring and	Flood Protection	Information	Public Participation
Task Groups	Expert Group	Expert Group	Expert Group	Expert Group	GIS Expert Group	Expert Group
	Hydromorphology	Accident Prevention	Groundwater	Flood Monitoring ar	ıd	
	Task Group	Task Group	Task Group	Forecasting Task G	roup	
	Economics	Nutrients	Accident Emergency			
	Task Group	Task Group	Warning System Task Group			
Supported by	Ad hoc Strategic					
	Expert Group					

Structure of the Cooperation

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Montenegro, Crna Gora – sometimes translated as "Black Mountain" – is the latest Contracting Party of the ICPDR. The natural values of Montenegro are remarkable including the Durmitor National Park and the Tara Gorge, the second deepest in the world after the Grand Canyon, at 78 kilometers in length and 1,300 meters at its deepest.



Cooperation inside and outside of the basin

The ICPDR took steps in 2008 to strengthen international cooperation. In addition to the regular response to requests for information or visits to the ICPDR by other international commissions, the ICPDR agreed to undertake intense cooperation with the Orange – Senqu River Commission (ORASECOM) based in Southern Africa. This cooperation will be supported by funding provided by the International Thiess River*prize*.

Cooperation with Business continued to be an important activity of the ICPDR and a more structured basis for this cooperation was organised with the formation of the Business Friends of the Danube in June 2008 (for more information, see section 11).



3. Assessing the river: Water Quality and Hydrological Situation in the Danube River Basin

The Danube River Basin includes numerous rivers, lakes and other important water bodies. Monitoring their status is vital for all of us.

The Danube and its tributaries play a critical role in the lives of the 83 million people living and working in the region. Tracking the quality and the quantity of the basin's waters provides vital information to sustain these precious resources.

Hydrological situation

The total discharge of the Danube River in 2008 was 188.2 km^3 – about 90.9% compared to the long-term average of 207 km³. The average mean flow value in 2008 was 5950 m³s⁻¹ compared to a long-term average of 6500 m³s⁻¹ (see also figure on the right side).

Regarding the annual variance, the Danube had the maximum discharge in its upper reach in August; the minimum was recorded in October but the flow was relatively balanced and did not reach extremely low values. The annual discharge pattern of the lower Danube is shown with data from the Bazias Station (rkm 1071) in figure below.

The Danube – Mean annual discharges in 2008



Danube flow at Bazias in 2008





The Danube and its tributaries provide habitats for about 2,000 plant and more than 5,000 animal species, all of which depend on a healthy river system to survive.

Precipitation in the upper Danube Basin was seasonally unbalanced: in Austria in February only 35% of the long-term monthly average was recorded, while in December the rainfall reached the 260% value. The same pattern was also observed in Slovenia, where another dry period was recorded in September. Spring brought the most rainfall in Bavaria. In the Czech Republic, July was the month with the highest precipitation (105 mm), and minimum precipitation was observed in February (25 mm). The summer brought many thunderstorms, especially in the upper Danube. The distribution of monthly precipitation in Romania is shown in the figure on page 11.

Eleven of the months in 2008 had higher than average air temperature in Bavaria (Germany); January, February and May were remarkably warm. In the lower Danube basin the mean thermal regime was about 1°C warmer than the climatologic average of 1961–1990.

Total precipitation values in 2008 are shown in the table on the right, along with the relative precipitation in the same year compared to the long-term annual average:

Total precipitation values in 2008

	Total annual precipitation in 2008 [mm]	Relative annual precipitation in 2008 [%]
Germany	980	99
Austria	975	95
Czech Republic	653	91
Slovakia	606	105
Hungary	607	101
Slovenia	1417	105
Serbia	620	92
Bosnia and Herzegovina	850	83
Romania	674	105

^{ta}nto IIII Masyarország //// Slovenija //// Hrvatska III Bo^{sna i} H^{ercegovina} III Cp6uja //// Сгла Goa IIII Волгария //// Deutschland //. Волгария //// Moldova IIII УКРАїна //// Deutschland //.



Water quality situation

Accidental spills caused no significant or long-term negative impact on water quality. In Bavaria, nitrogen concentrations in the Danube and the tributaries remained remarkably lower than previous years, and biochemical oxygen demand and phosphorous concentrations also declined in some rivers. During heavy rainfalls, however, the phosphorous levels rose sharply. The situation improved concerning perfluorooctanoic acid, detected in the Danube during Joint Danube Survey 2, as the main user of this substance in Bavaria gradually replaced it with a new emulsifier with better ecotoxicological properties.

Water quality in the Morava and Dyje in the Czech Republic improved slightly compared to 2007 when most of the water quality monitoring data could be categorised as class I and II. No significant changes in water quality were observed in Slovakia, Hungary, Serbia or Slovenia. In Bulgaria, the situation in the Danube was similar to the previous years; however, some water quality problems were registered in the tributaries due to sewage from municipal areas without wastewater treatment plants. In Romania about 74% of the river's length had water quality in classes I and II.

Mean monthly precipitation in Romania in 2008, against the climatologic average (1961–1990)



4. One of the world's largest river research expeditions: Joint Danube Survey 2

The scientific results of one of the world's largest river research expeditions released in 2008 show that the Danube and its tributaries are becoming cleaner, confirming that the cooperation among Danube countries to reduce pollution is bringing positive results.

The Joint Danube Survey 2 (JDS2) was the world's biggest river research expedition in 2007. Its goal was to produce highly comparable and reliable information on water quality and pollution for the entire Danube River and its major tributaries. The information was also essential for the Danube countries and the ICPDR to attain a complete overview of the water quality needed to meet the requirements of the EU Water Framework Directive (WFD). The results of the JDS2 can be found in the Final Scientific Report as well as in a shorter summary publication for the public.

Launched on August 14, 2007 from Regensburg, Germany, the JDS2 ships travelled down the Danube through 10 countries, reaching the Danube Delta in Romania and Ukraine in late September. Some 96 sites were sampled along the 2,600 km of the Danube River, and 28 sites on its major tributaries.

Hydromorphology

The assessment of the hydromorphology of the Danube was a completely new task and the first such comprehensive survey ever organized in the Danube Basin. It was prepared because the WFD requires EU river systems to have a "good ecological status" by 2015, which includes hydromorphological assessment. Overall, the assessment showed that the lower Danube is in better condition than the upper part, and that about 40% of the Danube investigated is in good condition, meaning that there are still many healthy ecological areas – more than earlier perceived.

