

DANUBE WATCH

THE MAGAZINE OF THE DANUBE RIVER / WWW.ICPDR.ORG 2 / 2010

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Hungary proves that successful implementation of the EU Water Framework Directive requires close cooperation between experts and organisations involved or interested in river basin management planning.





Credit: ICPDR/Stögmüller

Dear readers,

Maybe you have spent your holidays in the Danube Basin: walking the Alps or the Carpathians, relaxing on a lake or a river bank, or swimming on the shores of the Black Sea. If so, you have enjoyed the beauty of this remarkable basin – a beauty we enjoy thanks to the high biodiversity of plant and animal species.

To highlight this natural wealth, the UN has declared 2010 to be the International Year of Biodiversity. The article on page 15 links our region to this celebration of life on earth and of the value of biodiversity for our lives.

However, the Danube Basin is not only home to animals and plants – it is also home to over 80 million people, all of whom need electricity for their daily lives – electricity that is often produced by hydropower. Pushed by the increasing need for carbon-neutral electricity, the exploitation of hydropower and the voices that call for the construction of new hydropower plants are getting stronger.

To address this important issue, the ICPDR initiated a dialogue in June with the representatives of the hydropower sector along the Danube and its main tributaries (see also article on page 10). We will explore if and how the sustainable use of hydropower can be secured. I am very positive that compromises can be found, which will balance our commitment to nature with the needs of people.

Finally, we are very pleased to include a conversation with Janos Potočnik, EU Commissioner for Environment, in this issue of Danube Watch. The article on page 12 looks at the impact and success of the EU Water Framework Directive, ten years after its adoption, and proves that the Danube countries have much to be proud of.

Mitja Bricelj, ICPDR President 2010, Slovenia



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Danube Watch is available on the web at www.icpdr.org



Danube Watch is printed on Arctic the Volume 150 & 100 g/m². Arctic Paper holds a FSC traceability certificate.

IMPRINT

Owner/Publisher: ICPDR – International Commission for the Protection of the Danube River, Vienna, icpdr@unvienna.org; **Executive Editor:** Jasmine Bachmann; **Editor:** Kirstie Shepherd; **Design:** Agentur 7, Sylvia Kostenzer; **Cover photo:** WWF DCP; **Print:** Druckerei Janetschek GmbH, Vienna

Danube Watch is the official magazine of ICPDR, the International Commission for the Protection of the Danube River. Danube Watch enhances regional cooperation and information sharing on sustainable water management and environmental protection in the Danube River Basin. It reports on current issues affecting the Danube Basin, and on action taken to deal with challenges in the river basin. Striving for scientific accuracy while remaining concise, clear and readable, it is produced for the wide range of people who are actively involved in the Danube River Basin and are working for the improvement of its environment.

The ICPDR accepts no responsibility or liability whatsoever with regard to information or opinions of the authors of the articles in this issue.



Credit: Mello



Credit: Vogel



Credit: Teun



Credit: Mello

EU BATHING WATER QUALITY REMAINS HIGH

The annual bathing water report presented by the European Commission and the European Environment Agency shows that 96% of coastal bathing areas and 90% of bathing sites in rivers and lakes complied with minimum standards in 2009. The results confirm a long-term upward trend, with the greatest increase for inland waters, rising from 52 % to 90 %.

For more information, please visit: <http://www.eea.europa.eu/publications/quality-of-bathing-water-2009-bathing-season>

NEW REGISTER OF INDUSTRIAL EMISSIONS

A new European pollutant release and transfer register launched by the European Commission and the European Environment Agency provides data on the quantity and location of pollutants released to air, water and land by industrial facilities throughout Europe. It includes annual data for 91 substances and covers more than 24,000 facilities in 65 economic activities.

For more information, please visit: <http://prtr.ec.europa.eu/>

TACKLING EUROPEAN WATER SCARCITY

A new EC report on water scarcity and drought states that greater efforts on pricing and efficiency are needed to reverse the over-exploitation of limited water resources. Despite more rainfall in southern European countries in 2009 than in previous years, the report warns that some Member States have begun to suffer 'permanent scarcity across the whole country'.

For more information, please visit: http://ec.europa.eu/environment/water/quantity/eu_action.htm#2009

EVERYTHING ABOUT FRESH WATER IN EUROPE

The European Environment Agency has added two new sets of data on urban waste water and pollutant releases to the information on the web-based Water Information System for Europe. The website brings together all the information collected at EU level and on surface and ground water, including data on bathing waters. It presents the information in the form of data sets or interactive maps.

For more information, please visit: <http://water.europa.eu>

19–24/9/2010

MONTRÉAL, CANADA

IWA WORLD WATER CONGRESS AND EXHIBITION

The IWA World Water Congress and Exhibition is a biennial event that brings 4500 water professionals together to discuss water management, climate and energy and the security of water resources for the future.

For more information, please visit: www.iwa2010montreal.org/

6/10/2010

KUHMO, FINLAND

4TH PAN-EUROPEAN GREEN BELT CONFERENCE

The European Green Belt aims to create an ecological network from the Barents to the Black Sea, spanning some of the most important habitats for biodiversity and almost all distinct biogeographical regions in Europe.

For more information, please visit: www.europeangreenbelt.org/

6–8/10/2010

PARIS, FRANCE

INTERNATIONAL WORKSHOP ON URBAN RAINWATER MANAGEMENT

This workshop, organised as preparation to the 6th World Water Forum, aims to share experiences about practices and policies implemented in various countries and in particular in southern countries.

For more information, please visit: www.gwpceeforum.org

11–14/10/2010

PERTH, AUSTRALIA

13TH INTERNATIONAL RIVERSYMPIOSIUM

The Symposium will bring together a diverse audience for interactive and vibrant discussion on six key areas: water sources, water for industry, rivers and catchments, climate change, policy and regulations, and community.

For more information, please visit: www.riversymposium.com



Credit: ICPDR/Stögmüller

NEW HEAD OF DELEGATION

Jorge Rodriguez-Romero has taken over as Head of the EU Delegation from Helmut Blöch, who will be working on marine issues within the DG Environment. Helmut has been not only the mastermind of the EU Water Framework Directive, but also an important pillar for the ICPDR. The ICPDR would like to thank Helmut for his efforts and warmly welcomes Jorge.



Credit: ICPDR/Stögmüller

GOOD BYE JASMINE – WELCOME RAIMUND!

After coordinating public participation and communication activities for eight years, Jasmine Bachmann has left the ICPDR Secretariat. Jasmine has been responsible for the launch of international Danube Day, the Danube Box and the re-launch of Danube Watch.

Raimund Mair has taken over as Technical Expert for River Basin Management and will coordinate implementation of the Danube River Basin Management Plan. The ICPDR wishes Jasmine all the best for her future, and welcomes Raimund to the Danube family!



Crossing the Danube

A new book highlights the glories of the Danube's bridges and reveals the architecture and inspiration that make these beautiful structures a part of the character and culture of the Danube.

Bridges link cultures while they span the length of our imagination. They reflect back to us the strengths and aspirations of our societies. A new book by photographer Peter Gyukics, to be published this autumn, showcases the beautiful bridges of the Danube River.

Peter Gyukics had been photographing roads and highway constructions for years when he became interested in bridges. He was working with engineer Margit Schulz when he was captured by the form and



structure of a railway bridge that he'd never noticed before. "This was the breaking point for me," says Gyukics. "I started to pay attention to all the bridges that I passed, and took photos of them all."

Gyukics's fascination with bridges, he says, comes from their invisibility. "Bridges are part of our everyday life, but we don't notice them at all, we only use them. Bridges fade into the landscape, and even if they stand out from it they still emphasise the nature surrounding them," he says. And it is their usefulness

that makes them beautiful, "especially when functionality and the most recent technological knowledge of the era are fused in them".

Putting a passion into print. Later Gyukics met bridge historian Erno Tóth, author of several technical books. "He told me about an old dream of his", says Gyukics. "He'd always wanted a book which is not full of technical schemes, tables or text, but with lots of pictures about bridges." No such book existed then, and Gyukics and Tóth decided to collaborate to

Bridges overcome obstacles of time and place and inspire us to unite the divided and make one of what once was two.

Credit: Gyukics

Gyukics's favourite bridge is Liberty Bridge in Budapest, the first bridge engineered by Hungarians. "I was caught by its gracefulness and its gaudiness before I knew anything about bridges. The form and the proportions of its arcs and its ornaments make this bridge a good example of the fusion of an era's maximal technical knowledge and aesthetics." *Credit: Gyukics.*



create a photo book of bridges. Gyukics took photos of the 151 most important Hungarian bridges (of the country's 27,000 bridges), and *Bridges in Hungary* was published in 2005.

