

# ANNUAL REPORT

## on the Activities of the ICPDR in 2001



### Information

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## **Imprint**

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## Foreword



In 2001, the ICPDR made several important achievements that contributed to strengthening its role in harmonising transboundary water management in the Danube River Basin. Full responsibility for the implementation of the work programme was with the Expert Groups and the Secretariat, which once again proved their technical and managerial capacities in carrying out the given tasks. Among the tasks, the highest priority was given to the harmonisation of river basin management activities with the European Union guidelines. Consequently, the setting up of a strategy to co-ordinate the implementation of the EU Water Framework Directive was a major achievement in 2001.

Another important milestone concerns the acceptance of the 2001-2005 Joint Action Programme for the Danube River Basin (JAP) – a document outlining the general strategy for the implementation of the DRPC in the forthcoming five years. It defines the policies, strategies and integrated measures for attaining a high water quality status in the Danube River Basin.

Further, an Inventory of Potential Accident Risk Spots in the Danube River Basin was prepared in 2001. It is the first international review of potentially dangerous installations in the Danube region. The prioritisation of the risk-spots followed by an application of precautionary measures will help prevent accidental spills in the Danube River Basin.

In addition, 2001 was marked by the launch of the Joint Danube Survey (JDS, the Survey) in August that year, a scientific expedition aimed at improving the validity and comparability of water quality data received from the Trans-National Monitoring Network (TNMN). The Survey produced a homogeneous set of data on selected biological and chemical determinands measured along the entire course of the Danube River as a basis for a reliable description of the Danube water and sediment quality and a contribution towards identifying and confirming specific pollution sources in the Basin. The results of the Survey will serve as a sound basis for making adequate environmental decisions.

The new UNDP/GEF Danube Regional Project, which started in December 2001, will support the activities of the ICPDR in developing effective mechanisms for regional co-operation in order to ensure protection of international waters, sustainable management of natural resources and protection of biodiversity.

An important breakthrough in co-operation between the ICPDR and the Black Sea Commission (BSC) was made in 2001 when a joint Declaration on the Protection of Water and Water-Related Ecosystems in the Wider Black Sea Region was signed at the ministerial conference in Brussels on November 26, 2001. On this occasion the Danube-Black Sea (DABLAS) Task Force was created to reinforce co-operation among the countries and to link with International Financing Institutions and donors to support the implementation of investment projects. On the same occasion, the ICPDR and the BSC signed a Memorandum of Understanding to reinforce mutual co-operation in nutrient reduction and the protection of the Black Sea ecosystems. All these steps represent important milestones towards a cleaner environment in the Danube-Black Sea Region.

**Ambassador Stanko Nick  
President of the ICPDR**

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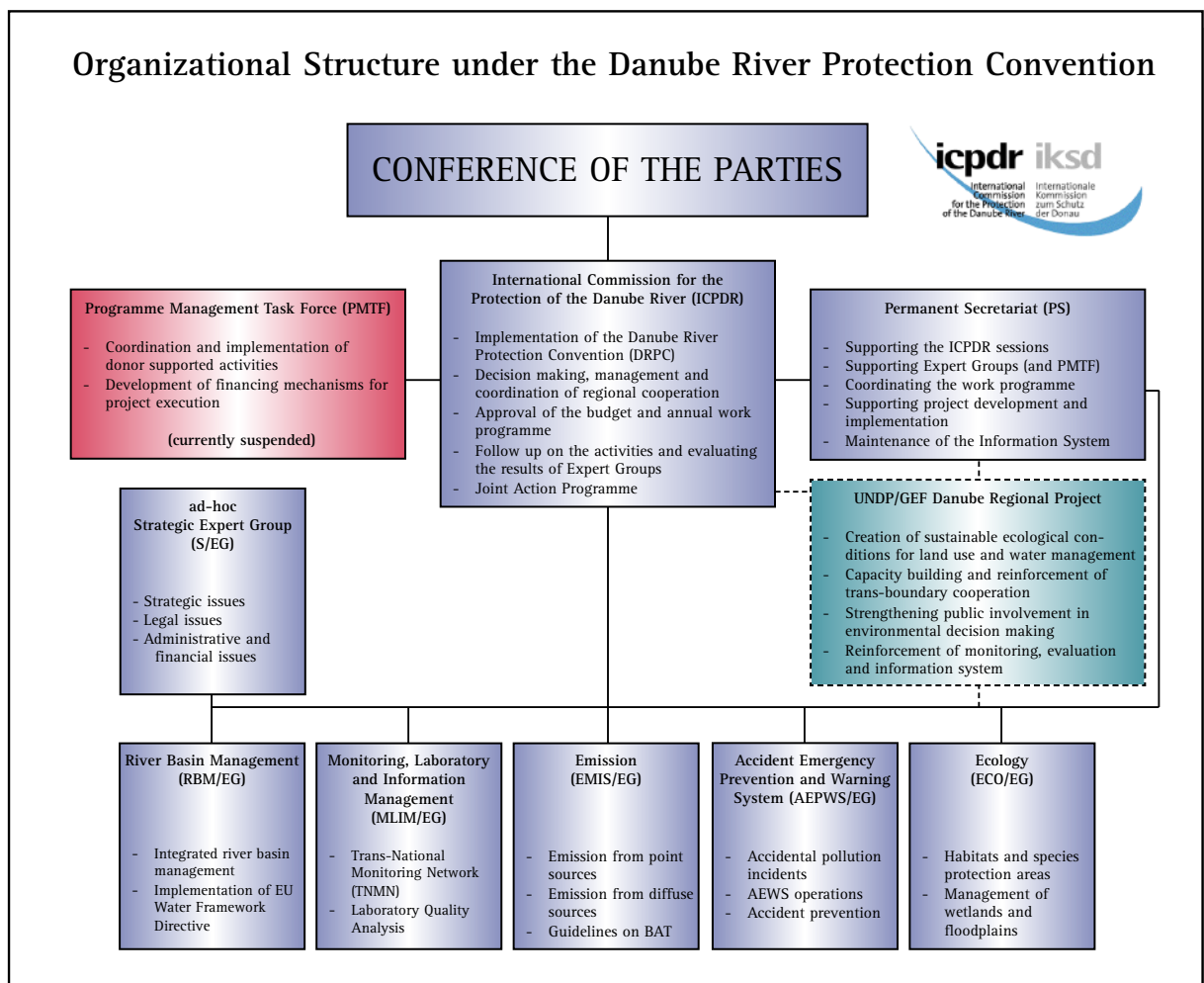
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# 1. Operational and Institutional Framework



2001 was the second year the ICPDR was in full operation including the activities of the Permanent Secretariat. The Seat Agreement between the ICPDR and the Republic of Austria was signed on 14 December 2000 and it entered into force after its ratification by the Austrian Parliament on 1 November 2001. The organisational structure under the DRPC in 2001 is shown below. The Joint Action Programme (JAP) was finalised in 2001.

The ICPDR in its 3rd Plenary Meeting welcomed the request of the Federal Republic of Yugoslavia (FRY) to accede to the Danube River Protection Convention with all the rights and duties of a Contracting Party. The FRY is currently a Participant with Consultative Status in the ICPDR and has applied for its full membership. Ukraine has not yet ratified the DRPC. The ICPDR has granted observership to the Internationale Arbeitsgemeinschaft der Wasserwerke im Donaueinzugsgebiet (IAWD).



# 1. Operational and Institutional Framework

In 2001, five Expert Groups dealt with technical issues and one ad-hoc Expert Group addressed administrative and financial matters arising from the implementation of the DRPC.

## Specifically:

- The River Basin Management Expert Group (RBM/EG) defined and prepared the steps and activities the ICPDR should take in the 2001-2004 period towards the implementation of the EC Water Framework Directive in the Danube River Basin;
- The Monitoring, Laboratory and Information Management Expert Group (MLIM/EG) was responsible for issues concerning water quality assessment and classification including the operation of the Trans-National Monitoring Network, AQC, laboratory analysis and monitoring data distribution. Special activities of this Expert Group related to the Joint Danube Survey and the Investigation of the Tisza River;
- The Emission Expert Group (EMIS/EG) focused its activities on the reduction of pollution resulting from emissions into the waters of the Danube and its tributaries. A priority issue was harmonisation with the EU water policies, e.g., compliance with the EU/WFD List of Priority Substances;
- The Accident and Emergency Prevention and Warning System Expert Group (AEPWS/EG) was involved in the operation of the Danube Accident Warning System with an emphasis on the communication of alarm/warning messages during accidents causing pollution in water bodies. An additional task of this EG was pollution prevention and precautionary control in the whole Danube River Basin;
- The ad-hoc Ecological Expert Group (ECO/EG) was established with the aim to support the

ICPDR activities related to the conservation, restoration and sustainable management of aquatic ecosystems and those terrestrial ecosystems and wetlands directly depending on them. This ad-hoc expert group should also contribute to the implementation of the ecological provisions of the EU Water Framework Directive. In its 4th Plenary Session the ICPDR decided that this Expert Group would be a permanent expert body till the end of 2004;

- The ad-hoc Strategic Expert Group (S/EG) is mandated to deal with ad-hoc administrative and financial matters of the ICPDR.