Biology

The analysis of macroinvertebrates indicated good biological water quality for almost 80% of the Danube sites. Significant organic pollution affecting living organisms was detected in the Sio, Jantra, and Russenski Lom Rivers. Due to excessive pollution, the Arges River hosted no macroinvertebrates.

The fish survey, the first ever for the Danube, revealed that only about one-third of the investigated sites indicated good status. Hydromorphological alterations are the main pressure on fish populations in the upper Danube, while water quality is a key pressure in the middle and the lower Danube.

Phytobenthos, in contrast to aquatic fauna, react directly to the nutrient content (mostly phosphorus) in the river, and are a reliable longterm indicator of eutrophication processes. The phytobenthos analysis suggested an increase of nutrients in the longitudinal profile of the Danube. The analysis of phytoplankton found most of the Danube with acceptable conditions. Elevated levels of chlorophyll-a (an indicator of phytoplankton) and phytoplankton biomass were found only in the middle reach.

One-third of the sites were affected by microbial contamination, while faecal indicators (excreted by humans and warm-blooded animals) originated mainly from human sewage. Identified hot-spots were the Danube stretch between Budapest and Belgrade and the Arges and Russenski Lom tributaries.

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Full information on the JDS2, including a log-book and all reports and data can downloaded from the website: www.icpdr.org/JDS2





Overall total hydromorphological assessment in five classes as longitudinal colour-ribbon visualisation

Native and exotic fish species along the Danube

species native species non-native

Species number



Iron Gate



Watchyour Danube

08

ASI COCOL

Regensburg, 14 Aug + Wien, 20 Aug + Bratislava, 22 Aug + Budapest, 28 Aug + Osijek, 2 Sep + Beograd, 6 Sep + Turnu Severin, 12 Sep + Ruse, 19 Sep + Vilkovo, 25 Sep + Tulcea, 27 Sep

A fleet of three ships is travelling down the entire Danube River. They include scientists from all Danube countries. Looking into the Danube to uncover what lies beneath the surface, they are testing the water for pollution and waste and seeing what kinds of organisms depend on the river for their lives – from tiny plankton to fish.

We all want clean water for drinking and swimming, and as a home for the plants and animals that we love and care for. We are watching your Danube. You can too.

Get involved! Online (www.icpdr.org/JDS) you can view the JDS2 and some of its results, stories and pictures. Or just come to the river and see it live!

Selected pesticides in the Danube River



Chemistry

Chemical analysis revealed a significantly decreasing profile of nitrate concentrations moving down the Danube. A comparison with the JDS1 results of 2001 revealed higher concentrations of nitrates and mostly lower concentrations of orthophosphates.

Among the EU's priority substances (the EU has 33 substances or groups of substances which have been shown to be of major concern for European waters, including priority hazardous substances), di-(2-ethylhexyl)phthalate (DEHP) was found in nearly all JDS2 water samples at relatively high concentrations; in 44% of the water samples, the proposed environmental quality standard (commonly agreed concentration levels that are acceptable for "good quality" under the WFD) was exceeded. At several sites, an indication of WFD non-compliance was found for polycyclic aromatic hydrocarbons, nonylphenol, tributyltin and trichlorobenzene. The concentrations of metals in water were found above the quality targets at only three sites. In general, the average concentrations of priority substances detected during the JDS2 tend to be lower than those measured during the JDS1, especially for organic substances. The ecotoxicological analysis of Danube sediment showed no significant toxic effects. The regional distribution of ¹³⁷Cs contamination originated mainly from the Chernobyl accident in May 1986. The JDS2 results demonstrate a clear general decrease by a factor of 10 in the ¹³⁷Cs activity concentration of Danube sediments between 1988 and 2007. Due to decreased artificial radioactivity levels in the Danube River, there are no associated health risks. Naturally occurring radionuclides such as ²²⁶Ra and ²²⁸Ra in the Danube and tributary sediments were found in normal geochemical activity concentration levels. No enhanced anthropogenic input from industrial sources could be detected.

"All 124 of the pre-selected sampling sites along the Danube and its main tributaries were successfully sampled," said JDS2 Team Leader Béla Csányi. "This was despite conditions on the water that were often unexpected and extremely difficult for the scientific team and crews." These included the cold, heavy rain and winds, equipment problems, low and high water levels and unfriendly vessels passing the JDS2 ships.

Conclusions and suggested actions

The JDS2 created the most comprehensive and homogeneous database on the status of the aquatic ecosystem of the Danube and its major tributaries. The survey confirmed earlier ICPDR conclusions of a generally improving trend along the main Danube River.

5. Setting priorities for the river basin: Implementation of the EU Water Framework Directive

A comprehensive management plan for the entire Danube River Basin – involving experts from industry and agriculture, and representatives from environmental and consumer organisations as well as local and national authorities, NGO's and civil society – ensures that environmental objectives are met on time.

The implementation of the EU Water Framework Directive (WFD) is the highest priority in the Danube River Basin. The WFD establishes a legal structure to protect and enhance the status of aquatic ecosystems, prevent their deterioration and ensure long-term, sustainable use of water resources. The Directive provides for an innovative approach for water management based on river basins – the natural geographical and hydrological units – and sets specific deadlines for EU Member States to produce River Basin Management Plans including Programmes of Measures.

The WFD establishes several integrative principles for water management, including public participation and economic approaches. It aims as well for the integration of water management into other policy areas. The WFD calls for the creation of international districts for river basins that cover the territory of more than one EU Member State and for coordination of work in these districts. EU Member States should aim to achieve "good ecological and chemical status" in all surface water bodies and "good chemical and quantitative status" in all groundwater bodies by 2015.

Managing the basin together

The focus in 2008 was on the development of the draft Danube River Basin Management Plan, including the Joint Programme of Measures. The ICPDR is the coordination body for the development of this comprehensive management plan for the entire Danube River Basin using the principles of the WFD. The plan has been developed on a basin-wide scale, as the countries which are not EU Member States, and therefore not obliged to implement the WFD, have committed to meet the requirements.

The document, Outline of the Danube River Basin District Management Plan - Report on the DRBM Plan and its Joint Programme of Measures to support the EU WFD public consultation process of the Danube states, was produced and adopted by the Heads of Delegation in December at the Ordinary Meeting. It outlines the Danube River Basin Management Plan and its Joint Programme of Measures, and is used in the national public consultation process of the Danube states which began in December 2008. Therefore, many Danube countries have translated the outline into their national languages and annexed it to their national river basin management plans and programme of measures.