After the book's great success – it was so popular among bridge specialists that there were no copies left for bookstores – Gyukics turned to 'the favourite river of Hungarians', the Tisza. This second photo book, *Along the Bridges of the Tisza River*, was published in 2007 and presented all the bridges of Tisza River and 72 interesting monuments with technical and historical facts.

The diversity of the Danube. According to Gyukics, what makes the Danube's bridges so special is their variety. The very first bridge on the Danube was built out of stone in Regensburg, Germany, in 1146 (Regensburg's Stone Bridge) and is still standing. The second permanent bridge is the Széchenyi Chain Bridge in Budapest – a suspension bridge made from stone and steel. Today most bridges are made from reinforced concrete. Contrary to what one would think, Gyukics says, this doesn't mean uniformity.

"All bridges are unique. They have the energy to concentrate on the perspective even after the great technical planning and construction work." And there is much to see for those who cross the bridge – fine sculptures, balustrades and memorial tablets. "In Binzwangen, Germany, we can find a 200 to 300-year-old baroque sculpture near the bridge, and a 20th-century sculpture of St. John of Nepomuk on the same bridge!"

Bridging identities. The Danube winds through varying landscapes, diverse regions and countries, and

Gyukics's journeys photographing the river's bridges have introduced him to people from all walks of life. "Today it's not astonishing to see a Canadian and a Hungarian having a conversation in the 400-year-old post office restaurant of Immendingen and when the owner joins the conversation they switch from English to German. Even without any common language, the local people are very open."

Bridges are powerful metaphors for Gyukics, and he is confident that the Danube Basin might be the region to lead Europe to change. "If we utilised our natural resources more efficiently and developed closer cooperation it could help us to make the first steps towards change," he says. "We need great minds to turn our ship in the right direction".



It is no surprise that Gyukics finds inspiration from a leader in bridges and navigation: Hungarian Count István Széchenyi recognised the importance, for Hungary and the entire region, of regulating the Lower Danube and worked to open the region for steamers and railway traffic. The Széchenyi Chain Bridge, linking Buda and Pest for the first time, was named for the Count. "He patronised science and contributed to the economic development of the country by his books and his social and public activities," says Gyukics. "He condemned – by his words and his work – extreme nationalism."

Perhaps Széchenyi's life can inspire the next generation of leaders needed to bridge Europe and the Danube River Basin. **For more information or to order a copy, please visit: www.danube-bridges.com.**

Kirstie Shepherd is a freelance journalist living in Vienna and has called the Danube River Basin home since 2000.

Financing the Joint Programme of Measures



In cooperation with the Government of Serbia, the ICPDR held a consultation meeting on financing the Joint Programme of Measures in Belgrade on 18-19 May 2010.

The meeting brought together Heads of Delegation to the ICPDR and members of the ICPDR delegations, representatives of financial institutions and programmes for sessions chaired by designated officials, introductory presentations by known experts, and case studies to gain insight into the financing needs and finance strategy. Facilitated dialogues for each session gave participants the opportunity to provide input on the main investments needs for urban wastewater treatment, agricultural measures and infrastructure projects.

Deputy Prime Minister of Serbia Bozidar Djelic said the meeting should be seen in close synergy with the EU Danube Strategy process, which can bring new impetus into the EU accession process, especially for the non-EU countries.

ICPDR Executive Secretary Philip Weller presented a review of significant financial resources needed, such as to achieve the management objectives for investment in the Urban Wastewater Treatment Directive, for investment in non-point pollution reduction, to improve lateral and longitudinal connectivity (fish bypasses, flood plain reconnection), for flood protection and for a combination of investment and policy initiatives.

Mibaela Popovici is the ICPDR Technical Expert on Pollution Control.

Troubled Waters photo exhibition on tour now



The exhibition 'Troubled Waters', now making its way around the world, captures the wide range of water challenges – from floods to droughts. Credit: Borealis

Today, more than one billion people do not have access to clean water, the fundamental source of life. To create awareness of this problem, its causes and consequences, and to encourage a more efficient use of water, Borealis has created the exhibition 'Troubled Waters', presenting the photos of Dieter Telemans, a renowned Belgian photographer who has travelled around the world documenting the many facets of freshwater resources.

The opening of the exhibition's international tour was held in June 2010 at the Borealis offices in Vienna for Borealis' employees, family and visitors, and included a water test and an ICPDR information stand. Borealis is a member of the Business Friends of the Danube, the business association of the ICPDR.

Informing the public of water challenges and management solutions is a key step in encouraging them to use and preserve their water resources better, and is part of Borealis' ambitious awareness-raising programme. The exhibition is touring as part of the 'Water for the World' programme, a project from Borealis and joint venture partner Bourouge to raise awareness of the water challenges in the local communities which are home to Borealis' facilities and centres, and to foster knowledge on the sustainable use of water and effective sanitation.

To learn more about the exhibition and the programme 'Water for the World', please visit: www.waterfortheworld.net.

Doris Gfrerer is a member of ICPDR project staff working on communication and environmental education initiatives.

Power from the Danube – can it be sustainable?

Danube leaders discuss the increased need for CO₂-neutral energy, the construction of new hydropower plants, minimum ecological requirements and how all of this can be in line with the Danube River Basin Management Plan



When constructing new hydropower plants, energy companies spend a lot of money to ensure that fish can still overcome the obstacles. *Credit: Verbund*

Based on the possible effects of climate change and pressure stemming from the renewable energy sector, hydropower is a hot topic within the European Union as well as around the world. Voices for increased exploitation of hydropower along the rivers are getting louder.

The biannual meeting of the ICPDR Heads of Delegation in Brdo, Slovenia, dedicated a special discussion to the current and future situation of hydropower in the Danube River Basin, initiated by the ICPDR Presidency 2010 and chaired by Roko Žarnić, Minister for Environmental Protection and Spatial Planning of Slovenia.

Nearly all Danube countries depend on hydropower. The upper part of the Danube is ideal for building hy-

dropower plants due to the river's natural gradient. A total of 59 dams have been built along the Danube's first 1,000 kilometres – from the source down to Gabčíkovo – many of them decades ago. This means that the Upper Danube is interrupted every 16 km on average.

Around 60% of the electricity generated in Austria yearly originates from hydropower – 20% produced along the Danube itself. In Slovakia, hydropower counts for about 16% of the energy mix; 11% derives from the hydropower plan Gabčíkovo. The largest hydropower dam and reservoir system along the Danube is located at the 117-km-long Džerdap Gorge (Iron Gate Dam I and II). This peak operation system consists of two dams, operated jointly by Serbia and Romania, producing about 37% of the total energy used in Serbia and 27% in Romania.

Even more power from the water. Due to pressure from EU policies responding to the possible effects of climate change and the strong dependence on imported electricity, construction of new hydropower plants is currently under discussion or in planning phases on the Sava, Mura, Drava and the Tisza Rivers, as well as on the Danube itself between Romania and Bulgaria.

However, existing and planned constructions can cause hydromorphological alterations which have negative impacts. Such alterations can lead to river and habitat interruptions, the disconnection of wetlands and floodplains and can even provoke changes in the natural structure of rivers, including the alteration of river depth and width, of flow regimes, the interruption of sediment transportation as well as the interruption of natural fish migration routes.

These effects work against the spirit of the EU Water Framework Directive and the goals set out in the Danube River Basin Management Plan, which was accepted by all Danube countries in February this year. “We need to find a compromise between the goals set out by the EU Renewable Energy Directive and the EU water policy,” says Žarnić. “Securing the sustainability of hydropower is one of the main challenges in the implementation of the EU Water Framework Directive.”

Best planning, construction and operation – but not everywhere. Best practices for planning, construction and operation of plants can minimise their negative effects, as seen at the Freudenua Hydropower Plant, Austria. Especially on the Upper Danube, millions of Euros are being spent and will be spent in the coming years to re-fit old-fashioned plants for the future, as requested by the WFD. Unfortunately, however, these standards are not state of the art in plants throughout the basin. And even if all ecological standards are met by a plant, hydropower potential alone can not be seen as a green light for its exploitation.

“We need to look at each hydropower project individually as we have high-sensitive, sensitive and non-sensitive areas,” says Otto Pirker, from VGB Power Tech. “Public interests need to be respected: energy production or environmental protection.”

Small plants – smaller footprints? Another key problem is the increased and subsidised construction of small hydropower plants. “There is a general conception that a small hydropower plant causes small impacts,” says Jian-hua Meng, hydropower expert from WWF International, “but this is not true. Moreover, there is a substantial cumulative impact.”

Facing the problems these smaller plants cause for river ecology requires new thinking.. “First of all we should focus on sites of catchment areas with high

hydropower potential. Secondly we should use only those sites that have a low impact on ecology. Maybe it is even better to upgrade existing hydropower plants instead of constructing new buildings or to build one large plant instead of constructing hundreds of small ones along all rivers – we need to be realistic and creative with solutions,” says Fritz Holzwarth, Head of the German Delegation to the ICPDR.