## Joint Action Programme - a Tool for Implementing the Danube River Basin Convention

The Joint Action Programme (JAP, January 2001 - December 2005), was developed to describe policies and strategies for pollution reduction and water management in response to the Danube River Basin Convention (Art. 8). JAP also includes an investment programme for the reduction of pollution loads mainly from point sources (municipal and industrial discharges).

Investments and expected results (JAP / Five-Year Nutrient Reduction Plan)	
<b>Investments</b>	
- Municipal waste water collection & treatment	3.709 billion USD
- Industrial waste water treatment	0.276 billion USD
- Agricultural projects and land use	0.113 billion USD
- Rehabilitation of wetlands	0.323 billion USD
<b>Nitrogen reduction</b>	
- from point sources	58,600 t/y
- from diffuse sources	60,000 t/y
- total emission reduction	22 %
<b>Phosphorus reduction</b>	
- from point sources	12,000 t/y
- from diffuse sources	4,000 t/y
- total emission reduction	33 %





In addition, it identifies projects planned for the restoration of wetlands and floodplains. Total investment required for priority measures in the five-year period (2001-2005) is projected at about EUR 4.404 billion.

243 committed investment projects have been identified in the frame of the ICPDR JAP (Five-Year Nutrient Reduction Action Plan), out of which 156 in the municipal sector and only 44 in the industrial sector. Most of these projects, which generally respond to hot spots or point sources of emission, represent national priorities but they also take into account the obligation to mitigate transboundary effects. Particular emphasis was also placed on the identification of sites for the restoration of wetlands, which play an important role not only as natural habitats but also as nutrient sinks.

### **The Role of the UNDP/GEF Danube Regional Project**

The overall objective of the UNDP/GEF Danube Regional Project (DRP) is to complement the activities of the ICPDR required to strengthen a regional approach for solving transboundary problems. This includes the development of national policies and legislation, the definition of priority actions for pollution control and nutrient reduction in particular, as well as the achievement of sustainable transboundary ecological conditions within the DRB and the Black Sea Basin area. The DRP will facilitate the implementation of the Danube River Protection Convention (DRPC) and will assist those DRB countries that are in the EU accession process in meeting the requirements of EU water-related directives with a special emphasis on the Water Framework Directive (WFD.)

The ICPDR JAP reflects the general strategy for the implementation of the DRPC in the forthcoming five years. Particular attention is paid to:

- Developing a River Basin Management Plan for the Danube River Basin to comply with the EU Water Framework Directive;
- Maintaining and improving emission inventories and implementing measures proposed for the reduction of pollution from point and non-point sources;
- Restoring wetlands and flood plains to improve flood control, increase nutrient absorption capacities and rehabilitate habitats and ecosystems;
- Improving the operation of the Transnational Monitoring Network (TNMN) to assess the ecological and chemical quality status of rivers, including the establishment of respective water quality standards;
- Developing an ICPDR Recommendation on the Reduction of Point Discharges from Agriculture;
- Establishing a Danube List of Priority Substances;
- Maintaining and improving the existing AEPWS;
- Reaching a self-binding voluntary agreement with which the detergent industry pledges to the ICPDR to put only phosphate-free detergents on the market;
- Developing a report on joint programmes aimed at minimising the impact of floods in the Danube River Basin and eliminating their causes;
- Developing a water balance for the whole Danube River Basin.

## 2. Financial Contributions and Budgetary Situation

The 2nd Plenary Session of the ICPDR held in Sinaia from 22 to 23 November 1999 approved the budget for the year 2001 providing an overall total of ATS 10,812,293.00 (EUR 785,759.95). This Budget already incorporates the working capital fund as its integral part, and the additional contributions of the two joining Contracting Parties (CPs), Bulgaria and Moldova, as part of the total contribution. These CPs were supposed to pay 5% of this overall total as an input to the budgetary reserve, i. e. working capital fund (see Financial Rules, Article 6.3).

### Regular Budget

The actual expenditures in 2001 still failed to match the projected figures but there was a substantial improvement against the year 2000. The necessary revision of the budget was carried out in December 2001 and approved by the President. The final regular expenditures per budget line are as follows:

Budgetlines	ATS	EUR
1. Staff	5,321,310.-	386,715.-
2. Services	1,632,671.-	118,651.-
3. Equipment	378,511.-	27,507.-
4. Other	1,093,731.-	79,484.-
5. Operational costs	1,346,370.-	97,845.-
Carried over balance	56,764.-	4,125.-
<b>Overall total</b>	<b>9,829,357.-</b>	<b>714,327.-</b>

### Special Funds

All financial contributions to the ICPDR supporting special activities beyond its normal tasks are considered as Special Funds. Thus, all funding of special activities and contributions to the establishment of the Secretariat are Special Funds, and are taken separately into account of the approved Regular Budget Contributions.

#### - Study on Bio-Indicators

The Austrian and German Governments decided to jointly finance a study on bio-indicators in the Danube River. The funds were transferred into the account of the Secretariat on 22 and 29 October 1999 respectively. After submitting the Final Report, VITUKI Plc was paid 80% of the contractual amount on 12 December 2000. After the Final Report was approved by the 4th Plenary Session, the 20% balance of ATS 90,355.20 (EUR 6,566.37) was also transferred to VITUKI Plc. The accounts are closed.

#### - Joint Danube Survey (JDS)

In order to improve the comparability of water quality data within the Danube River Basin, the MLIM/EG proposed a Danube longitudinal survey focused on chemical and biological determinands. The Austrian and German Governments decided to jointly finance these activities. Funds were transferred into the account of the Secretariat on 10 July and 28 November 2001 by Germany and on 16 August 2001 by Austria. While Germany has fully paid its part, the Austrian contribution still shows a negative balance of ATS 400,562.00 (EUR





29,109.98). The latter has been pre-paid from the account of the ICPDR and will be balanced out as soon as Austria pays its due.

#### - Joint Danube Survey – Investigation of the Tisza River

The ICPDR organised Joint Danube Survey – Investigation of the Tisza River (JDS ITR) as a technical follow-up on JDS. The JDS ITR was financed by the European Commission (EUR 95,000) and received in-kind contributions from the participating partners (EUR 56,500). The EU transferred its first part of EUR 57,000 (ATS 784,337.10) to the account of the ICPDR on 12 November 2001.

The three partners in the project are VITUKI Plc (Budapest, Hungary), with a total contractual amount of EUR 54,280, out of which EUR 32,568 (ATS 448,145.45) was paid on 26 November 2001. Further contracts were made with the Hessisches Landesamt für Umwelt und Geologie (HLUG, Wiesbaden, Germany) for EUR 21,720, and with the Federal Hydrometeorological Institute (FHMI, Belgrade, Yugoslavia) for EUR 14,000. For the last two contracts no payments were made in 2001.

#### - Analytical Quality Control (AQC)

In order to ensure reliability of water quality data produced within the TNMN there is a need to organise a regular Analytical Quality Control Programme for the TNMN hydroanalytical laboratories. Having the mandate from the 5th Steering Group meeting, the Secretariat launched a tender for the selection of the laboratory that would conduct the AQC programme for the

ICPDR in 2001. The contract was awarded to VITUKI Plc of Budapest, Hungary.

At the 6th Steering Group meeting some countries expressed their readiness to make financial contributions to support the continuation of the AQC scheme. The contributions for 2001 were offered by Hungary (EUR 11,000), Germany (EUR 7,800), Austria (EUR 2,200) and Slovakia (EUR 1,000).

The German and Austrian contributions were foreseen to be paid to VITUKI Plc through the Secretariat, while contributions from Hungary and Slovakia were transferred directly to VITUKI Plc to cover the total cost of EUR 22,000 for the annual AQC programme. The contract with Germany was made for a total amount of EUR 7,800 and the contract with Austria is being drafted.

# 3. Implementation of the Water Framework Directive in the Danube River Basin

## Commitment to Implementing the Water Framework Directive

On 22<sup>nd</sup> December 2000, the EU Water Framework Directive (WFD) came into force. The EU Member States are obliged to fulfil this Directive. In order to find out whether all Danube countries would join in the efforts to implement the WFD in the Danube River Basin, the president of the ICPDR wrote a letter to all Danube countries in September 2000 inquiring about their willingness to support the implementation of the WFD. In response, all countries co-operating under the DRPC expressed their firm political commitment to supporting the implementation of the WFD in their countries and pledged to co-operate in the framework of the ICPDR to achieve a single, basin-wide co-ordinated Danube River Basin Management Plan.