Teamwork is the main tool for the successful development of the Danube River Basin Management Plan.



Organising data and creating templates

Data collection is crucial as it is the basis for the compilation of the draft Danube River Basin Management Plan and the Joint Programme of Measures. The data collection for all Significant Water Management Issues using the important tool DanubeGIS was the focus during 2008. The data collection is done by the Information Management and GIS Expert Group and will be finalised in autumn 2009.

In 2008, the Task Group on Hydromorphology focused on the development of thematic templates for the Danube River Basin Management Plan, data analysis, future infrastructure projects as part of the Plan, possible use of the Joint Danube Survey 2 data and on exemptions according to WFD Articles 4(4) and 4(5). The final designation of heavily modified water bodies of the Danube River was also set.

The Task Group on Economics focused on the Danube socio-economic indicators list. The group also elaborated a Danube matrix of elements for economic analysis and performed a basin-wide economic analysis in line with the WFD.

Intercalibration

An intercalibration exercise was held to compare is national quality classes among countries according to the normative definitions of the WFD. The outcome of the intercalibration exercise is the basis of WFD compliant status assessment and therefore a crucial component of the overall process. The ICPDR Secretariat coordinated the Eastern Continental Geographical Intercalibration Group (EC GIG) until the transfer of the leadership to the Czech Republic and Hungary in December 2007. The new leaders organised the first EC GIG meeting in May 2008 to plan the finalisation of the important exercise by the end of 2010.

All steps towards the development of the Danube River Basin Management Plan were only possible through the contributions of all Expert Groups and Task Groups. Improvement and finalisation of the Danube River Basin Management Plan will be the main focus of WFD implementation in 2009.

A workshop on the development of the Danube River Basin Management Plan's Joint Programme of Measures was held 27-28 November 2008 in Vienna. This workshop was an important stepping stone and delivered preliminary key findings and conclusions for each Significant Water Management Issue and for groundwater. They will be further developed during 2009.

6. Taking integrated management to all levels: River sub-basins

River basin management plans are underway for the Danube's major sub-basins to ensure that the waters of the region are protected at all levels.

The EU Water Framework Directive encourages EU Member States to supplement river basin management plans by producing more detailed programmes and management plans for sub-basins. The ICPDR has taken an active role in sub-basin planning – supporting and encouraging the processes and assisting in stakeholder involvement as well as providing additional information to local and regional planners.

Sava River Basin

Since the establishment of the International Sava River Basin Commission (ISRBC) in 2006, the commission has worked to develop the Sava River Basin Management Plan, to be finalised in 2009. Work in 2008 focused on developing protocols for the Framework Agreement on the Sava River Basin, as well as activities to prepare for the implementation of the European Commission's project Technical assistance in the preparation of the Sava River Basin Management Plan and promoting the activities of the ISRBC, including the celebration of Sava Day on June 1.

The Commission's work in 2008 included efforts to develop integrated systems for the Sava River Basin, such as Geographic Information Systems and River Information Systems, as well as flood forecasting and early warning systems.

Tisza River Basin

In 2008, the Tisza Group, a platform for strengthening coordination and information exchange related to international, regional and national activities in the Tisza River Basin, finalised the Tisza Analysis Report 2007 which is the first important step toward the development of the Tisza River Basin Management Plan, planned to be prepared by the end of 2009.

Global Environment Facility approved the proposal for the UNDP/ GEF Tisza Medium Sized Project called "Integrating multiple benefits of wetlands and floodplains into improved transboundary management for the Tisza River Basin" in 2008. This project will allow additional financial resources for the work in the Tisza River Basin. Three demonstration projects will be implemented in the coming years.

Danube Delta

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In December 2007, the three countries sharing the Danube Delta, Romania, Ukraine and Moldova signed the Joint Declaration of the Heads of Delegations from the Republic of Moldova, Romania and Ukraine. The main objective of the Joint Declaration is to develop the Danube Delta Analysis Report, including harmonized monitoring, and nutrient and sediment control.

The first steps towards the development of the River Basin Management Plan for the Danube Delta have been taken in the framework of the project funded through the Environment and Security Initiative (ENVSEC), formed by UNDP, UNEP, OSCE, NATO, UNECE and REC.

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The Danube Delta lies within Moldova, Romania and Ukraine. It is one of the largest wetlands of the world - a unique habitat of canals, reed beds, lakes, and ponds. Manmade constructions are numerous, i.e. flood protection dams, rice fields, ponds, polders, sluices, irrigation systems and other hydraulic constructions. It is an important goal of the ICPDR to ensure the sustainable management of the Danube Delta – the first steps undertaken towards this goal are promising.





7. Pollution Control: Creating a strategy that meets EU requirements

Throughout the basin, planning and construction is under way to provide advanced water pollution control to reduce the long-term effects of pollution.

Full integration of EU policies into the national and basin-wide pollution control strategies is a long-term goal of the ICPDR. In response to the EU Water Framework Directive (WFD) requirements addressing the pollution-related Significant Water Management Issues (organic, nutrients and hazardous substances), a new system to collect and calculate emission data for the Danube River Basin has been designed and implemented bridging the efforts of the non-EU countries in the Danube River Basin that will use the European data collection systems and methodologies. The ICPDR has refined the pressures assessment of the water bodies, including point and diffuse sources of pollution.

The major cause of organic pollution is insufficient treatment of wastewaters discharged by municipalities, agricultural point sources (animal breeding farms, manure depots, etc.) and industrial point sources. Organic pollution greatly contributes to unbalanced plant growth in water and influences the nutrients input into the river systems.

The analysis of the point source pollution in the Danube River Basin requires the availability of complete inventories of point sources with high quality data. The 2006/2007 data collection on the urban wastewater treatment plants, for agglomerations which fall under the scope of the EU Urban Wastewater Treatment Directive (UWWTD) – i.e. > 2000 population equivalents (PE) – reference year 2005/2006, has been linked to the data sets already available in the ICPDR Emission Inventory and the DABLAS (DAnube BLAck Sea) database through a two-step approach. In the first phase (2006) the methodology has been developed and data collected on agglomerations with more than 10,000 PE.