Dialogue to reach solutions. The coming years will show if and how hydropower can be produced sustainably. The ICPDR is ready to open this chapter with stakeholders from the energy sector to discuss, explore and define solutions which respect both the increased demand of CO₂-neutral energy and the protection of rivers and habitats. Clearly, duplication with other efforts at the national or EU level should be avoided, and the ICPDR will take into account ongoing discussions and suggested solutions.

As a first step all relevant documents on hydropower will be assembled and an overview on the current situation of the hydropower use in the Danube River Basin will be prepared by autumn. “Working with the navigation sector to develop the ‘Joint Statement on Inland Navigation and Environmental Protection’ was a very good experience,” says Philip Weller, ICPDR Executive Secretary. “We are positive that the dialogue with the energy sector will also lead to a fruitful and moreover sustainable outcome.”

Jasmine Bachmann is the Executive Editor of Danube Watch.

NON-DAM HYDROPOWER – THE SOLUTION FOR THE FUTURE?

One of the most exciting innovations in hydropower doesn't use dams. Instead, ‘hydrokinetic’ turbines capture energy from the flow of water in rivers, estuaries and ocean currents. Hydrokinetic turbines look just like underwater wind turbines built on the riverbed or hanging upside down from barges anchored in the river. Non-dam hydropower could have a lower impact than dam-based hydropower and other conventional generation technologies, with no significant engineering challenges to install or operate the turbines in rivers.

In January 2010, the Pike Energy consulting firm estimated that if the European Union and the United States continue to increase incentives for non-carbon energy, there could be about 3,000 megawatts of river flow turbines installed by 2025.

Source: www.internationalrivers.org/en/node/5127

“We should not only ask how much energy can be produced, but we should also ask what are the requirements of a healthy ecosystem.” Jorge Rodriguez-Romero, Head of the EU Delegation to the ICPDR.

EU Commissioner for Environment looks at challenges in the Danube

Over the last decade, the EU Water Framework Directive has introduced a holistic approach to managing waters. As a result, much progress has been made, but Janos Potočník, EU Commissioner for Environment, looks closer.

Ten years have passed since the adoption of the EU Water Framework Directive. Today, the impact and success of this comprehensive directive on integrated water resources management are visible in the Danube region, says Janez Potočník, EU Commissioner for Environment.

Danube Watch: What is the current state of implementation of the Water Framework Directive (WFD)?
Potočník: For about 80% of the EU population, River Basin Management Plans are, or will soon be, in place. This is also the case for most EU Member States in the Danube River Basin District.

“Both when developing inland waterway transport and hydropower, it is crucial that there is adequate coordination between the responsible authorities and cooperation with the main stakeholders.”

The Danube River Basin Management Plan is a success in international river basin management world-wide. It provides a good overview of basin-wide water management issues, and how to solve them. However, the international plan indicates that for the most important water management issues at the basin wide level, such as nutrient pollution and hydromorphological pressures, the environmental objectives will not be achieved in 2015. Those therefore have to be addressed with specific action at national or regional level. And despite the River Basin Management Plans being ready, the biggest effort is still to come: the implementation of the plans for real improvements to water status until 2015 and beyond. We are approaching 2012, the year by which Member States need to ensure that the Programmes of Measures adopted under the River Basin Management Plans are fully operational. There is only a three-year window, so all countries need to be pro-active in implementing sometimes costly measures.

The improvements for the Danube countries, including for non EU Member States, are not only about implementing measures such as the construction of urban waste water treatment plans. They are also about ensuring that all economic developments in the Danube region go hand in hand with environmental protection. This is particularly valid for development of infrastructure for inland waterway transport and renewable energy.

Danube Watch: How can environmental concerns be integrated in these developments?

Potočník: For inland waterway transport, the Joint

Statement on Guiding Principles for the Development of Inland Navigation and Environmental Protection in the Danube River Basin is an important tool in integrating the different requirements. It is now time to put these principles into practice in different parts of the region.

I also support the forthcoming ICPDR initiative to develop similar guiding principles on the use and development of hydropower plants. The current practice of hydropower development often lacks an assessment of



impacts and better environmental options at river basin scale. More strategic planning is therefore crucial for international river basins such as the Danube. This will allow planners to take into account cumulative effects

or available locations for hydropower plants which are less valuable, for example regarding fish migration. But besides guidance and adequate coordination, it is crucial that sufficient funding is made available for integration of environmental concerns in different policies. While it is clear that the implementation of the WFD requires resources at Member States level, we need to make sure that at the EU level policies for agriculture, energy, industry, transport and research, and regional policy all contribute to water protection. In this respect, there are important opportunities ahead of us. Later this year and then in mid-2011, the Commission will table proposals for the reform of the Common Agricultural Policy and the new financial perspectives, which will cover both agriculture and regional funding. As you may know, these absorb the bulk of the EU budget.

If we do not achieve further integration of environmental protection in these policies, we will be undoing with one hand what we are trying to achieve with the



Janez Potočnik,
EU Commissioner
for Environment.
Credit: European Union

other. Moreover, we should not underestimate the business opportunities that such an approach would offer in terms of development of know how and new technologies.

Danube Watch: Can the future Strategy for the Danube Region play a role in this?

Potočnik: The EU Strategy for the Danube Region will address environmental concerns and the need for economic developments in the region. The importance of ensuring and improving river continuity will be recognised, as will be the important work of the ICPDR in environmental protection in the region. It is important that actions in the future Strategy are in line with the needs of protecting the environment and with the Danube River Basin Management Plan. With this in mind, the future Strategy can play an important role in further integrating environmental concerns in economic developments.

Danube Watch: What will the European Commission do with all the River Basin Management Plans?

Potočnik: The Commission is preparing a report to be presented to the European Parliament and the Council on Member States' on implementation of the Directive in 2012. It will conduct an in-depth analysis of the 170 River Basin Management Plans, which have been or should be reported to the Commission. This report will focus on how Member States have implemented the substantial requirements of this Directive and to what extent, at both the national and EU level, synergies with other policies have been exploited.

In addition, I will propose a 'Blueprint to safeguard Europe's waters' in 2012. This will build on the results of the review of the implementation of the WFD and the review of the existing EU policy on water scarcity and droughts.

This Blueprint will be designed to provide Europe with the water security it needs and will address the challenges associated with efficient water use and ensuring a good quality of water resources and aquatic ecosystems in and bordering Europe. This is imminent to protect the environment, for climate change resilience, and to improve the health and safety of Europeans, the stability of food supply and economic prosperity for years to come.

This Blueprint will be a significant element of the resource efficiency initiative under the EU2020 strategy. It will highlight the importance of integrating water policy objectives with other areas such as agriculture, energy, industry, land use, research and transport. And all these topics are of course very relevant for the most international river basin district in the world: the Danube.

Interview by *Joe Hennon*, the European Commission Spokesperson for Environment.

"The Water Framework Directive transformed water management from a purely scientific and technical subject for engineers and scientists to an issue at the forefront of political attention."



River dynamics provide the basis for a wide range of river habitats and secure long-term richness in biodiversity. *Credit: Baumgartner*

The Danube is the major river of Europe, connecting central Europe to the south-eastern parts. Because of its large area and very diverse habitats – gravel islands on the Upper River, large remaining forest floodplains, extended wetlands on the Lower River – it provides suitable living conditions for a large number of different species. The complete river basin, including tributaries, is home to around 2,000 plant and 5,000 animal species, including numerous endangered or nearly extinct species. However, our knowledge of the richness of biodiversity and the complexity in ecosystems is only beginning.

Diversity in peril. Diversity along the river is threatened: Many dynamic habitats have nearly disappeared due to river engineering, hydropower plants and navigation projects. Growing cities have made flood protection measures necessary, which in turn cut off large floodplain areas from the river system. For these and many other reasons, the extinction rate of species is currently around 1000 times faster than it should be. Mammals are especially threatened – 1% of the nearly 6000 species worldwide is extinct, with another 22% endangered in varying degrees. The group of animals under the highest pressure is amphibians, with 30% of species threatened.



The Danube River – Europe’s backbone of biodiversity

The richness in habitats, flora and fauna qualifies the Danube River to be a focus for conservation of biodiversity in Central and South-East Europe. Experts from different protected areas weigh in on the wise use of this natural heritage.



However, considering that biodiversity gives mankind a variety of goods and services – which are now starting to be valued also in terms of money – the United Nations declared 2010 to be the International Year of Biodiversity as a “celebration of life on earth and of the value of biodiversity for our lives”.