This commitment was confirmed at the 3rd Plenary Session of the ICPDR held in Sofia on 27<sup>th</sup>-28<sup>th</sup> November 2000, which ended with the following resolutions:

- The implementation of the EU Water Framework Directive is considered as the highest priority of the ICPDR.
- The ICPDR will provide a platform for the co-ordination necessary to develop and establish a River Basin Management Plan for the Danube River Basin.
- The Contracting Parties pledge to make all efforts necessary to create a co-ordinated international River Basin Management Plan for the Danube River Basin.

## Challenges of the Water Framework Directive

The Water Framework Directive brings major changes into water management practices. Most importantly:

- It sets uniform standards in water policy throughout the European Union and integrates different policy areas involving water issues;
- It requires cross-border co-operation in the development of integrated and co-ordinated river basin management plans;
- It includes public participation in the development of river basin management plans encouraging active involvement of interested parties including stakeholders, non-governmental organisations and citizens;
- It stipulates a defined timeframe for the achievement of the good status of surface water and groundwater;
- It requires a comprehensive ecological assessment and classification of a water body on the basis of the composition and abundance of aquatic fauna and flora taking into account the type-specific reference conditions of the water body;
- It introduces economic analysis of water use in order to estimate the most cost-effective combination of measures in respect to water uses.

## The Special Situation in the Danube River Basin

What makes the implementation process in the Danube River Basin a particular challenge is the fact that only a few countries are currently EU members and as such obliged to fulfil the WFD.



As indicated in the table below, most of the Danube countries are in the process of EU accession and are now preparing to fulfil the complete body of EU legislation in order to become members. Others have not expressed their intent to join the EU. The Danube River Basin is the second largest river basin of Europe, covering 817.000 km<sup>2</sup> and territories of 18 countries. The 13 countries that have national territories greater than 2.000 km<sup>2</sup> within the Danube River Basin are involved in the activities of the ICPDR.

Countries in the Danube River Basin:			
Germany (M)	Hungary (AC)	Yugoslavia	Ukraine
Austria (M)	Slovenia (AC)	Bulgaria (AC)	Others*
Czech Republic (AC)	Croatia	Romania (AC)	
Slovak Republic (AC)	Bosnia-Herzegovina	Moldova	

\*Areas less than 2.000 km<sup>2</sup>: Switzerland, Italy (M), Poland (AC), Albania and Macedonia  
M = EU Member; AC = Accession Country

The Danube River Basin shows a number of particularities in comparison with other European river basins not only in terms of its size and the large number of countries but also in terms of its diverse landscapes and the major socio-economic differences. Regional differences in climate and landscape lead to differences in precipitation and discharge in the streams, making some countries rich in freshwater and others suffering from poor water resources. There is a large gap in socio-economic development between the upstream and downstream countries. This is reflected, for instance, in the percentage of population connected to the public water supply and sewage systems and in the level of technical development in wastewater treatment. Last but not least, nutrient enrichment in the DRB contributes to the eutrophication of the Black Sea.

ment in the DRB contributes to the eutrophication of the Black Sea.

### Tasks of the River Basin Management Group

The River Basin Management Expert Group (RBM EG) was created to prepare and co-ordinate the necessary actions for the implementation of the WFD. The RBM EG developed a detailed work plan for phase 1 of the implementation process (2001-2004). The work plan identifies the necessary steps to be taken by the ICPDR in order to comply with the reporting deadlines of the WFD in 2003 (identification of the river basin district and the competent authorities) and in 2004 (analysis of pressures and impacts including an economic analysis). Furthermore, a link was established to the relevant parts of

the UNDP/GEF Danube Regional Project. Some of the operational tasks were assigned to the existing working groups of the ICPDR.

The RBM expert group carried out an inquiry into the existing cartographic systems and GIS in the Danube countries. It was agreed that the existing systems would be used as far as possible including the GIS-based European river basin information system of the Joint Research Centre (JRC) of the European Commission. A first workshop on Cartography and GIS was held in Budapest in May 2001 and was attended by experts from the Danube countries and the JRC. In October 2001, an expert subgroup for cartography and GIS was created.

## 4. Joint Danube Survey and Investigation of the Tisza River

The Joint Danube Survey (JDS) was proposed by the Monitoring, Laboratory and Information Management Expert Group (MLIM EG) as the best way to obtain comparable and reliable information on the occurrence of specific substances (organic and inorganic micropollutants) in different compartments of the aquatic ecosystem (water, sediments, suspended solids, biota) along the entire length of the Danube River. The idea was to use the Danube countries' sampling and laboratory expertise and resources that have the necessary level of analytical instrumentation and use the proven, acceptable AQC procedures. The survey plan also reflected the requirement of the EU WFD to produce a characterisation of the water status, especially with respect to the List of the Priority Substances.

**Specific objectives of the Joint Danube Survey were as follows:**

- To produce a homogenous data set for the Danube River, based on a single laboratory analysis of specified determinands;
- To identify and confirm specific pollution sources;
- To screen the different segments of the water body for pollutants as specified in the EU Water Framework Directive;
- To provide a forum for the participation of riparian countries in sampling and inter-comparison exercises;
- To identify specific training needs and improve in-country experience;
- To promote public awareness.

The Survey was carried out by an international team of ten experts from Germany, Austria, Slovakia, Hungary, Yugoslavia, Bulgaria and

Romania using two ships from Germany (Argus) and Hungary (Szechenyi). Following the briefing and preparatory meeting on 11–12 August 2001 in Regensburg, the cruise started on 13 August by sampling in Neu-Ulm, Germany, and made its way through Austria, Slovakia, Hungary, Croatia, Yugoslavia, Bulgaria, Romania, Moldova and Ukraine ending in the Danube Delta on 20 September 2001.

**The following JDS activities were accomplished in 2001:**

- Surface water, sediment, mussels and biological (macrozoobenthos, phytobenthos, macrophytes, phyto-plankton, zooplankton) samples were collected at 98 sampling sites along the Danube and its major tributaries. Core sediment samples were collected in Gabcikovo and Iron Gate reservoirs. Suspended solids samples were collected at 63 sections along the Danube. All samples were sent to 9 JDS Reference Laboratories for analyses of more than 80 determinands. The results are expected to be available in January 2002;
- Fifteen parameters were analysed on board;
- Press conferences were organised in Regensburg, Vienna, Bratislava, Budapest, Osijek, Belgrade, Ruse, Silistra, Ismail and Tulcea to disseminate information about JDS.





## JDS Findings - Biology

More than 1000 aquatic taxa were found during JDS:

- 268 macrozoobenthos taxa
- 340 phytobenthos taxa
- 49 macrophyte species
- 261 phytoplankton taxa
- 120 zooplankton taxa
  
- The saprobity of the Danube varied between water quality classes II (moderately polluted) and II/III (critically polluted). Many arms and tributaries were more polluted than the main stream and some of them even reached water quality class III (strongly polluted/the Sio River) or worse (the Iskar, the Olt and the Arges - any macro-invertebrates missing).
  
- The opening of the Main-Danube Canal in 1992 removed a natural biogeographical barrier and triggered mutual fauna transfer between the two rivers;
  
- A high correlation of phytoplankton-biomass and chlorophyll-a concentration was observed. High values in biomass/chlorophyll-a were found in the Hungarian stretch of the Danube downstream of Budapest;
  
- The peak in phytoplankton biomass was followed by maximum zooplankton density values in the middle section of the Danube. The decrease in phytoplankton was associated with an increase in zooplankton density probably due to the filtering effect of zooplankton;
- The highest microbiological pollution

values were found in the tributaries (the Rusenski Lom and the Arges in particular) and in the side arms (the Moson arm, the upper part of the Soroksar arm).