In the second phase (2007) data from agglomerations between 2,000 and 10,000 PE have been collected. The pressures assessment includes an estimate of the pollution loads discharged from the agglomerations to the Danube Basin. According to the data model of the UWWTD, the data model of the ICPDR Municipal Emission Inventory 2007 considers the relation between agglomerations, urban waste water treatment plants or collecting systems without treatment and discharge point (figure on page 22).



The use of phosphate-free household detergents offers a quick and cost-effective solution to reduce the phosphorus input into the Black Sea: the introduction of phosphate-free household detergents in all countries of the Danube River Basin would reduce the annual input of phosphorus into the Black Sea to the status of the 1960s.

Pressures and impacts

The results have strengthened information of the Danube Basin Analysis 2004 about the pressures, impacts and economic aspects of water uses. This was needed to develop measures and compare their likely effectiveness to support achievement of WFD objectives. A total of 5,898 agglomerations > 2,000 PE are located in the basin. Out of those, 4,648 agglomerations (=19,982,652 PE) are in the class > 2,000 PE – 10,000 PE and further 1,250 agglomerations are classified PE > 10,000 (=75,122,279 PE).

These figures clearly demonstrate the importance of addressing organic pollution from these large communities (> 10,000 PE), which contain a majority of the population. There is still a high number of agglomerations > 2,000 PE which are not connected to a sewage collecting system or to a wastewater treatment plant. In total, over 2,600 agglomerations (11% of the total generated load) exist where wastewaters are not collected at all.

Taking actions to reduce phosphates through P-free detergents

Nutrient pollution remains a priority environmental challenge in the Danube River Basin with excessive inputs from phosphorus and nitrogen causing eutrophication, especially in the north-western Black Sea. The main sources are agriculture (including effluents from pig farms and agro-industrial units), inadequate wastewater treatment plants and detergents using phosphates.

While the situation has improved significantly since the late 1980s, tertiary treatment as required by the UWWTD does not sufficiently address excess phosphorus emissions. However, significant phosphorus reduction can be achieved by widespread adoption of phosphate-free laundry detergents. As shown in some Danube countries, voluntary agreements are unlikely to be effective and there is a clear need for a basin-wide ban. As an analysis has revealed, the full introduction of P-free laundry detergents and dish washers would decrease P input into the Black Sea to a level, which is only 5% above the input in the 1960ies, it is obvious that introducing phosphate-free detergents is a fast and efficient way to reduce nutrient emissions into surface waters.

It is critical to address organic pollution from communities. There is still a high number of agglomerations of more than 2,000 population equivalents which are not connected to a sewage collecting system or to a wastewater treatment plant. In total, over 2,600 agglomerations (11% of the total generated load) exist where wastewaters are not collected at all.

Major pathways of wastewater from agglomerations as covered by the ICPDR reporting on urban waste treatment development in the Danube River Basin



Assessment of contaminated sites due to accidental pollution

The existing ICPDR inventory of contaminated sites susceptible to flooding, with both former industrial sites and former waste deposits, has been supplemented with data by the countries. The updated inventories provide a clearer picture of potential risk sites as well of possible targets to reduce and control accidental pollution.

Dr. Horst Behrendt passed away on December 26, 2008, and the ICPDR family lost a great scientist. Horst's work for the MONERIS model helped to develop strategies for pollution reduction. We all will remember Horst with great respect and gratitude.

8. Environmental safety in action: the Danube Accident Emergency Warning System

Accidental pollution can quickly affect downstream neighbours, but with round-the-clock preparedness, Principal International Alert Centres can warn national authorities to respond to the danger.

The Accident Emergency Warning System (AEWS) is activated whenever there is a risk of transboundary water pollution, or threshold danger levels of hazardous substances are exceeded. The system's warning messages to downstream countries help national authorities put environmental protection and public safety measures into action. The ICPDR Secretariat maintains the central communication system, which is integrated with the ICPDR information system Danubis.

The AEWS operates on a network of Principal International Alert Centres in each of the participating countries. These centres are made up of three basic units:

- Communication Unit (operating 24 hours a day), which sends and receives warning messages
- Expert Unit, which evaluates the possible transboundary impact of any accident using the database of dangerous substances and the Danube Basin Alarm Model
- Decision Unit, which decides when international warnings are to be sent

Two tests of the AEWS were organized by the ICPDR Secretariat in 2008. Both tests were unannounced and the major goal was to check the preparedness and response time of the Communication Units of the Principal International Alert Centres in the Danube countries. While the first test in April was triggered on a business day, the second test was organised on Sunday, 11 November. In general, both tests confirmed that the Danube AEWS is performing well as required and that the system is appropriately designed to react timely in the event of an accident. However, more attention must be given to strengthening the cooperation with Principal International Alert Centres in Ukraine to improve their active operation of the system.

Accidents on the river

In 2008, the Danube AEWS was activated by five accidents. As in previous years, the most frequently polluting substance was mineral oil caused by leaks from ships or from on-shore installations. The Colbu 2 tailing dam was breached causing a spill of the tailing water, but environmental quality standards in the rivers downstream were not exceeded.

Site & date of accidentAffected RiverPrimary PollutantRouting of international messaBechet, Dolj CountyDanube, rkm 679Mineral oilPIAC08 - PIAC09, PIAC13"Request for Informatio06.02.2008PIAC09PIAC13 - PIAC09, PIAC08"Standard MessagPrahovoDanube, rkm 859Mineral oilPIAC07 - ISRBC, PIAC06, PIAC14"Request for informatio27.02.2008PIAC07PIAC07 - ISRBC, PIAC06, PIAC14"Request for informatioPrahovoDanube, rkm 859Mineral oilPIAC07 - ISRBC, PIAC06, PIAC14"Request for informatioPIAC07PIAC07PISRBC, PIAC06, PIAC14"Request for informatioPIAC14 - PIAC07PIAC06PIAC07"Standard messagPIAC14 - PIAC07Tisza, rkm 705 to 537White floatingPIAC13 - PIAC08, PIAC09"Standard messag17.04.2008Mur/MuraMineral oilPIAC08 - PIAC13"Request for informatioGrazMur/MuraMineral oilPIAC08 - PIAC03"Standard messagColbuValea ViseuluiTailing wastePIAC05 - PIAC08"Request for informatioPIAC08 - PIAC05PIAC08 - PIAC05"End of aler					
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KisarTisza, rkm 705 to 537White floating precipitationPIAC13 ~ PIAC08, PIAC09"Standard messag17.04.2008precipitationPIAC08 ~ PIAC13"Request for informatioGrazMur/MuraMineral oilPIAC08 ~ PIAC13"Request for informatio06.06.2008PIAC13 ~ PIAC08PIAC08 ~ PIAC08"Standard messagColbuValea ViseuluiTailing wastePIAC05 ~ PIAC08"Request for informatio26.07.2008PIAC08PIAC05 ~ PIAC08"Request for informatio	Prahovo 27.02.2008	Danube, rkm 859	Mineral oil	PIAC07 → ISRBC, PIAC06, PIAC14 PIAC07 → ISRBC, PIAC06, PIAC14 PIAC06 → PIAC07 PIAC14 → PIAC07 PIAC14 → ISRBC, PIAC06, PIAC07	"Request for information" "Request for information" "Standard message" "Standard message" "End of alert"
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	Colbu 26.07.2008	Valea Viseului	Tailing waste	PIAC05 ► PIAC08 PIAC08 ► PIAC05	"Request for information" "End of alert"