Protected areas – hotspots of biodiversity. This year the Danube Delta Biosphere Reserve celebrates its 20th anniversary. Established in 1990, it is not only one of the first protected areas in the Danube River Basin, it is also one of the largest (580,000 hectares) and richest in biodiversity.

“The Danube Delta is a natural gene bank with inestimable value for the world’s natural heritage,” says Governor Grigore Baboianu proudly. “The mosaic of habitats developed here is the most various in Romania, hosting a great variety of communities of plants and animals that number around 5429.” In 30 types of habitats, the area is home to 1839 flora species, 678 algae species and 1016 cormophytes. The 3590 fauna species include 2244 species of insects,

Developing the Danube River as a biological corridor is important for the long-term conservation of biodiversity. However, green corridors between big cities could also bring a wide range of benefits for people. *Credit: Donau-Auen National Park*

Danube protected areas play a key role for the conservation of biodiversity.

Credit: Bandacu

91 species of molluscs, 135 fish species and 331 different bird species.

Conservation programmes for flagship species.

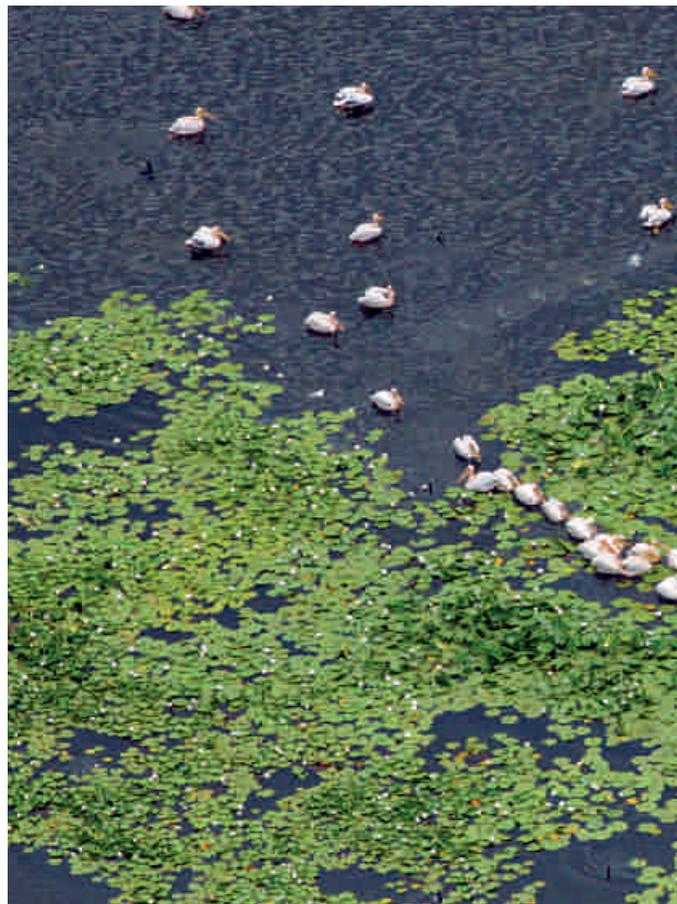
With limited resources available for nature protection and poor knowledge of the habitat requirements of most of the species, it is not possible for protected areas to run conservation programmes for all endangered species, but instead it is necessary to focus on ‘flagship species’.

“Concrete conservation actions for flagship species for the Danube islands also support other characteristic species here in Persina Nature Park,” says Director Stela Bozhinova of one of the conservation strategies for this Bulgarian Protected Area. “In the long term, our conservation activities for the Pygmy Cormorant – a globally threatened bird species – will be beneficial not just for this species. The activities implemented in the frame of a cross-border LIFE+ project should improve habitat conditions for a wide range of other organisms.”

Habitat management for biodiversity. Our philosophy of conservation of species is based on conservation of their natural habitats,” explains Tomas Kusik, biodiversity expert of the Slovakian DANUBEPARKS partner BROZ. “Therefore, we prefer long-term management of selected areas,” adds his colleague Mira Ruda. In the Slovakian Danube floodplains, BROZ has re-established meadow grazing by cows, horses and sheep, which was a common land use on Danube islands many decades ago. The vegetation, including numerous endangered plants, insects and other organisms, is still adapted to this way of management and will benefit significantly.

Tibor Parrag, head of the department for nature conservation in the Duna-Dráva National Park, stresses an additional concern. “The negative effects of human activities influence most types of habitats and therefore, there is the need for habitat restoration. In the long term we are trying to restore ‘self-regulated habitats’ which won’t need permanent human management in the future.” In addition to day to day conservation management for selected habitat types and hotspots for some priority species, nature conservation increasingly focuses on the initiation, restoration and conservation of natural processes.

Conservation of natural processes. The incredible biodiversity in floodplains is based on the wide range of different habitats developed by the permanent change of parameters of the water regime. Furthermore, highly dynamic river habitats like gravel banks and sandy islands are some of the most endangered ecosystems. Therefore, nature protection on a river has to be based on river dynamics.



Even the best human habitat management will not be able to compensate for the loss of river dynamics – ecological river engineers prefer just to initiate and then ‘let the river do the work’. “The river restoration projects here in our Protected Area initiate and bring back the dynamic of the river,” says Carl Manzano, Director of the Donau-Auen National Park, located between Vienna and Bratislava. “This is the only guarantee for the existence and permanent redevelopment of characteristic habitats for the long term.”

The compensation of dynamic habitats by artificial structures has been tried several times and can work for specific species. But observations on the behaviour of the Little-ringed Plover on the Austrian section of the Danube – a characteristic breeding bird species on gravel islands in this part of the Danube – has brought interesting results: compared to gravel islands created by natural river dynamics, birds have to invest much more time in foraging on artificial islands when they are ‘established’ by human activities. “Obviously, the number of available foods on natural habitats – including a wide range of insects, spiders etc. – is much higher in natural habitats,” explains Matthias Schmidt, conservation officer of BirdLife Austria.

Similar cases can be found in forests, where the very specific requirements of dead wood beetles underline the need for forest dynamics for the conservation of



connected with source populations by suitable stepping stones. So the protection of specific habitat structures like gravel islands, steep dynamic river banks or gallery forests in protected areas can conserve sustainable populations of characteristic species only if we protect source populations and if we develop a coherent habitat network including numerous stepping stones along the whole river section.

A transnational strategy for biodiversity.

The elaboration of the EU Strategy for the Danube region is going into the final phase. At this stage, in addition to the improvement of connectivity and communication systems and the reinforcement of the socio-economic development, the preservation of the environment – including the conservation of biodiversity – has been identified as one of the main pillars for this strategy.

The inspiration of a living river – including all flora and fauna, the richness in habitats and structures as well as human culture

species, showing that it is hardly possible to compensate for dynamic habitats and the richness of biodiversity.

Habitat networks for biological corridors. The efforts of protected areas alone cannot ensure long-term conservation of all the characteristic animal and plant species of the region. Most protected areas, at less than 1000 hectares), cover small areas in comparison to the total territory. The White-tailed Eagle – one of the flagship species for the protection of large scale flood-plain habitat complexes – inhabits home ranges up to some thousand hectares. Protected areas can only act as key habitats and stepping stones for such endangered species.

But rivers can serve as biological corridors, such as for Danube sturgeons migrating from the Black Sea upstream to their spawning areas in the Upper Danube region. The EU Water Framework Directive and the Danube River Basin Management Plan highlight the importance of the corridor function of rivers and longitudinal continuity.

For biodiversity, the longitudinal continuity of a river should include more than just fish ladders and bypasses for hydro power dams, it must also take into consideration semi-aquatic and terrestrial habitats. To ensure re-colonisation, specific habitats have to be



Conservation activities for flagship species – like the Pygmy Cormorant – contribute to improved habitat quality for numerous organisms.
Credit: Gergelyj

linked to nature – integrates Central and South-East Europe. Implementing corridor concepts will emerge as the key role of protected areas for the conservation of these natural values. DANUBEPARKS – the Danube River Network of Protected Areas – was established in 2009 to start facing these challenges on the field of nature conservation.

The EU Strategy for the Danube Region is expected to underline the importance of transnational activities for biodiversity conservation and to strengthen transnational initiatives to raise the capacity of key actors. In this way, the EU Strategy for the Danube Region could significantly contribute to establishing the role of the Danube River as a living corridor and the backbone for biodiversity in Central and South-East Europe.

For more information, please visit:
www.danubeparks.org.

Georg Frank is the Project Manager for DANUBEPARKS.



Public participation in action: Hungary's river basin management planning process

Hungary proves that while the need for public involvement is an important feature of the EU Water Framework Directive, for that involvement to be meaningful, people need a basic understanding of the principal features of the Directive.