## JDS Findings - Chemistry

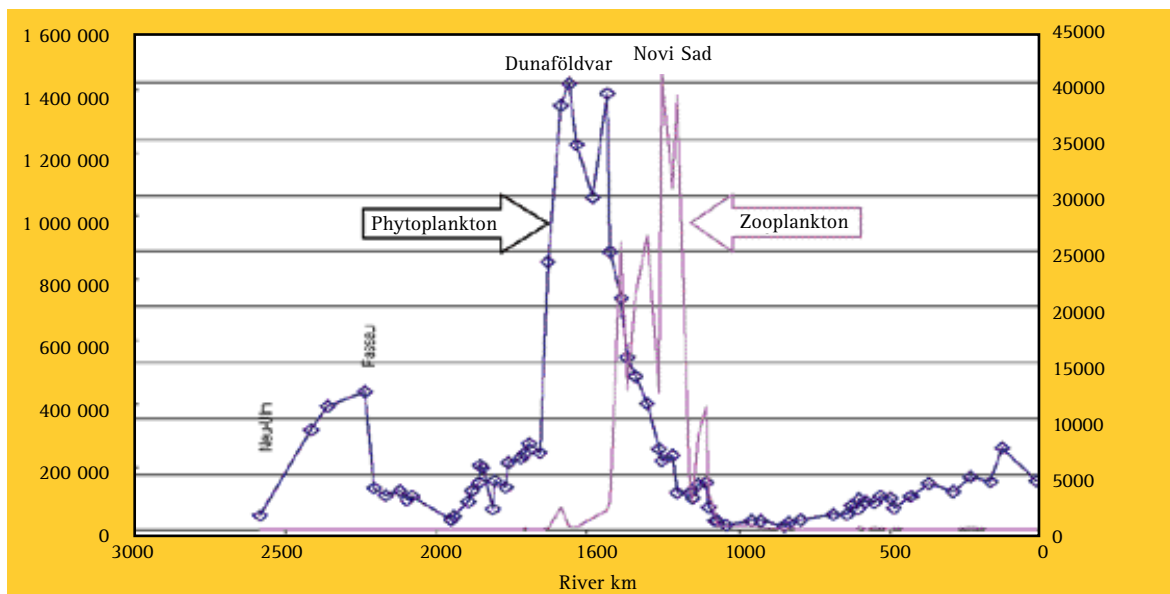
- Algal blooming increased both pH values and dissolved oxygen concentration in the Middle Danube reach;
  
- The highest heavy metal concentrations in water were found in the Rusenski Lom, the Iskar and the Timok tributaries;
  
- The analysis of sediments identified the Iskar (cadmium, lead and zinc) and the Timok (arsenic and copper) as specific contamination sources;
  
- The highest values of petroleum hydrocarbons in sediments and suspended solids were found in the Middle Danube reach;
  
- The maximum value for atrazine was found in the Sava River (0,78 µg/l). It affected the Danube River downstream of the Sava confluence;
  
- Significant concentrations of 4-iso-nonylphenol and di[2-ethyl-hexyl]phthalate (on EU WFD List of Priority Pollutants) were found in bottom sediments and suspended solids (from a few µg/kg up to more than 100 mg/kg). Most of the elevated concentrations of nonylphenol were found in the Yugoslavian section of the Danube.

## 4. Joint Danube Survey and Investigation of the Tisza River

The total cost of JDS was EUR 557,373. The German Federal Environmental Agency contributed EUR 458,263 towards this amount and the Federal Ministry of Agriculture, Forestry, Environment and Water Management of Austria provided EUR 99,110. The activities of JDS

National Teams, including the analytical work, were financed by the individual participating countries as their in-kind contribution.

The JDS Report is expected to be published in the summer of 2002.



Variation in phytoplankton biomass and zooplankton population density along the Danube River found during JDS





## The Tisza Survey

The ICPDR organised the Joint Danube Survey – Investigation of the Tisza River (JDS ITR) as a technical follow-up on JDS. The objective of this survey was to assess the water quality of the Tisza by hydro-biological and hydro-chemical measurements and to promote public awareness. JDS ITR was financed by the European Commission (EUR 95,000) and by in-kind contributions of the participating partners (EUR 56,500). Besides the ICPDR, other partners in the project were VITUKI (Budapest, Hungary), Hessisches Landesamt für Umwelt und Geologie (HLUG, Wiesbaden, Germany), and Federal Hydrometeorological Institute (FHMI, Belgrade, Yugoslavia).

The technical programme of JDS ITR started in Titel (confluence of the Danube and the Tisza rivers) on 29 September and ended up on 9

October in Tokaj. Sampling and on-board analyses were carried out on the Argus ship by experts from Hungary, Germany, Romania, Slovakia and Yugoslavia.

During the survey, samples of surface water, sediments, suspended solids, mussels and biology (macrozoobenthos, phytoplankton, zooplankton) were taken from 27 sampling sites covering the 744-km stretch of the Tisza River. Water samples were analysed on board for eleven parameters: pH, temperature, conductivity, dissolved oxygen, nitrites, nitrates, ammonium, ortho-phosphates, alkalinity, suspended solids, chlorophyll-a. Biomarkers (growth, parasitization, sex ratio) were also determined on board in fish collected by electrofishing at five sampling sites. Samples of fish tissues were prepared and sent for analyses. The Final Report of the Tisza Survey will be completed in the spring of 2002.

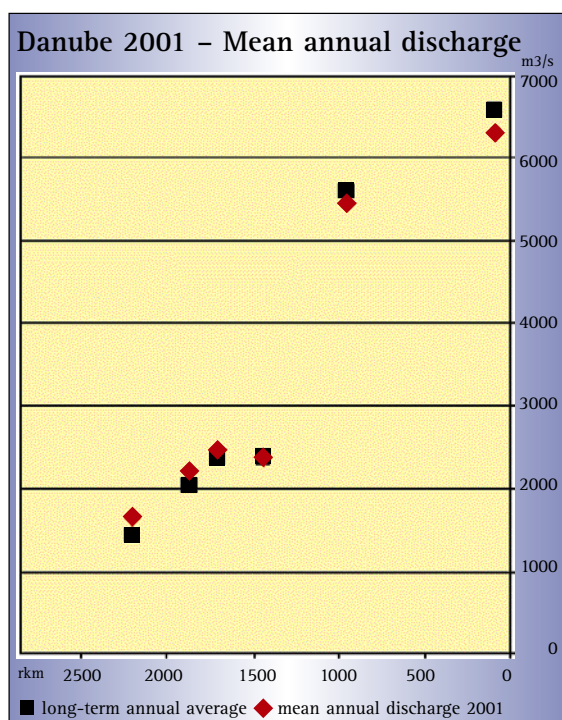
## 5. Water Quality and Hydrological Situation in the Danube River Basin.

The long-term daily mean flow of the Danube River is about  $6500 \text{ m}^3\text{s}^{-1}$ , which represents an average annual discharge of  $207 \text{ km}^3$ . The discharge in 2001 was  $199 \text{ km}^3$  (96% of the average annual discharge)

### Hydrological Situation

The hydrological situation in 2001 can be characterised by big seasonal and spatial variations in precipitation and the respective discharge in the whole basin. Total precipitation values in 2001 and relative precipitation values in the same year (compared to the long-term annual average) in selected countries are shown in the following table:

Country	Total annual precipitation in 2001 (mm)	Relative annual precipitation in 2001 (%)
Germany	1230	105
Austria	967	95
Czech Republic	803	112
Slovakia	845	111
Hungary	562	98
Bulgaria	485	90
Romania	409	63
Moldova	587	107



In Germany, high precipitation occurred in March, June, August and September. The monthly precipitation in March was twice the average

long-term value, which resulted in the highest daily discharges in 2001. On the other hand, July was the driest month in the German part of the Danube Basin with half of the average precipitation values. In Austria, comparatively high precipitation was measured in northern and western parts of the country. This explains the higher discharge of the Danube River in comparison with the long time series. In the lower Danube, the differences in precipitation were also significant. While in western and northern Romania the discharges were slightly over the average long-term mean, in southern Romania and northern Bulgaria they dropped to 20 - 60% of the long-term average. This irregular hydrological pattern led to frequent flash floods in a large part of Romania almost throughout the year. Rapid snowmelt in combination with heavy rainfall in the upper Tisza region in March caused a disastrous flood in the Hungarian territory.

### Pollution Caused by Accidents

No major pollution events with a substantial impact on water quality were recorded in 2001. Similarly, the flood in the Tisza River Basin had no detrimental effect on the water quality. A pollution event reported in Germany was caused by



the infiltration of hexachlorobutadiene (HCBD) into the Inn River (right tributary of the Danube). The compound accumulated in the local fish population, which affected the fishing industry in that region. Rehabilitation activities were immediately launched. Apart from this, minor accidents were observed in the Czech Republic and Slovakia but these had no measurable impact on the Danube water quality. Accidents that triggered the Danube Accident and Emergency Warning System are reported in Chapter 7.