9. Sustainable action plans: Flood protection in the Danube River Basin

In the last decade several massive floods have occurred in the Danube Basin's ecologically rich natural floodplains. But Danube flood experts are actively working to ensure that proper flood protection, prevention and mitigation measures are in place.

Floods are natural phenomena, which have helped to shape natural landscapes, habitats and ecosystems in floodplains, wetlands and other lowlands. They are impossible to prevent altogether, although measures may be taken to reduce their frequency and the damage they cause. Floods can, however, turn into disasters causing widespread damage, health problems and casualties.

The impacts of major floods in Europe may increase considerably in the future, since society is becoming more vulnerable to the damage and disruption caused by floods, and because floods may become more serious and more frequent due to climate changes.

Increased peak flood flow occurs where rivers have been cut off from their natural floodplains, are confined to a man-made channel, and where houses and industrial sites have been constructed in areas that are naturally liable to flooding. Changes in land use in rural and urban areas can also worsen floods or their effects.

Defining the scope of action

The ICPDR Action Programme on Sustainable Flood Protection stipulates the development of flood action plans for all sub-basins of the Danube River Basin. An important step towards this goal was taken in 2008 when the Danube Flood Experts agreed upon 17 geographical units within the Danube River Basin for which action plans need to be drafted.

The exact delineation of the borders of these geographical units is still under discussion, but reaching a general agreement on the sub-basins enabled the compilation of the plans to begin. The flood action plans for the sub-basins are expected to be finished by the end of 2009, and will describe the targets and the measures to be implemented to ensure sustainable protection against floods. The plans will clarify what type of actions will be taken and set a timeline to enable efficient flood protection, prevention and mitigation in all countries sharing a particular basin. Drafts of the action plans began in 2008 at the national level and the process will continue in 2009 when the international harmonization of each of these plans will take place.

Recognising progress

While the action plans will list the actions to be taken against floods in future, it is equally necessary to inform the stakeholders and the public of the accomplishments already in place in the field of flood protection, prevention and mitigation. This is the role of the Report on Achievements in Flood Protection in the Danube River Basin, which was prepared in 2008 and will be published in 2009.

This report will be updated regularly and will show the tangible results achieved through realization of the flood protection activities across the Danube River Basin. The report will address basin-wide targets, such as the development and improvement of flood forecasting and early warning systems, or recommendations for a common approach in flood risk mapping, but particular attention will be given to the key achievements in particular sub-basins.

In 2008, Sándor Tóth, the long-term Chair-person of the ICPDR Flood Expert Group and employee of the Central Directorate for Water and Environment of Hungary has passed away. Sándor's personal and professional commitment was crucial for the activities related to flood protection and mitigation and prevention and his death is a loss for the entire ICPDR family.



10. Sharing information: Public participation and the **ICPDR** information systems

Providing access to information is vital to building public participation and encouraging cooperation in the Danube River Basin.

The ICPDR has always worked to ensure that international stakeholders are actively involved in its work. Stakeholder involvement is not limited to the Public Participation Expert Group. Instead, securing the active participation of stakeholders is a cross-sectoral initiative of the ICPDR and is encouraged in all Expert Groups. Only the full involvement of interest groups can ensure integrated management of the Danube River Basin.

Public Participation Expert Group

The former ad-hoc Public Participation Expert Group has been turned into a permanent ICPDR Expert Group in December 2008. This formal act underlines the importance of the work of this group focusing on implementing joint outreach projects, such as Danube Day and the Danube Box, and on sharing information between countries as well as supporting the puplic participation process of the river basin planning activities.

Public participation on the draft Danube River Basin Management Plan

To promote WFD implementation, the ICPDR, in its role as coordinating platform, has put special emphasis on promoting public participation activities. The ICPDR has identified four channels to inform the public and receive comments on the draft management plan:

- round table discussions with selected stakeholder groups
- e-mails addressing professionals and representatives of professional groups
- questionnaires for interested public and professionals
- a Stakeholder Forum to discuss the management plan
- These activities started in 2008 and will be finalised in 2009.



Information systems

The ICPDR shares information with decision makers, journalists, scientists and the general public via www.icpdr.org and dedicated websites, such as www.danubeday.org and www.danubebox.org. More than 85,000 people visited the ICPDR website in 2008, up 20% compared to the previous year. The top 20 visiting countries included the Danube countries plus the USA, the UK, France, Canada, China, India, Australia, the Netherlands and Belgium, and the most visited content was the Black Sea, river basin management, human impacts and floods and droughts.

The Danube Box website, www.danubebox.org, was launched in April, and more than 2,300 orders were received in 2008. The website includes all available content (handbook, poster, family ^{IIII} S^{lovenija} III Hrvatska III Bosna i Hercegovina //// Cp6uja //// Crna Gora III/ România //// България //// Moldova //// Україна IIII Deutschland //// Österreich //// cards, CD-ROM) from all available versions (International/English,



The key maps of the Tisza River Basin Analysis 2007 have been prepared in the DanubeGIS. This screenshot shows the risk assessment for nutrient pollution.

The ICPDR Information System Danubis offers delegations and expert groups an internal working area to share documents and other information related to their work. In 2008, 293 new users were added, for a total of 1050 users.

Securing the active participation of stakeholders is a cross-sectoral initiative of the ICPDR — only the full involvement of interest groups can ensure integrated management of the Danube River Basin.