The WFD refers to three forms of 'stakeholder engagement': access to background information, consultation in three steps of the planning process and the active involvement of interested parties in all aspects of WFD implementation.
Credit: Gayer



Successful implementation of the EU Water Framework Directive (WFD) requires close cooperation between experts and organisations involved or interested in river basin management planning – in short among all stakeholders.

The first WFD-compatible public participation strategy for Hungary was developed in 2006. It was based on the European Commission's Guidance Document No. 8 on Public Participation, the Danube River Basin Public Participation Strategy, the findings of the Harmonising Collaborative Planning Handbook and the country's own specific characteristics. The strategy is based on written and verbal consultations from 42 river basin management planning sub-units divided into four sub-catchments: Danube River, Tisza River, Drava River and Lake Balaton.

As part of a pilot study on WFD implementation, the strategy was tested in the Upper-Tisza catchment area. The test coincided with the *first round of the WFD Article 14 consultations* in 2007 for the river basin management plan timeline and work programme, and the final version of the Hungarian Public Participation Strategy is the result of both processes.

Gathering stakeholders. The public participation process is the responsibility of the country's 12 regional Environmental and Water Directorates in cooperation with the local environmental inspectorates and national parks. To assure meaningful public involvement the strategy suggests establishing planning committees of the existing 12 Regional Water Management Councils, 4 Sub-catchment Water Management Councils and a National Water Management Council.

The strategy recommends that these bodies be composed of representatives from four major interest groups: central and local governmental organisations, NGOs, water users and professionals and academia in a 40%-20%-20%-20% distribution respectively. They provide public control of the planning process in accordance with the WFD, especially during the preparation of river basin management plans. They supervise the public participation process at their own level, comment on the draft plans, then endorse or return them for further improvement. Finally, the National Water Management Council has the right to recommend the minister in charge of water to adopt the national river basin management plan.



Engaging the public. Once the national public participation strategy was ready, the *second round of the WFD Article 14 consultations* began on the significant water management issues. A consultation document describing each issue was made available to the public on the internet in December 2007. Comments were received in written form during the first half of 2008, and then those stakeholders who had sent comments were invited for a verbal consultation forum.

The consultation document was finalised based on those results, pointing out what problems the evolving river basin management should address. "The national river basin management plan cannot meet every single demand," says water director László Kóthay, "but it is built up from sound compromises acceptable by all of us."

The *third round of the WFD Article 14 consultations* was held as an open planning process with consultation periods and stakeholder conferences organised all over the country. The outline of the national river

basin management plan was presented online in December 2008 and was available for comments until the end of January 2009. Based on the remarks received, the draft version of the national Programme of Measures was made ready and published in April 2009 and remained open for comments until the end of July. The consultation documents were debated in 42 local stakeholder conferences during July to complete the written consultation.

Bringing consultation opportunities to stakeholders.

Next, 25 thematic and regional conferences were held in September, when all the 47 drafts of river basin management plans were available (42 sub-units, 4 sub-basins and a national plan). Some 30-40 stakeholders attended each meeting and all in all more than 1,500 comments and remarks were expressed.

The consultation period was originally planned to close with the last forum in mid-September, but on the request of NGOs the written consultation period was extended until November. The comments (either written or verbal) were documented in the river basin management plans, together with the responses given by the planners when completing the plans.

“The necessity of trust building between government and civil society has been an important lesson we learned during the planning process,” says Ferenc Ligetvári, Vice Chair of the National Water Management Council.

Putting public participation into action. The Regional, Sub-catchment and National Water Management Councils convened in December 2009–January 2010 to approve the river basin management plans. The recommendations of these bodies were integrated from the bottom up and finally the National Water Management Council approved Hungary’s river basin management plan on 18 January 2010. For legislative reasons a shorter version of the national plan was compiled and endorsed on 1 March. This version was announced later by a governmental decision as Hungary’s river basin management plan.

The work of the Water Management Councils has not finished with the completion of the plans in the first planning cycle. They have the mandate to monitor the implementation of the Programme of Measures and act as supervisors of WFD implementation.

“The involvement of the public into the river basin management planning process was an unprecedented exercise in Hungary”, says Gyula Reich, Chair of GWP Hungary, “and demonstrated that governmental and civil organizations are able to work together if goodwill exists from both sides”.

József Gayer works for the Hungarian Ministry of Rural Development.

Summer 2010: Massive floods along the Danube River



This summer the Danube River Basin was repeatedly deluged by torrential rains causing massive floods. Across the basin people were forced from their homes, and many houses collapsed or were damaged as a result of floods or landslides after flood events.

At least ten people died in the Czech Republic following heavy rains in June. Floods and torrential rain in June killed 24 people in Romania, forced 7000 to be evacuated and damaged farms and infrastructure. In Serbia, about 10 people died in flash floods in rural areas. Thousands were forced to evacuate in over 900 villages and small towns in Slovakia in June as a result of floods that destroyed crops, and damaged buildings and cars. Casualties were also reported after floods in Hungary and Austria. Flash floods created lakes in Bulgaria’s capital in June and large parts of the country were flooded as well. Fighting floods was a cruel summer reality in many areas of Croatia, Bosnia and Herzegovina, Ukraine and Moldova.

Long term forecasts indicate that torrential rains may become worse and more frequent with the potential effects of climate change. Facing future flood risks requires coordinated implementation of the EU Floods Directive. All Danube countries currently have national programmes for flood protection. The ICPDR adopted its Action Programme on Sustainable Flood Protection in the Danube River Basin in 2004, setting key targets for protection, prevention and mitigation, and action plans for 17 sub-basins were adopted in 2009.

Igor Liska is the Technical Expert for Water Quality for the ICPDR.

In order to overcome future flood risks sound flood risk management planning must be put in place at all levels. *Credit: Tóth*

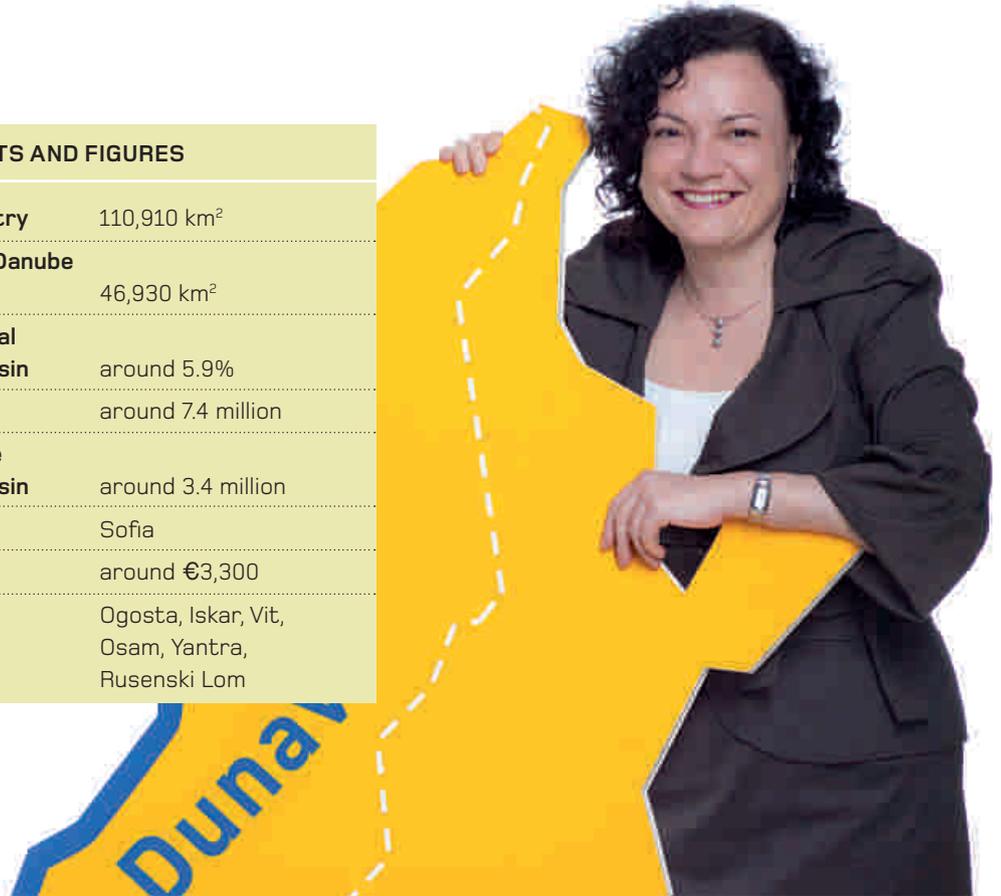


Sailing together in one direction

Ivelina Vassileva, Deputy Minister of Environment and Water of Bulgaria and Head of the Bulgarian Delegation to the ICPDR, speaks about the responsibility to protect the Danube Black Sea and working together in the ICPDR.