### Improvements in Wastewater Treatment

In Germany, improvements aimed at nitrogen reduction were performed at several wastewater treatment plants (WWTP). Only five out of all plants serving more than 100,000 inhabitants have yet to comply with EU directives on nitrogen treatment. A pilot project was carried out at the Isar River (right tributary of the Danube) aimed at reaching bathing water quality. To achieve this, the local WWTP was equipped with UV disinfection. Simultaneously, structural changes of the banks and the riverbed were performed including the building of fish traps. In Austria, the percentage of the population connected to the central WWTP fulfilling national regulations further increased to reach 85 %. Despite the fact that this figure was for a long time considered to be at the margin of economic feasibility, new developments in the construction of wastewater collection facilities have led to solutions which allow the cost to be lowered and to further increase the number of population to be connected. At the end of the year 2000 more than 1,400 biological purification plants were in operation in Austria, out of which approximately 80 % with more than 2,000 PE perform tertiary treatment. The upgrading of the city of Linz

WWTP (Upper Austria, 950.000 PE) was finalised in 2001. This achievement resulted in a further reduction of nutrient discharges into the Danube due to P- and N-reduction at this plant.

In the Czech part of the Danube River Basin, the new municipal WWTP in Prostějov was put into operation. Reconstruction activities continued at the WWTPs in Prerov, Hodonin, Třebíč, Uherské Hradiště, Brno and Kroměříž. In Hungary, the upgrading of WWTPs is also a high priority. The National Sewerage and Wastewater Treatment Programme for the municipalities enjoys a significant governmental support. 110 municipal projects aimed at developing sewerage systems and wastewater treatment facilities were supported in 2001. In Romania, the main contribution to pollution reduction was in the industrial and agricultural sectors. The chemical and mining industries significantly reduced their activities and so did the farming industry. In agriculture, the use of fertilisers has decreased by more than 60 % since 1989. However, it was not only the decline in production that led to reduced pollution in Romania. Altogether 1,445 WWTPs operate in this country out of which about 42 % report satisfactory performance. The construction of another 12 WWTPs is under way.

### Water Quality Trends

No significant changes in the Danube River water quality in comparison with the previous year were observed along the whole river stretch. Considering the results from the national classification schemes, partial improvements were observed in the tributaries in the Czech Republic (Dyje/Thaya) and in Romania.

## 6. Work Towards Harmonised Emission Policies in the Danube Basin

Harmonised Emission Policies are central to effective implementation of the DRPC. This includes establishing basin-wide harmonised emission inventories and tracking systems, credible methods for determining the Best Available Techniques and the Best Available Practice to prevent or reduce the emissions, as well as a transparent reporting and updating system.

National and sector emission policies will also be needed in the near future to lower the values for industrial and municipal discharges and to encourage cost-effective measures for limiting emissions over time. Political commitment and co-operation in the Danube Basin, as well as institutional, technical and behavioural innovations are essential ingredients and so is the role that the ICPDR can play to enhance the Danube countries' capacity to respond effectively to emission control.

Major activities carried out in 2001 under the guidance of the EMIS Expert Group include the drafting of Emission Inventory 2000, the translation of ICPDR Recommendations into national languages, negotiations with the detergent industry over the use of phosphate-free detergents and a workshop looking at policy options for the handling of shipping wastes.

### Emission Inventory 2000

The Emission Inventory 1996 is mainly based on data from the year 1996. The data were widely used in different research projects including, for example, the UNDP/GEF Pollution Reduction Programme. Since the development of an updated version of the Emission Inventory was vie-

wed as urgent, the EMIS/EG prepared an inventory of municipal and industrial point sources in the Danube catchment area with the reference year 2000. Some improvements in data collection and reporting were integrated in the new inventory such as, for example, the indication of geographical co-ordinates of discharge locations to enable future presentation of the data in GIS.

### Translation of ICPDR Recommendations into National Languages

A critical challenge for the Danube countries lies in reducing consumption of energy and raw materials as well as the output of waste and pollution. To respond to this requirement the ICPDR adopted Recommendations/Guidelines (including related Reporting Formats) on the Best Available Techniques in the chemical, food and pulp and paper industries, on the treatment of municipal waste water, and on the monitoring of waste water discharges.

These Recommendations/Guidelines have been translated with the support from the European Commission into all administrative languages in the Danube River Basin.

Local authorities and other stakeholders (e.g. industrial associations) will benefit from having access to the ICPDR Recommendations in their own languages. Bulgaria, for example, has already distributed 1,000 copies of the translated versions to local institutions and other concerned parties.





### Negotiations with the Detergent Industry on a Voluntary Agreement Concerning the Use of Phosphate-free Detergents

The ICPDR JAP attaches special importance to reducing the discharge of phosphorus into the water bodies. Besides the reduction of 5200 t P/year by treatment of wastewater measures in municipal and industrial sites, the use of phosphate-free detergents shall be encouraged.

The environmental problems associated with phosphates in water are mainly related to the eutrophication with subsequent algae bloom. The introduction of synthetic detergents was seen as a major contributor to the eutrophication. Municipal waste water is the main source of P-load into the surface water (5 - 41% of P originates from detergents). The first seminar on phosphate-free detergents organised by EMIS/ EG and held in Zagreb on 3 October 2001 brought together national experts and major European detergent companies.

#### *Water quality in the Danube River Basin Concentrations of ortho-phosphate-phosphorus (TNMN 1998)*

0.003 - 0.640 mg/ l (Danube)  
0.027 - 0.342 mg/ l (annual mean -Danube)  
0.002 - 1.120 mg/ l (Tributaries)  
0.016 - 0.636 mg/ l (annual mean -Tributaries)

In order to obtain the necessary statistical data, the detergent companies were invited to deliver for every country and detergent sector (laundry, dishwashing, industrial) information on the total phosphorus sold in 2000. These data should be

available by spring 2002. Since in Germany and Austria only phosphate-free detergents are available on the market (and should be in the Czech Republic by 2005), the ICPDR believes there are good chances that a voluntary agreement with the detergent industry will be reached.

### Pollution from Inland Navigation

A workshop on "Shipping Wastes in the Danube River" was held at Harbour Enns, Austria, with a view to clarifying the policy options and reaching a harmonised procedure for handling shipping wastes. The workshop was attended by representatives of the Danube Commission, the ICPDR and the Austrian Ministry of Transport. Among the participants were also experts from the Danube countries and from Denmark and the Netherlands.

Various alternatives were presented and discussed on how to collect bilge water and wastes, with particular attention to the options to have the incurred costs covered by ship owners or harbour companies. In future, the "polluter pays" principle should be applied, as intended, for example, at the Rhine, by levying an additional charge on the fuel bought by ship owners.

The Austrian Ministry of Transport, in co-operation with Germany, Slovakia and Hungary, will take the lead in establishing a more effective and harmonised system of reception and treatment of shipping wastes. At the same time, further research actions and their funding by the EU and individual countries should be initiated.

## 7. Operation of the Danube Accident and Emergency Warning System

In 2001, the Accident and Emergency Warning System (AEWS) covered almost the entire Danube Basin, except for the territories of Bosnia-Herzegovina and Yugoslavia. During that year, the AEWS transmitted information on five accidents out of which four were caused by

oil spills. In all those accidents, the impact areas were local - no transboundary effects were observed. Brief information on pollution caused by accidents in the Danube River Basin in 2001 is given below.

Site of Accident / Date	Affected River	Primary Pollutant	International Satellite Messages	Transboundary Impact
Hungary (and Slovakia) 30.01.2001	Ipoly in Slovakia	Oil	PIAC 05kPIAC 04 "Info" PIAC 04kPIAC 05 "End of Alert"	SK: No H: No
Hungary (and Slovakia) 01.03.2001	Danube (km 1768) (common river stretch)	Oil	PIAC 05kPIAC 04 "Info" PIAC 04kPIAC 05 "End of Alert"	SK: No H: No
Slovenia/Croatia 10.05.2001	Kolpa/Kulpa (border river)	Textile dyestuff	PIAC 07kPIAC 06 "Info" PIAC 06kPIAC 07 "Confirmation" PIAC 06kPIAC 07 "End of Alert"	SLO: No
Austria 10.08.2001	Dyje river near Drosendorf	Oil	PIAC 02kPIAC 03 "Warning" PIAC 02 Æ PIAC 03 "End of Alert"	CZ: No
Slovakia (and Hungary) 23.09.2001	Danube (km. 1734)	Oil	PIAC 05kPIAC 04 "Info" PIAC 04kPIAC 05 "End of Alert"	SK: No

### Development of the Accident and Emergency Warning System in 2001

In order to economise the operation of the warning system a new concept has been adopted introducing a simultaneous use of satellite communication and the Internet. According to this concept, the first "flash warning message" should be propagated via the satellite system to ensure fast and reliable dissemination of the warning, while the more descriptive information

on an accident should be distributed through the Internet. The proposal of the project for an AEWS upgrade to involve Internet communication was prepared and submitted to potential donors. During 2001, emphasis was placed on designing an emission-oriented approach for the detection of water pollution accidents. This included an assessment of alert thresholds for the launching of a warning message. The whole concept is expected to be finalised and approved in 2002.