The Danube River Basin GIS (DanubeGIS) provides GIS experts with a tool for sharing and displaying geocoded data for harmonization and map production, and maps from previous projects are available to the public (Roof Report 2004, Monitoring Report 2007, Tisza Basin Analysis 2008). Further development of the DanubeGIS focused on support of data collection for the Danube River Basin Management Plan.

////// Čes_{ká} rep_{ublika} //// Slovensko //// Magyarország //// Slovenija //// Hrvatska //// Bosna i Hercegovina //// Србија //// Crna Gora //// România //// България ///

11. Shared river basins, shared responsibility: International and regional cooperation

To achieve the goal of integrated river basin management, the ICPDR relies on cooperation with regional and international agencies, NGOs and scientific and business communities.

Navigation statement sailing ahead

In October 2007, a Joint Statement on Inland Navigation and Environmental Sustainability in the Danube River Basin was finalised. The initiative was launched by the ICPDR, in cooperation with the Danube Navigation Commission and the International Sava River Basin Commission. In 2008, preparations were made for a workshop, held in January 2009, to discuss achievements and how to improve the application of the Joint Statement in waterway projects.

Statements from the workshop highlighted the strong support for the implementation of the Joint Statement. Participants also stressed that any inland waterway transport project has a better chance of receiving environmental permits and international funding if it meets the Joint Statement principles and criteria, notably early integration of the EU environment protection objectives and other river-related development plans and projects.

Platina - to promote environmentally friendly navigation

The European Commission is using the Platform for the Implementation of NAIADES (PLATINA) to promote and support its European Action Programme for Inland Waterway Transport. Started in 2008, PLATINA is executed by a consortium of public and private key stakeholders, including via donau (Austria), Voies navigables de France (France), Bundesverband der Deutschen Binnenschiffahrt (Germany), Promotie Binnenvaart Vlaanderen (Belgium), the Rijkswaterstaat Centre for Transport and Navigation (The Netherlands) and the ICPDR. There is a clear need to reconcile transport policy objectives with the interests of other water users, such as environment and nature, flood protection, recreation, energy and other land uses. The PLATINA project aims also to ensure the proper integration of environmental aspects in the development and maintenance of inland waterway infrastructure, in line with the targets of the EU Water Framework Directive - which is the task of the ICPDR.

The Danube - Black Sea Cooperation

Cooperation between the ICPDR and the Black Sea Commission was formalised in 2001, committing the two Commissions to exchange information on water quality and pollution loads from the Danube to the Black Sea and on the status of the Black Sea, through the Joint Technical Working Group.

In 2008 the ICPDR has continued to provide the Black Sea Commission with data on loads of pollution from the Danube to the Black Sea on an agreed set of parameters. The Monitoring and Assessment Group under the Black Sea Commission is currently developing general recommendations for the Black Sea data assessment. The assessment is crucial as the results can be used for the trend analysis to show an ecological and chemical status of the Black Sea from a long-term perspective.

Official Visits

Visits of study groups are an integral part of the ICPDR's cooperation with other countries and commissions. In 2008, the Orange-Senqu River Commission and the Permanent Okavango River Basin Water Commission in Southern Africa, came to the ICPDR Secretariat for intensive two-day visits. The ICPDR presented information about its activities and discussed the organisation of transboundary river commissions. Both visits gave the ICPDR the chance to cooperate with other international commissions dedicated to improving water management and to learn from shared experiences.

A high level delegation of Chinese representatives from the Yangtze und the Yellow Rivers visited the ICPDR and five Danube countries – Austria, the Czech Republic, Hungary, Slovenia and Slovakia – in October. Further visits and exchange are planned for 2009. In addition to these visits, a wide range of visits from representatives of stakeholder groups, NGOs, institutes and delegates from companies gave an overview of the variety of influence of the ICPDR.

The Green Danube Partnership

The Green Danube Partnership was established in 2005 to unite Coca-Cola Hellenic, The Coca-Cola Company and the ICPDR in efforts to preserve and protect the Danube River Basin. The Green Danube Partnership provided vital financial and technical support for Danube Day celebrations in Austria, Bulgaria, Croatia, Hungary, Romania, Serbia, Slovakia and Ukraine; and support from Coca-Cola also made it possible for the winners of the "Danube Art Master" competition to attend the award ceremony held in Vienna in autumn. Financial and technical support from Coca-Cola also brought the Danube Box to more classrooms throughout the basin. See Section 12 for more information on these activities.

In addition, support from Coca-Cola created the Danube Photo Gallery to present photographs and videos of activities and events conducted such as the Danube Day. The high quality library, which has provided photographs for use by the European Commission, is an important tool for the ICPDR Secretariat.

Business Friends of the Danube

The Business Friends of the Danube is an initiative of the Green Danube Partnership (between ICPDR and Coca-Cola Hellenic and the Coca-Cola Company) and offers renowned and international companies a framework to support social responsibility and to support the ICPDR in its efforts to protect the Danube.

The Business Friends of the Danube initiative was launched on June 2 by the ICPDR Secretariat, the Austrian Minister for Water Management represented by the Minster Josef Pröll, the Austrian Broadcasting Cooperation ORF represented by Walter Köhler, Coca-Cola Hellenic represented by Sir Michael Llewellyn-Smith and The Coca-Cola Company. A General Assembly was held on November 17 and also included companies Borealis, Verbund Austrian Hydropower and Kommunalkredit Bank and Consulting. Many new opportunities will be available through the partnership for supporting ICPDR efforts such as sustainable river basin management, environmental protection, nature conservation, pollution reduction, emergency preparedness and disaster relief.



Business, as a key Danube stakeholder, can either make environmental problems or contribute to solutions and boost corporate social responsibility.

The Danube needs more business friends



Members of the Business Friends of the Danube Fund-

- Join the ICPDR and other businesses in high profile activities to protect the Danube River Basin, its resources and ecosystems
- Gain valuable opportunities to demonstrate commitment to Corporate Social Responsibility through meaningful engagement in sustainable development efforts
- Reach millions of people with key messages about maintaining or increasing responsible water use, including in their own operations
- Open avenues for demonstrating expertise through participation in a wide range of initiatives, including everything from pollution reduction and awareness-raising, to research expeditions and educational projects ... and more.

12. Bringing the Danube into communities: Danube Day and the Danube Box

Programmes like Danube Day and the Danube Box strengthen "Danube Solidarity", highlighting that in spite of our different cultures and histories, we have a shared desire and responsibility to protect our precious resources.