BULGARIA: FACTS AND FIGURES

| | |
|----------------------------------------------|------------------------------------------------|
| Size of the country | 110,910 km ² |
| Area within the Danube River Basin | 46,930 km ² |
| Share of the total Danube River Basin | around 5.9% |
| Population | around 7.4 million |
| Population in the Danube River Basin | around 3.4 million |
| Capital | Sofia |
| Per-capita GDP | around €3,300 |
| Main tributaries to the Danube | Ogosta, Iskar, Vit, Osam, Yantra, Rusenski Lom |



Ivelina Vassileva, Deputy Minister of Environment and Water of Bulgaria and Head of the Bulgarian Delegation to the ICPDR.
Credit: ICPDR/Stögmüller

In its continuing series, Danube Watch presents portraits of the leaders whose passion and commitment actively steer ICPDR processes and help determine the future of the basin.

In the work of the ICPDR, the Heads of Delegations are often seen as ‘behind-the-scenes players’ who, inconspicuous as they sometimes may seem, actively steer the ICPDR processes and represent their countries at the highest political level. Ivelina Vassileva joined the ICPDR Family as the new Head of the Bulgarian Delegation and recently met with Danube Watch.

Danube Watch: After half a year in the position as the Head of the Bulgarian Delegation to the ICPDR, what are your impressions of the strengths and weaknesses of the ICPDR?

Vassileva: The ICPDR is a good example of international cooperation as it brings all the Danube countries around one table with the common goal to protect and improve the condition of the Danube. Rivers do not respect administrative and national borders and

this is why improving water quality, protecting biodiversity and returning to natural river dynamics cannot be the task of a single country. Just as the Danube is a common natural good, its protection should be a common responsibility.

As an international organisation, the ICPDR has great opportunities and faces great challenges at the same time. Being all ‘in the same boat’ gives us the chance to work together and steer in one direction, having already found the balance among the different countries’ interests. Such problems are not always easy to solve, because each country has its own specifics and important issues. Nevertheless, efforts are worthwhile since they aim at the common interest of protecting and improving the Danube River.

Danube Watch: What are the most important tasks Bulgaria faces in implementing international plans and strategies?

Vassileva: One of the biggest challenges for Bulgaria is providing the agglomerations in the Danube Basin with the necessary collecting systems and treatment

HISTORY HIGHLIGHTS

A country in the middle of the ethnically, culturally and linguistically diverse Balkan Peninsula, Bulgaria has had many twists and turns in its long history and its territory has stretched to the coastlines of the Black, Aegean and Adriatic Seas.

In 681 the Bulgars, originally from central Asia, formed an independent state that became known as Great Bulgaria. In the following centuries, Bulgaria struggled with the Byzantine Empire to assert its place in the Balkans, but by the end of the 14th century the country was overrun by the Ottoman Turks, who controlled Bulgaria for nearly five centuries.

In 1876, the April Uprising broke out – the first significant and organised attempt at liberation from Ottoman domination. The bloody uprising was crushed by the Ottomans, but it drew the attention of European countries to the Bulgarian national crisis. The Treaty of Berlin split Bulgaria in three, but a complete, independent Bulgaria was established by King Ferdinand in 1908.

Bulgaria sided with the central powers in World War I, subsequently losing a great part of its lands, and in World War II Bulgaria fought on the side of the Axis. After the war, Bulgaria fell within the Soviet sphere of influence and became a People's Republic in 1946. Communist domination ended in 1990, when Bulgaria held its first multi-party election since World War II. A new constitution was adopted in 1991, and Bulgaria began moving toward a market economy. The country joined NATO in 2004 and the EU in 2007. Bulgaria has been a Contracting Party to the ICPDR since the Danube River Protection Convention was signed in Sophia in 1994.

plants, since untreated wastewater from agglomerations is the main source of organic and nutrient pollution in the water bodies. Yet construction of these facilities has slowed recently. A good number of treatment plants were constructed with the financial support of EU under the Instrument for Structural Policies for Pre-Accession programme and now under the Operational Programme 'Environment', but many agglomerations still lack appropriate collecting systems and treatment plants. With short deadlines and the limited financial sources, this task is very challenging.

Danube Watch: How does being a Black Sea country affect Bulgaria's water management?

Vassileva: The Black Sea and the Danube River are interrelated and the Danube River is one of the biggest rivers flowing into the Black Sea – and bringing a lot of pollution with that flow. This means to a certain extent that the path to protecting the Black Sea goes through protecting the big rivers in the basin, including the Danube River. From the Danube Delta, the natural streams within the Black Sea go down to the Bulgarian Black Sea coast, which is almost entirely used as a tourist destination. Since tourism is an important income for the country and a matter of culture and tradition as well, the protection of the Danube becomes an even more critical problem to solve.

Another interesting look at the Danube and the Black Sea water management is that both fall under the competence of EU legislation but the two regions are completely different when it comes to legislation of the countries in the two commissions. Most of the Danube countries share the same legislation as EU Member States, which makes cooperation easier from certain point of view, while only Bulgaria and Romania are EU countries in the Black Sea Commission. The challenge is to work in the same direction and with the same criteria, while having a different legislative basis. Nevertheless, all Black Sea countries recognise that improving the condition of the Black Sea is in our common interests and should be a goal to pursue together.

Danube Watch: What do you expect from EU Strategy for the Danube Region?

Vassileva: The challenge of the Danube Strategy is to find the actions and projects which will enhance the development of the Danube region in a sustainable way. Bringing all the important sectors which are subject to the Strategy in a single document allows us to look at the region from a 'bird's eye view' and recognises the important tasks to be done which will make the region more competitive. Transport and energy are important sectors not only for Bulgaria but also for all Danube countries, and the environment is the important pillar of sustainability for implementing actions and projects. Bringing the key sectors together to enhance development has the potential to make the process effective and less consuming in time and resources.

For Bulgaria, the Strategy means a chance to stress the important role of certain projects in the sectors of transport, energy, tourism and environment, which will contribute to the development not only of our country but also of the whole Danube region.

Danube Watch: Thank you very much, Ms. Vassileva.

Jasmine Bachmann is the Executive Editor of Danube Watch.

"Being all 'in the same boat' gives us the chance to work together and steer in one direction, having already found the balance among the different countries' interests."

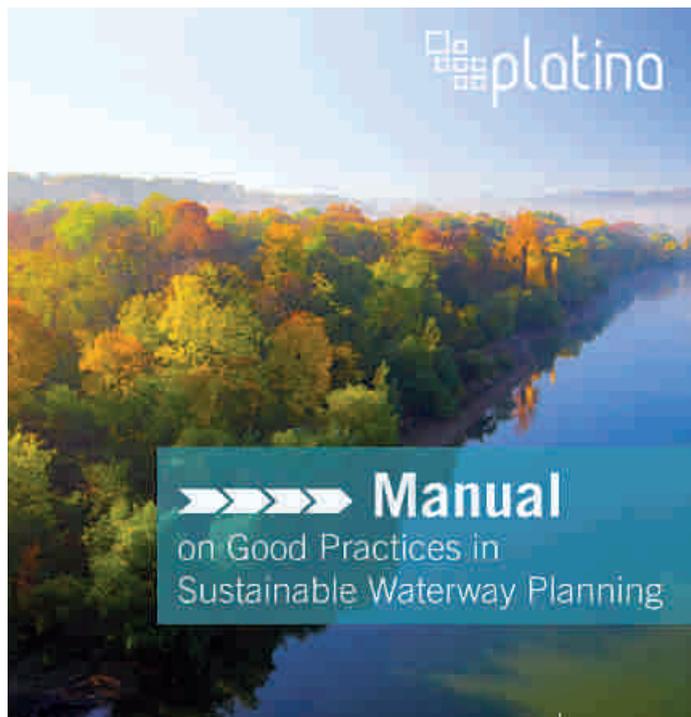
"The path to protecting the Black Sea goes through protecting the big rivers in the basin, including the Danube River."

The ecological road for waterways

A new manual published by the ICPDR provides guidance on integrated planning to bring technical planners and environmental representatives into the planning process and create win-win solutions for everyone.

On 2 September 2010, the PLATINA consortium launched an innovative manual presenting good practices in sustainable waterway planning. This document, produced by the ICPDR Secretariat, illustrates how waterway development projects can be made compatible with environmental protection requirements, such as those stipulated by EU law.

The Platform for the Implementation of NAIADES – PLATINA, consists of 22 partners from 9 different countries working to accelerate the achievement of NAIADES, aims to enhance the use of inland navigation as part of intermodal freight solutions, in order to create a sustainable, competitive and environmentally friendly European-wide transport network.



The manual offers general advice for waterway infrastructure projects and addresses both technical planners and interested stakeholders who want to be involved in a planning process. The early integration of stakeholders (including those representing environmental interests) and of environmental objectives and wide communication are essential for a successful planning process.