## 8. Basin-Wide Inventory of Potential Accident Risk Spots



In response to the spill accidents in Baia Mare and Baia Borsa in January and March 2000, the ICPDR Steering Group in September 2000 encouraged all Danube countries to create national ARS inventories in order to arrive at a common inventory for the whole Danube River Basin. The Accident and Emergency Prevention and Warning System Expert Group (AEPWS EG) was given the responsibility for conceptualising and preparing the national inventories. This expert group also created a special ad-hoc ARS Expert Panel charged with compiling the results and preparing an analytical summary of the inventory.

Because systems for classifying accident risks vary between the Danube countries, a common procedure had to be found for arriving at a single classification. Therefore, the EU Seveso II Directive, the UN/ECE Agreement on the Transboundary Effects of Industrial Accidents (Industrial Accidents Convention) as well as the methodology applied in a similar inventory prepared by the International Commission for the Protection of the Elbe River (ICPE) were considered.

The approach adopted by the ICPE was found to be the most suitable tool for the analysis of industrial activities and sites with a high risk of pollution caused by accidents. This approach takes into account the potential of water-endangering installations expressed in terms of Water Risk Classes (Wassergefährdungsklassen, WGK in German) and the quantity of hazardous substances used in the process or stored. The concept of Water Risk Classes is based on an integrated assessment of a substance in terms of its toxicity, its persistence in the environment, its degradability (physical, chemical and biological) and its accumulation ability (in biota and on

solid particles). Water Risk Classes (WRC) have already been used in Germany for more than 20 years as a means of assessing substance-specific water hazards, particularly in determining the water-endangering potential posed by hazardous installations. At present, about 6,000 substances and mixtures of substances have been classified by WRC. Since the use of Water Risk Classes also takes into account the basic criteria used in the EU Seveso II Directive and in the UN/ECE Industrial Accidents Convention, it was assured that all industrial installations would also be included in the basin-wide inventory.

For a final assessment of potential risk, the Water Risk Index was used taking into account the Water Risk Classes and the respective masses of hazardous substances handled and stored in a particular installation.

The ARS Inventory reflects the status as of 30 June 2001. Altogether 611 potential accident risk spots in nine countries were reported. About six million tonnes of dangerous substances equivalent to the highest WRC 3 risk are handled and stored in those installations. It is now the task of the ICPDR member states to control and monitor carefully the locations with a high-risk potential identified in the inventory.

The actual risks arising from the hazardous sites depend on the safety measures applied in each installation. In order to estimate the real safety level that has been attained, special checklists have been developed, which are based on the recommendations of the International Commission for the Protection of the Rhine River and of the ICPE. These checklists are to be used for the investigation of safety measures in each potential accident risk spot.

## 8. Basin-Wide Inventory of Potential Accident Risk Spots

Country	Reported ARS	Evaluated ARS	Total quantity in kg (WRC 3 – Equivalents)	Total WRI
Bulgaria	29	28	370,000,000	8.6
Germany	56	56	2,293,874,000	9.4
Croatia	30	26	135,734,760	8.1
Moldova	27	14	3,634,610	6.6
Romania	67	59	2,076,893,274	9.3
Slovak Republic	148	145	250,877,521	8.4
Slovenia	2	2	980,000	6.0
Czech Republic	9	8	144,617,790	8.2
Hungary	243	242	706,603,002	8.8
<b>Total</b>	<b>611</b>	<b>580</b>	<b>5,982,720,034</b>	<b>9.8</b>

The Baia Mare and Baia Borsa accidents severely affected the environment and had adverse impacts on social and economic conditions of the region. According to the results of the ARS Inventory, the tailing ponds of mines and the waste dumps were found to have the highest hazard potential. These sites are covered only partially by the international regulations. Therefore, the AEPWS EG proposed that the EU and the UN/ECE should be requested to provide

appropriate regulations and to set safety standards for those high-risk sites. The inventory of potential accident risk spots in the Danube River Basin is the first complete, albeit not yet perfect review of potentially dangerous installations and sites in the Danube region. It is essential to further work on the refinement and standardisation of the survey method and to update the ARS Inventory at regular intervals.

## 9. Preparation of an Inventory of Protected Areas



### Requirement of the Water Framework Directive

The EU Water Framework Directive requires the establishment of an inventory of "all areas lying within each river basin district which have been designated as requiring special protection ... of their sur-face water and groundwater or for the conservation of habitats and species directly depending on water" (Art. 6 WFD).

### Task of the Ecology Expert Group

The Ecology Expert Group (ECO EG) is entrusted with making an inventory of protected areas that are part of the riverine ecosystem in the Danube River Basin according to the provisions of the WFD Art. 6 and Annex IV, 1. (v), designated

- under EC regulations (Natura 2000 for EU Member States) or
- under national regulations (for non-EU Member States)

for the protection of habitats and species where

the maintenance or improvement of the status of water is an important factor in their protection.

### Approach to the Development of the Inventory

The inventory will be elaborated on the basis of materials and information from the Danube countries. Sites of international relevance (Ramsar sites, National Parks, IBAs, World Heritage Sites e.g.) will be given priority in the inventory since they have digital data sets available in a more advanced state. The IUCN-WCMC List of Protected Areas 1993, as well as the world-wide wetland inventory (managed by Wetlands International) can form an important basis for accomplishing the task. A number of protected areas have also been identified in the frame of the study "Evaluation of Wetlands and Floodplain Areas in the Danube River Basin" carried out in May 1999 by WWF Auen-Institut (Germany) as part of the UNDP/GEF-funded Danube Pollution Reduction Programme.

## 10. Development of the ICPDR Information System

### Preparation of Database for Joint Danube Survey

Data collection sheet in MS Excel and a manual for data entry were prepared to assure that data collected during the Joint Danube Survey are properly entered in the system. The JDS Database was also set up within the ICPDR Information System to present the data from on-board analysis. Additionally, data collection sheets for the laboratories were developed and a new format for collecting data from gas chromatographic mass spectrometric analyses was designed. Public web pages for JDS and JDS Investigation of the Tisza River were prepared containing general information, calendar of events (press conferences, sampling, etc.), contacts, maps, and further documents (list of stations, determinands, reference laboratories, etc.).

### Geographical Information System (GIS)

The ICPDR is currently examining the different modalities for establishing a GIS with particular attention to identifying the appropriate cartographic systems (such as co-ordinates, scales, etc.). For now, the ICPDR Information System can be used to support this discussion (through the availability of relevant documents and a discussion forum, etc.).

### Emissions Inventory

Emissions Inventory 1997 was finalised and a public version (with a click-on map of the Danube sub-basins) was made available on the ICPDR website. The publishing of the Emissions Inventory 2000 was also launched. Data collection worksheets for each country were prepared using MS-Excel. Validation checks were introduced to facilitate data input and reduce errors during input.

### TNMN Database

Data for the year 1998 were received from the TNMN Data Centre (Slovakia) and imported into the TNMN Database of the ICPDR Information System. As data were received in a different file format and not free of anomalies, new import procedures were developed in order to import data from different sources.