International Danube Day, held 29 June, was launched by the ICPDR in 2004 to celebrate the 10th anniversary of the signing of the Danube River Protection Convention. Through the joint effort of organising across the region, Danube Day has become an annual event, paying tribute to the Danube and the rivers that flow into it.

Danube Day 2008 was a celebration of a cleaner, safer river following 15 years of international cooperation. Sustainable use was the 2008 theme, with the slogan: The Danube rivers – let's use them not abuse them! With more events than ever before – 169 in 14 countries – Danube Day mobilised tens of thousands of people to make a difference for the Danube Basin. Events stretched across the region: river festivals; educational events; boat trips and river bank-clean up days combined with ministerial events, public meetings, conferences and exhibitions. Through media campaigns, basin-wide events, sponsorship and organisers' hard work, Danube Day reached hundreds of thousands of people.

Ripples from Danube Day even spread across the globe through celebrations at the World Water Expo at Zaragoza, Spain – the biggest water festival on earth. Visitors on 29 June were presented with a "Danube Passport" to collect country stamps, and the "Blue Danube Waltz" saw crowds of people dance for the river – organised by Global Water Partnership Hungary.

Encouraging competition to motivate children

The Danube Art Master competition is a key element of Danube Day, emphasising the complexity of rivers and their connection to land, animals and people. The competition was jointly organised by the ICPDR and the Danube Environmental Forum, the largest network of environmental NGOs in the Danube Basin.

Children from 15 Danube Basin countries were encouraged to visit local rivers and to create a piece of art using materials from in and around the river. Over 4,000 submissions were received from over 1,000 schools. The huge diversity of artworks created was a true reflection of the richness of the Danube Basin.

The winning submission for the International Danube Art Master, selected from the winners of the national "Danube Art Master" competitions, was created by Tomas Spusta and Martin Kratochvíl. Their artistic sculpture depicts a majestic duck watching over the Danube River, and was creatively made from local materials such as wood and grass.

The award ceremony in Vienna was attended by the national Danube Art Master winners and their mentors. After the ceremony, the winners took part in a three-day environmental programme with trips around Vienna, the Schönbrunn Palace and Zoo, and the National History Museum. The winners' trip was organised by Global Water Partnership Hungary and supported by Coca-Cola Hellenic and The Coca-Cola Company through the Green Danube Partnership.

"The Danube cooperation is an example to be followed." – Eduardo Jara, Water Tribune, 2008 World Water Expo in Zaragoza, Spain.



Sending the Danube to school

The Danube Box is an educational tool developed under the leadership of the ICPDR and the key outcome of the Green Danube Partnership between the ICPDR and Coca-Cola Hellenic and The Coca-Cola Company.

The Danube Box materials support water education lessons for the Year of Water within the UN decade of Education for Sustainable Development.

The multi-media teacher's kit helps students learn about the sustainable use of waters to the benefit of man and nature. The box has been implemented in Austria, Germany, Hungary and Romania, and plans are underway for its release in Bulgaria, the Czech Republic and Serbia. The internet launch of the Hungarian version of the Danube Box in February 2008 was accompanied by an online nation-wide competition with quizzes for students and instructions for teachers. In May 2008 a national final was organised in Budapest. Three hundred hard copies of the Box were printed and distributed to the best of over 400 school teams who took part in the competition. The German version of the Danube Box was launched with a presentation at the Didacta 08 Education and Training Fair in Stuttgart in April. Within six weeks, two thousand had been requested. In all, three thousand pieces of the German "Donau Box" were produced for distribution to schools across Germany in spring 2008. Across the region, the Danube Box continues to be well received. In Austria, the WWF – Academy, Europe's Schools for Environment and Nature, launched a school project on Danube issues, using the Danube Box as basis of their workshops and activities.

In Serbia, photos from the Danube Box CD-ROM were presented at the Lavoslav Ružička Museum in Vukovar Belgrade as part of the Vukovar Film Festival. As part of the official launch of the Romanian Danube Box for Danube Day this year, 22 teachers were selected for a training programme on the use of the Danube Box materials and on interactive methods and started to teach Danube issues in classrooms.

13. Regular Budget and Financial Contribution

Regular Budget Financial Year 2008

Three independent auditors, at the proposal of the Contracting Parties, audited the consolidated financial statement including the accounting records of the ICPDR for the financial year from 1 January to 31 December 2008. The Audit Team certified that the Statement of Accounts is correct, and the contents, structure and details are in accordance with ICPDR rules and regulations and the accounting principles assuring transparency of financial management.

Contributions Financial Year 2008

Contracting Party	Contribution in %	Contribution in Euro	Actually paid in Euro
Germany	9.71709	96,574.13	96,574.13
Austria	9.71709	96,574.13	96,574.13
Czech Republic	9.71709	96,574.13	96,574.13
Slovakia	9.71709	96,574.13	96,574.13
Hungary	9.71709	96,574.13	96,574.13
Slovenia	9.71709	96,574.13	96,574.13
Croatia	7.88164	78,332.35	78,332.35
Serbia	7.88164	78,332.35	78,332.35*
Bosnia and Herzegovina	1.00	9,938.59	9,938.59
Bulgaria	9.71709	96,574.13	96,574.13
Romania	9.71709	96,574.13	96,574.13
Moldova	1.00	9,938.59	9,938.59*
Ukraine	2.00	19,877.17	19,877.17
European Commission	2.50	24,846.46	24,846.46
Total	100.00	993,858.55	993,858.55

* contribution paid in early 2009

Expenditures Financial Year 2008

Budget Chapters	Approved Budget in Euro	Expenditures in Euro	Balance in Euro
Staff	535,400.00	535,184.26	215.74
Office Running	131,000.00	130,983.07	16.93
Publications	95,700.00	95,699.64	0.36
Meetings & Travel	113,200.00	113,199.97	0.03
Services	118,558.55	118,634.62	-76.07
Total	993,858.55	993,701.56	156.99

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Special Funds in 2008

In addition to the Regular Budget, Special Funds provided by various donors have allowed the ICPDR to undertake special activities in support of the Convention beyond those possible through the regular budget.

EU-Project – WATERDRB-2009 Danube River Basin Management Plan

Under the Title "Implementation of the EU Water Framework Directive (WFD) for the development of the Danube River Basin Management Plan" the ICPDR has received funding from the European Commission.

The project supports preparation work for the development of the Danube River Basin Management Plan in line with the WFD, also considering sub-basin developments. The work focuses on preparing a "Joint Programme of Measures" and data collection.