Reconciling what might be conflicting interests.

According to Philip Weller, Executive Secretary of the ICPDR, “this new planning tool will substantially enhance and smooth communication between the transport and environment sectors”. To Mr Weller, the public discussions make it clear that “there is a strong need to guide future actions, notably in infrastructure projects at the Danube and Sava Rivers. Some inno-

vative processes and measures have shown that it is indeed possible to create win-win solutions for environment, transport and other river uses.”

In recent years the ICPDR has been very active and successful in establishing the interdisciplinary dialogue between the various interest groups and river users. The first result in 2007 was a ‘Joint Statement on Guiding Principles for the Development of Inland Navigation and Environmental Protection in the Danube River Basin’, endorsed by the ICPDR, Danube Commission and International Sava Commission.

How to set up and succeed with a planning process.

The new manual goes several steps further by providing first a general, illustrated road map; second, background information on the complex legal requirements; and, third, concrete examples of ecology-supportive river engineering. Numerous figures, internet links and references facilitate its use.

The Manual was prepared within the EU PLATINA project, involving 22 organisations in 9 countries to improve inland waterway transport. The ICPDR work is based on two years of intense expert reflections with the Austrian waterway company via donau, the BOKU University of Natural Resources and Life Sciences as well as Inland Navigation Europe.

Result of extended stakeholder consultations.

The preparation of the manual relied on several workshops and commenting phases, actively involving institutions such as the European Commission, transport and environment ministries from various EU countries as well as environmental NGOs.

Get your copy. The manual can be downloaded from the PLATINA webpage www.naiades.info and from www.icpdr.org. Printed copies can be ordered from ICPDR, VIC D0412, PO Box 500, A-1400 Vienna, Austria.

Alexander Zinke is the ICPDR’s project manager for navigation, and the main author of the manual.

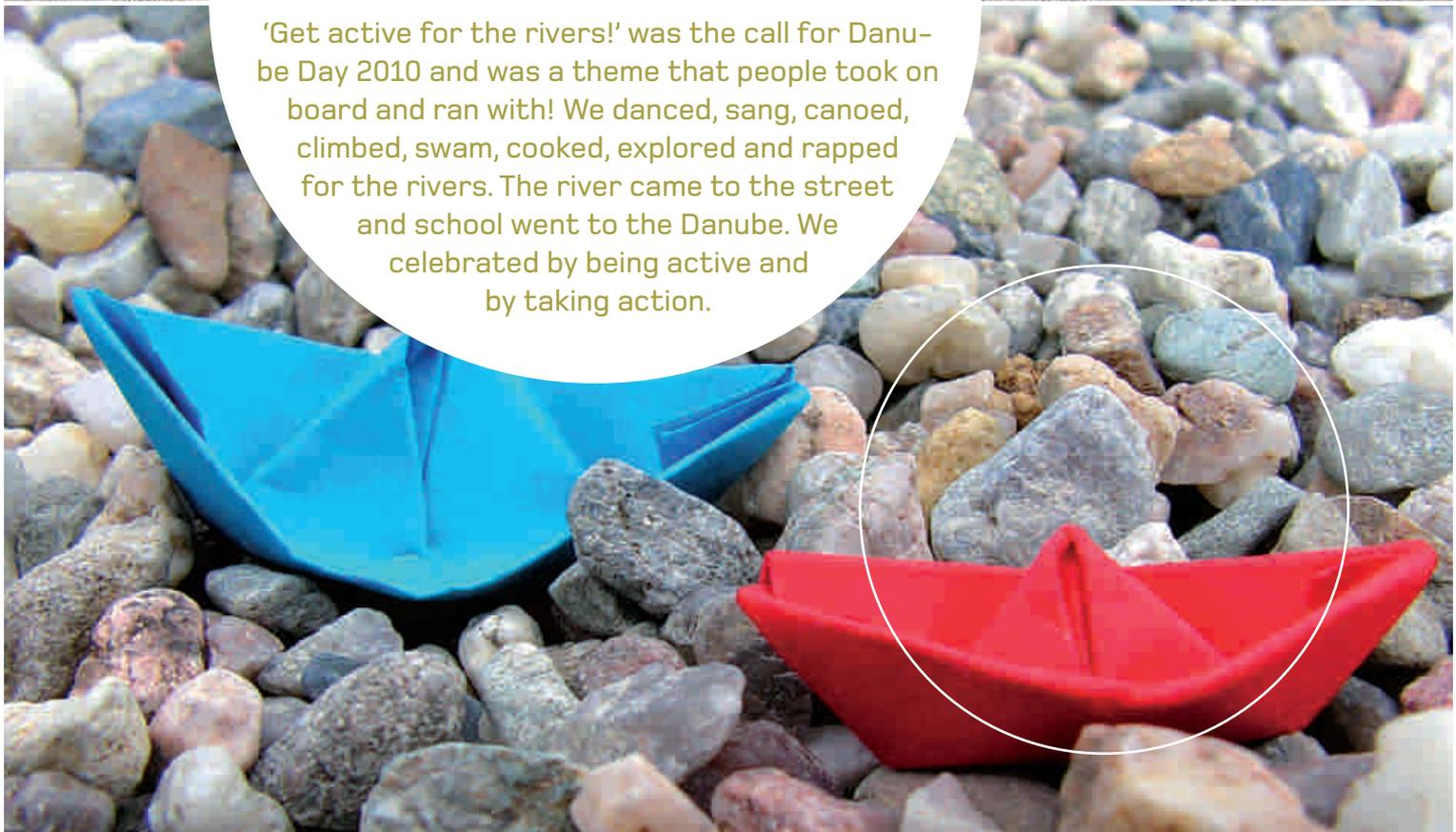


Danube Day activities allowed us to marvel at the spectacles and sights – such as untangling the web in Austria’s Danube Challenge 2010 – and to involve ourselves in creating a sustainable future. *Credit: (above) Bruckner, (below) Union for the Morava River*



Danube Day 2010: Getting active for the rivers!

‘Get active for the rivers!’ was the call for Danube Day 2010 and was a theme that people took on board and ran with! We danced, sang, canoed, climbed, swam, cooked, explored and rapped for the rivers. The river came to the street and school went to the Danube. We celebrated by being active and by taking action.



Danube Day 2010 was an immense success: despite the impacts of serious flooding in Danube countries, it continues to grow. Over 483 organisers – 60 more than last year – held 140 events. Actions built on previous years, cementing events in community life. They brought new partners, creating working relationships that will continue into the future. Overseen by the ICPDR, festivities stretched along the Danube and major tributaries, in 14 countries and 7 capitals. Romania beat all previous records: 205 organisations celebrated in over half the country's counties. Bulgarians got active in 8 towns. In Serbia, 87 partners created a great tide of events in 16 locations. Sava Day, on 1 June, marked the start in Serbia and, with events through to September, it's been more a Danube Summer than a Danube Day.

Every sector of society was involved. From international canoe tours to Ukrainian–Romanian flag ceremonies, basin-wide and Danube-long art extravaganzas to Upper Tisza bilateral workshops, the day provided an impetus to bring people, communities and countries together. The devastating floods were a distressing reminder of the influence of rivers on our lives. Several events were cancelled; others focused on flood issues: Czechs debated protection in Olomouc and warning systems were high on the agenda in Slovakia.

“The highlight of this year has been the cooperative efforts on both sides of the Tisza, working together to protect the river for future generations,” said Andriy Bubyk of Coca-Cola Beverages Ukraine. “This is perhaps a unique example of international cooperation which I hope will become a model for others.”

Getting active in the rivers. One topic stood out above all others – getting active – through sport and exercise or by helping your community. Whichever World Cup team you supported, it was ‘Danube United’ all the way in regional events: thousands played football, enjoyed fishing or had a laugh in sack races. We waltzed in Vienna, tangoed in Belgrade, belly danced in Adony and marched in Lom. Ukraine's Tisza has Talent in the tiny village of Dilove saw 350 people cheer on their favourites – including cycling acrobats in Danube Day T-shirts!

People got in boats: from Serbs learning to sail to professionals wowing Hungarian crowds. But who

needs boats: In Ingolstadt, 100 courageous people braved cold temperatures and high waters to swim a 1km stretch. A flagship event is Austria's Danube Challenge, and 400 children won the chance to take part. Environment Minister Nicholas Berlakovich and swimming champion Mirna Jukic welcomed the youngsters who were faced with an extra challenge – torrential rain! They valiantly soldiered on: pond-dipping, tracking, spider-web climbing and rapping.