### Integration of Library System

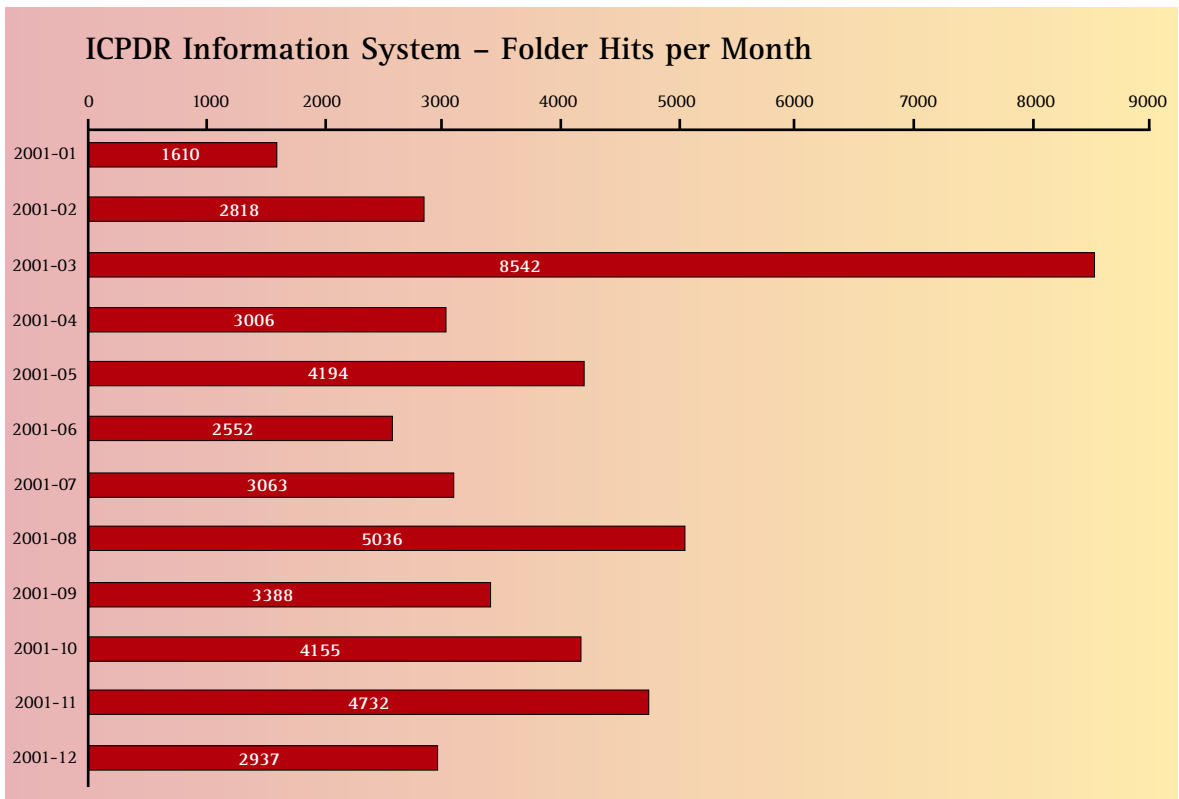
The technical integration of the Library System into the ICPDR Information System has recently been successfully tested. The user interface of the Library System needs to be further adapted to the ICPDR Information System. Once this has been done, it will make both systems work seamlessly in the near future.

### User Support

A training course for a selected group of users was held and a User's Manual was prepared. This manual, which contains step-by-step information on the most frequently needed procedures, was placed on the Information System. From there any new user can easily learn the way to perform the basic tasks in the Information System.

### Preparation of Software Upgrade

Both the website management software (Oracle WebDB, now called Oracle Portal) and the database management software (Oracle8 Database Server) were upgraded in 2001. Due to the complexity of this process, a test system of the ICPDR Information System was set up, where the upgrade could be tested before its final launch. The test system also allowed the new features of the software to be tried out.



Monthly number of folder hits during the period of January to December 2001

# 11. International and Regional Co-Operation

## 11.1 Co-Operation between the ICPDR and the IHP Danube Working Group on Project 5.3 "Update of Water Balance"

Links of co-operation have been established with the Danube IHP Working Group for the development of a water balance for the Danube River Basin. In this context, IHP National Committees in the Danube countries have offered their co-operation with particular attention to flood-related issues. The project proposal includes a description of the methodology, a time plan (two years) and budget estimation. The UNESCO Venice Office is requested to raise the necessary funds for project implementation, estimated at USD 120,000. The main objectives of the project include the following:

- Elaboration of a spatially distributed water balance for the whole Danube Basin to provide the basis for transboundary water management;
- Development of a standardised database in digital format to facilitate water management decisions at the national and the basin-wide scale;
- Creation of conditions for further harmonisation and unification of methodologies and the use of a more sophisticated approach at the domestic and/or sub-regional level;
- Assembling of baseline information for further impact analysis of ongoing global climate change.

All participating countries shall provide hydro-meteorological data for the development of a water balance for the agreed period (1951-1990) to the national experts of the IHP Water Balance Working Group and support their work technically and financially.

## 11.2 Creation of the Danube – Black Sea Task Force (DABLAS)

The joint Declaration on the Protection of Water and Water-Related Ecosystems in the Wider Black Sea Region was signed in Brussels on 26 November. To implement the Declaration, the DABLAS Task Force was created to reinforce co-operation between countries of the Danube-Black Sea Region and to bring them together with donors and international financial institutions. The aim of the DABLAS Task Force is to facilitate financial arrangements for the implementation of investment projects for pollution reduction and rehabilitation of ecosystems. DABLAS will have a Secretariat supported by the European Commission.

The ICPDR shall, in co-operation with the Black Sea Secretariat provide assistance in developing an operational framework for the identification, preparation and prioritisation of projects. The work shall be carried out based on existing information, in particular through the improving and updating of the existing ICPDR project database.

## 11.3 Signing the Memorandum of Understanding and Strengthening Co-Operation with the Black Sea Commission

On the occasion of the Ministerial Meeting in Brussels on 26 November 2001, a Memorandum of Understanding (MoU) was signed by the Presidents of the ICPDR and the BSC. In this context, the revitalisation of the Danube – Black Sea Joint Technical Working Group is to assure the implementation of all technical measures of the MoU with particular attention to the assessment





of nutrient inputs into the Black Sea, the assessment of the ecological status of the Black Sea, the development of a monitoring system and reporting formats, the analysis of national status reports and the identification of measures for limiting nutrient loads to the Black Sea. The two regional UNDP/GEF Projects (Danube and Black Sea) shall provide the necessary support for the work of the Danube – Black Sea Joint Technical Working Group.

#### 11.4 GEF Project Implementation

The 1st phase of the UNDP/GEF Project started on 1 December 2001. The project management is located near the offices of the ICPDR Secretariat to facilitate close co-operation. The recently assigned Project Manager is Ivan Zavadsky.

The total amount of the project budget is USD 5 million. The 2nd phase beginning end 2003 will have a budget of USD 10 million. All objectives, activities and modalities of implementation are contained in the Project Document that was sent for endorsement to all HoDs. A Project Inception Workshop shall be held in early 2002 to define the work programme and the implementation modalities. Experts from all ICPDR Expert Groups and from the NGO community will be invited in order to ensure broad participation in the early stage of project implementation.

#### 11.5 Status of Project Implementation in REReP (Stability Pact)

The donors' commitment and the joint efforts to create a regional approach to improve envi-

ronmental conditions in south-eastern Europe have resulted in the implementation of 92 current projects by the disbursement of more than EUR 100 million.

#### REReP Mechanism Supporting Stabilisation and Accession Process

The revised REReP mechanism presented by the European Commission is introducing new objectives with focus to

stabilisation and accession process (SAP) as well as redefining the structure of REReP. The new priority area of the programme "Reducing Environmental Health

Threats and Loss of Biodiversity" comprises projects previously listed under "Emergency assistance for combating war damage" and "Local and National Environmental Priorities".

#### REReP Projects Database

A decision was made that the "Quick Start" priority projects and the associated/bilateral projects should be reorganised in two lists: (i) projects underway or for which there is a firm donor commitment, and (ii) projects awaiting donor interest. The first list of projects contains projects from the "REReP Quick Start Projects" portfolio. Two of them not under the ICPDR label are also considered to contribute to pollution reduction in the Danube River Basin: "Transboundary Management of Two National Parks in the Iron Gate Area" and "Pilot Projects on Rapid Risk Assessment in Environment and Health in

*"Today, in South Eastern Europe we are also in the situation where a concrete political process is taking shape. The Stabilisation and Association Process – the European Union's contribution to the Stability Pact- is well underway". (Opening of the 4th REReP TF meeting by Margot Wallstrom, European Commissioner for the Environment).*

# 11. International and Regional Co-Operation

The ICPDR projects files in the EU database:

1. *Equipment for MLIM & AEWS under the Danube Convention*
2. *Joint Bulgarian-Romanian monitoring of the water and the sediments of the Danube River, paying special attention to the priority pollutants*
3. *Water Quality Monitoring (the radioactivity included) of the Danube River and the pollutants transport models for the transboundary zones in the southeastern European Countries*
4. *Improvement of the ICPDR Accident and Emergency Warning System and development of preventive measures for mining and industrial sites*
5. *Establishment and implementation program for the protection of the Sava sub-basin of the Danube River*
6. *Development of Water Resources Management in the Middle and Lower Danube River Basin via the implementation of the EU WFD*
7. *Remediation of high acidity and pollution by lead and arsenic from the mine activities on the agricultural land and of the Tchiprovtzi village, Tchiprovtzi municipality north-western Bulgaria*
8. *Remediation of high acidity and agricultural lands polluted by lead and arsenic on the land of the Bely Mel village, Tchiprovtzy municipality, north-western Bulgaria*

Secondary Rivers of the Lower Danube Basin". The second list contains project proposals from the ICPDR JAP clustered as "Support to Environmental Regional Co-Operation Mechanisms and Cross-Border Projects" and "Reducing Environmental Health Threats and Loss of Biodiversity".

The TF Secretariat has initiated preparation of a web-based database of information on REReP projects, structured in unified format and containing general project information, objectives and activities performed to date.