EU-Project – PLATINA

The ICPDR is responsible for a work package under an EU-funded project organised by via donau which supports the implementation of the Joint Statement on Inland Navigation and Environmental Sustainability in the Danube River Basin.

Within the frame of this project, a manual containing best practices on sustainable waterway planning in river basins will be developed. Such a manual can serve as a reference for inland waterway planning authorities and relevant stakeholders. It should contain practical examples of how to align ecological and navigation interests using general planning guidelines. The manual will be the main tool for the implementation of the Joint Statement's objectives.

UNDP/GEF Project – TISZA MSP

/// Србија //// Crna Gora //// România //// България //// Moldova //// Україна ///// Deutschland //// Österreich //// Česká republika //// Slovensko //// Magyarország ||

The ICPDR established the Tisza Group in 2004 as a platform for strengthening coordination and information exchange related to international, regional and national activities in the Tisza River Basin. The Tisza Group countries agreed to prepare a sub-basin plan (the Tisza River Basin Management Plan) by 2009, which integrates issues on water quality and water quantity, land and water management, flood and drought. The preparation of this plan will be financially supported by the medium-sized project approved by the Global Environment Facility in 2008.

About the ICPDR

The International Commission for the Protection of the Danube River (ICPDR) is an international organisation consisting of 15 contracting parties, including the European Union. Since its establishment in 1998, it has grown into one of the largest and most active international bodies engaged in river basin management in Europe. Its activities relate not only to the Danube River, but also to the tributaries and ground water resources of the entire Danube River Basin.

The ultimate goal of the ICPDR is to implement the Danube River Protection Convention. Its mission is to promote and coordinate sustainable and equitable water management, including conservation, and the improvement and rational use of waters for the benefit of the Danube River Basin countries and their people. The ICPDR pursues its mission by making recommendations for the improvement of water quality, developing mechanisms for flood and accident control, agreeing standards for emissions and ensuring that these measures are reflected in national legislation.

The ICPDR is supported by a Secretariat based in the Vienna International Centre in Vienna, Austria.

The contracting parties to the ICPDR are shown here, along with their organisations and website addresses:

European Union

European Commission, DG Environment http://ec.europa.eu/environment/



Austria

Ministry for Agriculture, Forestry,

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Composition of the ICPDR in 2008

1. PRESIDENCY		
Serbia	Saša DRAGIN	Minister, Ministry of Agriculture, Forestry and Water Management
		(Minister of Environment until July),
		Nemanjina 22-26 Str., 11000 Belgrade, Republic of Serbia

2. HEADS OF DELEGATIONS		
Germany	Fritz HOLZWARTH	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety Robert Schuman Platz 3, 53175 Bonn
Austria	Richard STADLER Fee	leral Ministry for Agriculture, Forestry, Environment and Water Management, Section VII Marxergasse 2, 1030 Vienna
Czech Republic	Jan HODOVSKY until January Veronika JAGLOVA from Apri	/ Ministry of the Environment Vrsovicka 65, 10010 Praha 10
Slovakia	Olga SRSNOVA	Ministry of Environment, Division of Water and Energetic Sources Namestie L. Stura 1, 81235 Bratislava
Hungary	Gyula HOLLÓ	Ministry of Transport and Water Management, Department River Basin Management Fö utca 44-50, POB 351, 1394 Budapest
Slovenia	Mitja BRICELJ	Ministry of Environment & Spatial Planning Dunajska cesta 48, 1000 Ljubljana
Croatia	Zeljko OSTOJIĆ	State Water Directorate Ulica grada Vukovara 220, 10 000 Zagreb
Bosnia and Herzegovina	Reuf HADZIBEGIC	Ministry of Foreign Trade and Economic Relations Musala 9, 71000 Sarajevo
Republic of Serbia	Aleksandar PRODANOVIC	Ministry of Agriculture, Forestry and Water Management, Directorate for Water 2a Bulevar Umetnosti, 11000 Belgrade
Bulgaria	Lubka KATCHAKOVA	Ministry of Environment and Water Bd. Maria Luisa 22, 1000 Sofia
Romania	Gheorghe CONSTANTIN	Ministry of Environment and Sustainable Development 12 Libertatii, Sect. 5, Bucharest
Moldova	Dumitru DRUMEA	Ministry of Ecology and Natural Resources 9 Cosmonautilor str., 2005 Chisinau
Ukraine	Stepan LYZUN	Ministry for Environmental Protection (MEP) 03035 Uritskogo str., Kiev
Montenegro	Velizar VOJINOVIC as of Octo	ber Ministry of Agriculture, Forestry and Water Management Rimski Trg 46, 81000 Podgorica
European Commission	Helmut BLÖCH	EC DG Environment, Unit Water and Marine Protection 1049 Brussels, Belgium

3. SECRETARIAT

Philip WELLER	Executive Secretary
Igor LISKA	Technical Expert – Water Management and Water Quality and Quantity
Mihaela POPOVICI	Technical Expert – Water Management and Pollution Control
Birgit VOGEL	Technical Expert – River Basin Management
Jasmine BACHMANN	Technical Expert – Public Participation and Public Relations
Alexander HÖBART	Technical Expert – Information Management and GIS Expert
Anna KOCH	Financial Management Officer
Sylvia KOCH	Office Manager
Paul CSAGOLY (from September until December)	Communication Support
Monika JETZIN (from August until December)	Public Participation Support
Doris GFRERER	Danube Box
Diana HEILMANN	Project Coordinator (Tisza)
Dan TEODOR (since September)	GIS Consultant
Alexander ZINKE (since June)	Project Manager for Navigation
Veselka PAVLOVA (until March)	Intern
Dragana SPASIC (until June)	Intern
Aleksander MILICEVIC (until April)	Intern
Mihaela MADAR (from April until September)	Intern
Conny Gehringer (since February)	Administrative Support Staff

4. CHAIRPERSONS OF THE EXPERT GROUPS AND EXPERT SUB-GROUPS

River Basin Management Expert Group (RBM EG)	Marieke VAN NOOD	European Commission, DG-Environment, Office: BU-9 03/125 1049 Brussels, Belgium
	Knut BEYER	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety Robert Schuman Platz 3, 53175 Bonn, Germany
Ad hoc Tisza Group	Marieke VAN NOOD	European Commission, DG-Environment, Office: BU-9 03/125 1049 Brussels, Belgium
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