Getting active for your community. People rolled up their sleeves and filled bin bags. Plastic pollution was a focus: Derventa NGO Forum from Bosnia-Herzegovina put it best with their Sava Plastic is not Fantastic! campaign. They ran a Clean Danube campaign in Ukraine: “After a hard day of rubbish collecting [the teenagers] were tired but happy and certain that they would never drop litter in the natural environment!” said a WWF organiser. At the Vilkovce ‘Juice Exchange’, bottles collected could be swapped for Coca-Cola. Sava Day in Slovenia saw Environment Minister Roko Žarnić present awards in the You're My River contest, which saw children from 19 schools make environmental adverts. All the children, Žarnić said, had an “incredible ability to touch our hearts”.

Government initiatives were launched and completed. The stunning nightscape of Budapest was the backdrop for Hungary's main event. 120 key decision-makers boarded the *Europa* for a gala cruise, marking the start of a Danube campaign in the run-up to the country's first EU presidency. Bavaria's impressive Action Week for the Danube, attracting 2500 visitors, celebrated the completion of floodplain restoration between Neuburg and Ingolstadt.

“It's important to emphasise that governmental actions are not enough to improve water quality and the environment,” said László Borbély, Minister of Environment and Forests, in his Danube Day message to Basin Committees and Water Basin Administrations across Romania.



Children served as the best ambassadors, bringing the message of the Danube – literally – out into their communities, and proving that we are all in the same boat. Credit: (this page) Wasserwirtschaftsamt Ingolstadt, (opposite page) Union for the Morava River

“Each of us has to do something for the sustainable protection of the Danube Basin ecosystem.”

Danube Day 2010 was BIG. Extraordinary sites and big spectacle characterised events: 4500 people were distracted from shopping at Vienna’s Millennium City to take a closer look at the giant 60m² game of Donau Punkt Genau. As darkness fell, the logo was displayed on the 202m tall Millennium Tower, reminding all Vienna and millions at the Donauinselfest what day it was. In a thought-provoking action, an enormous blue flag dangled high above the fast-flowing Tisza. Temporarily linking the villages of Velyky Bychkiv, Ukraine, and Bocicoiu Mare, Romania, the Fish United flag showing 14 fish in the national colours of each country floated across the sky to Romania – the start of its one year basin-wide journey. At Serbia’s main celebration, the Danube came to the streets. A huge blue swathe was painted onto the tarmac. Visitors strolled down the river, completing tasks to ‘help’ the Danube. ‘Hush’ was needed at Gornje Podunavlje to avoid frightening the shy Black Storks. At Djerdap, children helped Beluga get past the dam and met the Otter at Koviljsko Petrovaradinski Rit.

Finding out about our rivers. Education and investigation were clear themes. Events were dedicated to research; others focused on informing the public. In Serbia, 24 university faculties were involved. Slovakia held a seminar on monitoring water bodies for basin management plans. In Baden-Württemberg, the schoolroom moved to the Danube – German pupils could study the river up close.

“If we have more such activities, I’m sure we will learn more about nature and learn how to take care of it,” said Branko Ledinek, Major of Rače-Fram, talking to the 100 participants at the Danube Day walk in Rački Ribniki-Požeg Landscape Park, Slovenia. “Civil organisations...should take the major role in this task and show us the right way.”

Engaging the Facebook generation. Danube Day was hi-tech and hip, using social networking, live-cams and visual displays. Vienna’s Museums Quartier was the scene of a flashmob waltz launched via Facebook. At the appointed time, everyone enthusiastically began to dance – and some passers-by joined in too! Events could be followed on Facebook and Twitter e.g. Belgrade’s ‘Save the Danube camp’. On board the Donau-Live ship in Vienna, visitors saw what was going on underneath them via an underwater live-cam. New Czech and Bulgarian versions of the Danube Box education kit were also developed this year.

Traditions old and new: music, art and food. Culture was a strong element: traditional music drifted across rivers, whilst rock and jazz blasted out from riverside

stages. The Neuburg Festival was one of the best: 1,000 people watched bands on the floating stage, set against the floodlit castle and river banks lit by candles. Age-old music and craft were on show at ministry festivities in Croatia. A wreath was cast into the waters at Dolna Mitropolia. Danube Day’s own tradition, and – music to some people’s ears – the Greet the Danube Horn Blast took place in Hungary.

Danube Day’s biggest extravaganza was the 7th Danube Art Master contest, which helped develop a sense of solidarity across the Basin. Children’s understanding was clear: Save the Danube and the Living World Around Him and Blue Salvation were winners in Croatia. Danube Day was Danube Food Day in many towns. The Gourmet Festival in Uzlina saw hundreds of Romanians enjoy Delta hospitality. Top chefs competed to win prizes for community projects. Perhaps the best ploy to get good media coverage: Novi Sad held a journalists’ fish-soup contest.

Millions heard about Danube Day through widespread media coverage. We’ll meet again for Danube Day in 2011: can it get any bigger?

The ICPDR would like to thank the organisations involved in Danube Day 2010. Please visit: www.danubeday.org for full details of events and partners.

Suzie Holt lives in Devon, UK, and is a writer on environmental issues. She has been involved in Danube Day since its start in 2004 and before that worked for WWF on the Carpathian Ecoregion Initiative.

Danube Day 2010 was an immense success. Over 140 events stretched along the Danube and major tributaries, in 14 countries and 7 capitals. See some of the festivities on the following pages.



Participants in the Danube Art Master competition were challenged to visit their local rivers and to contemplate what the river means to them. The results of this reflection were then visualised by materials which the children found at and in the river, including reeds, stones or driftwood – even rubbish.

Credit: Union for the Morava River



Cross-border art: the Danube Scroll was transported along the Danube by canoe and painted along the way by a group of international artists. Uniting Hungarians, Croats and Serbs: the 150 km Baja Waters Unite Canoe Tour went ahead despite high waters. The sublime combination of food and culture enlivened the Danube spirit at the Uzlina Gourmet Festival in Romania. Swimming champion Mirna Jukic celebrates with young adventurers on the Danube Challenge 2010.

Credit: (top) UnterwegerZaiss, (above right) Adonyi Evezos, (above left) Ganea/Inquam Photography, (far left) Bruckner

United for the Basin: the Danube Fish United flag is officially handed over from Ukraine to Romania – the start of its tour through the Danube countries.

Credit: All-Ukrainian Ecological League



Taking the message to the streets of Lom, Bulgaria: young people made speeches, shared visions, paraded and launched goodwill messages. The Czech Danube Art Master contest saw more entries than ever before – the ethereal River Queen beat 360 entries from 50 schools and goes through to the international final in Vienna. Good news on Danube Day: WWF announced new colonies of the threatened Pygmy Cormorant were discovered during their recent canoe research expedition in Bulgaria. *Credit: (top) Municipality of Lom, (left) WWF DCP, (right) Union for the Morava River*



Battling hard: a highlight at Neuburg's festival in Germany was the good-natured but strongly contested canoe race, watched by 700 spectators. Young Ukrainians show off their hard work in the Clean Danube campaign in the Danube Delta and created eco-fashion from the colourful plastic rubbish they collected. Danube Action Week in Germany: Dr Markus Söder, Bavarian Environment Minister, (sitting centre), pressed the button to release 3 m³/s of water through the newly restored floodplains. *Credit: (top) Habermayer, (far left) WWF DCP, (left) All-Ukrainian Ecological League, (below) Wasserwirtschaftsamt Ingolstadt*



ICPDR MEETINGS

For final dates, please consult the ICPDR calendar, available at www.icpdr.org.

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|-----------------|---------------------------------------------------------------------------|
| 14–15/9/2010 | TIMISOARA, ROMANIA |
| | INFORMATION MANAGEMENT AND GIS EXPERT GROUP |
| 24–26/9/2010 | VIENNA, AUSTRIA |
| | INTERNATIONAL DANUBE ART MASTER SCHOOL COMPETITION – WINNERS’ TRIP |
| 30/09–1/10/2010 | VIENNA, AUSTRIA |
| | TISZA GROUP |
| 5–6/10/2010 | BUCHAREST, ROMANIA |
| | MONITORING AND ASSESSMENT EXPERT GROUP |
| 13–14/10/2010 | BONN, GERMANY |
| | PUBLIC PARTICIPATION EXPERT GROUP |
| 14–15/10/2010 | TIMISOARA, ROMANIA |
| | FLOOD PROTECTION EXPERT GROUP |
| 21–22/10/2010 | LJUBLJANA, SLOVENIA |
| | RIVER BASIN MANAGEMENT EXPERT GROUP |
| 21–22/10/2010 | BUDAPEST, HUNGARY |
| | GROUND WATER TASK GROUP |
| 9–10/12/2010 | VIENNA, AUSTRIA |
| | ICPDR ORDINARY MEETING |
| DW 03/10 | UPCOMING ISSUE |
| | 2010 floods – a review |
| | Sava update |