## Results of Regional Co-Operation

The major results of the early REReP project implementation are in the priority areas "Institutional Building" and "Support to environmental civil society" which lay the ground for follow up activities within the SAP. Networks of high officials and experts were successfully established in the area of environmental enforcement and compliance, biodiversity conservation, environmental financing, implementation of environmental multilateral agreements and national environmental information systems. The projects aimed at supporting civil society building have promoted networking and co-operation among NGOs in the region by providing financial grants for projects and for the establishment of electronic networks on regional level.

During the implementation of "Quick Start" priority projects, the beneficiary countries expressed their willingness to continue the regional co-operation and networking in the follow-up REReP project activities, which will be closely linked to the implementation of the obligations under the SAP.

### Example of co-operation achieved in south-eastern Europe:

*Ministers of Bosnia-Herzegovina, Croatia, Slovenia and Yugoslavia signed a Letter of Intent on the Sava River. The Letter of Intent, endorsed in Sarajevo, on 29th November 2001 on the margins of the Stability Pact Working Table II (Economic Reconstruction) meeting, establishes a Working Group, which will have the task to prepare an International Treaty on the Sava River. The Treaty will address issues such as institutional framework, navigation, fisheries, environment, hydropower, irrigation and tourism. It will also deal with matters related to the the Drina and the Una, tributaries of the Sava.*

## Annex 1: Composition of the ICPDR in 2001



**PRESIDENT:** *Stanko NICK*  
*Croatian Ambassador to Hungary*

**HEADS OF THE DELEGATIONS:**

**Germany:** *Fritz HOLZWARTH*, Deputy  
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**Czech Republic:** *Jaroslav KINKOR*, Director of  
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**Slovakia:** *Ivan ZÁVADSKÝ*, General Director,  
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31.11.2001)

*Milan MATUŠKA*, General Director, Ministry  
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81235 Bratislava, Slovakia (from 31.11.2001)

**Hungary:** *Gyula HOLLÓ*, Department of  
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**Slovenia:** *Mitja BRICELJ*, Director of Nature  
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ment and Physical Planning, Dunajska cesta  
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**Croatia:** *Zeljko OSTOJIĆ*, Senior Adviser on  
Water Protection, State Water Directorate,  
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Zagreb, Croatia

**Romania:** *Florin STADIU*, Secretary of State,  
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**Bulgaria:** *Manoela GEORGIEVA*, Deputy  
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**Moldova:** *Gheorge DUCA*, Minister, Ministry  
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**Bosnia-Herzegovina:** *Mehmed CERO*,  
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**European Community:** *Jean-Francois VER-  
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Belgium

# Annex 1: Composition of the ICPDR in 2001

## PERMANENT SECRETARIAT

*Joachim BENDOW, Executive Secretary*

*Károly FUTAKI, Information Management and Administration Officer*

*Igor LIŠKA, Technical Expert for Water Management and Water Quality*

*Mihaela POPOVICI, Technical Expert for Water Management and Emissions Pollution Control*

*Hellmut FLECKSEDER, Technical Expert for River Basin Management (until 31.01.2001)*

*Ursula SCHMEDITJE, Technical Expert for River Basin Management (from 01.08.2001)*

*Julia KÖLBLINGER, Support Staff – Finance & Relation with Host Country Services*

*Sylvia KERSCH, Support Staff – Secretary*

*Marcela FABIANOVÁ, GEF Technical Support*

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### Monitoring, Laboratory and Information Management EG

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### Monitoring EŞG

*Milan MATUŠKA, Director of the Water Protection Department, Ministry of the Environment Nam. L Stura 1, SK-812 35 Bratislava, Slovak Republic*

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*Dobri DIMITROV (until 20 Apr 2001), Senior Scientist, National Institute of Meteorology & Hydrology, Forecasting Dept., 66 Tzarigradsko Shose boul., BG - 1784 Sofia, Bulgaria*

*Aurel VARDUCA (from 20 Apr 2001), Head of the Department, ICIM Research & Engineering Institute for Environment, Spl. Independentei nr 294, Sector 6, RO - 77703, Bucharest, Romania*

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*Helmut BLOECH, European Commission, DG/Environment, Rue de la Loi 200, B-1049 Brussels, Belgium*

### Ecology EG

*Ödön RÁDAI (until 25 Oct 2001), János BRUHÁCS (from 26 Oct 2001), Temp. Secretariat for the Ecological Convention on the Danube Basin, 21 Költő utca, H-1121 Budapest, Hungary, Janus Pananius University, 48-as tér 1. H-7622 Pécs, Hungary*



## Annex 2: Observer Status as of 31.12. 2001



**Danube Commission (for inland navigation);  
(CD) Mr. Danaïl Nedialkov, Director General**  
*Benczúr utca 25, H-1068 Budapest - Hungary*

**World Wide Fund for Nature  
(WWF International)**  
*Mr. Philip Weller, Director, Danube Carpathian  
Programme, Ottakringer Str. 114-116  
A-1160 Vienna - Austria*

**International Association for Danube Re-  
search (IAD; in the framework of SIL)**  
*Dr. Meinhard BREILING, General Secretary,  
Schiffmühlenstr. 120, A-1220 Vienna -  
Austria*

**RAMSAR Convention on Wetlands**  
*Mr. Tobias SALATHE, Regional Coordinator  
for Europe, rue Mauverney 28  
CH-1196 Gland - Switzerland*

**Danube Environmental Forum  
(DEF) - DAPHNE**  
*DAPHNE, Hanulova 5/D, 844 40 Bratislava -  
Slovak Republic*

**The Regional Environmental Center for  
Central and Eastern Europe (REC)**  
*Mr. Jernej STRITIH, Executive Director*

*Ady Endre út 9-11, 2000 Szentendre -  
Hungary*

**International Commission for the Protection  
of the Black Sea (ICPBS)**  
*Mr. Plamen DZHADZHEV, Dolmabahce Sarayi  
II., Harekat Kosku, 80680 Besiktas, Istanbul -  
Turkey*

**GWP**  
*Mr. József GAYER, Global Water Partnership  
VITUKI II, P.O.Box 27, 1453 Budapest -  
Hungary*

**IHP UNESCO**  
*Dr. Pavol MIKLANEK, Slovak Committee for  
Hydrology, Institute of Hydrology SAS, P.O.Box  
94, 838 11 Bratislava 38 - Slovak Republic*

*Mr. Philippe PYPAERT, UNESCO Venice  
Office, Dorsoduro, 1262/A, 30123 Venice -  
Italy*

**International Working Association of Water  
Works in the Danube Basin (IAWD)**  
*Mr. Markus WERDERITSCH, c/o Wiener  
Wasserwerke, Grabnergasse 4-6  
A-1061 Vienna - Austria*

## Annex 3

# Financial Situation

### Regular Budget 2001

CONTRIBUTIONS			
Contracting Parties	Contribution Keys (%)	Contributions in EUR	
		Planned	Actual
Germany	14.81	116,352.91	116,352.91
Austria	14.81	116,352.91	116,352.91
Czech Republic	10.94	85,942.53	85,942.53
Slovakia	8.36	65,668.84	65,668.84
Hungary	10.94	85,942.53	85,942.53
Slovenia	10.94	85,942.53	85,942.53
Croatia	8.36	65,668.84	65,668.84
Bulgaria <sup>1</sup>	(5.00)	(39,288.02)	(39,288.02)
Romania	8.36	65,668.84	65,668.84
Moldova <sup>1</sup>	(5.00)	(39,288.02)	(0.00)
EC	2.50	19,643.98	19,643.98
<b>Total Contribution</b>	<b>100.00</b>	<b>785,759.95</b>	<b>707,096.23</b>

EXPENDITURES <sup>2</sup>				
	Approved Budget (EUR)	Expenditures (EUR)	Engagements (EUR)	Status as of 31-Dec-2001 (EUR)
<b>A. Administrative costs</b>				
1. Staff	388,090	381,949	4,766	1,375
2. Services	126,770	97,307	21,344	8,120
3. Equipment	28,342	27,507	0	835
4. Other	72,673	67,456	12,028	-6,812
Sub-Total A	615,875	574,220	38,138	3,518
<b>B. Operational costs</b>	98,452	91,028	6,817	607
<b>Total (A + B)</b>	<b>714,327</b>	<b>665,247</b>	<b>44,955</b>	<b>4,125</b>
Working Capital Fund	71,433	0	0	71,433
<b>Overall total</b>	<b>785,760</b>	<b>665,247</b>	<b>44,955</b>	<b>75,558</b>

<sup>1</sup> Contribution not taken into account for Regular

<sup>2</sup> Minor differences are due to roundings