

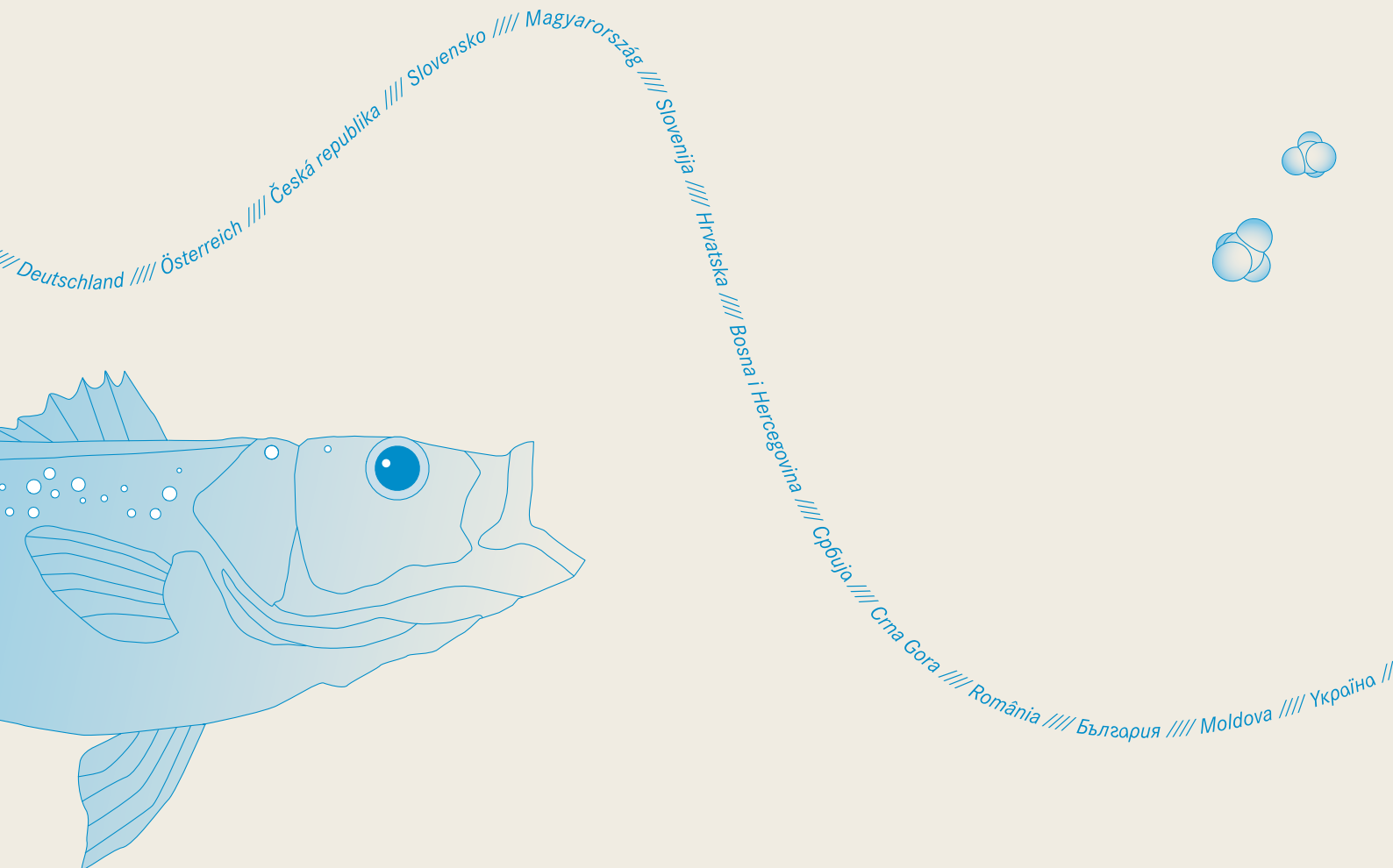
ICPDR IKSD

International Commission
for the Protection
of the Danube River

Internationale Kommission
zum Schutz der Donau

Shared waters – joint responsibilities

ICPDR Annual Report 2017





2017 was another busy and exciting year for the ICPDR and its Contracting Parties ensuring the full and timely implementation of the ambitious measures required by the Danube River Basin Management and Flood Risk Management Plans and the Danube Declaration from the 2016 ICPDR Ministerial Meeting.

Doing so in a coherent and coordinated fashion within the framework of the cooperation in the ICPDR to ensure a cleaner, healthier and safer Danube is essential for sustainable development in the basin. The ICPDR has the necessary internal structures, cooperation with key stakeholders and relevant international organisations and initiatives. It is therefore well equipped to address them and continues to be a global front-runner in international river basin management.

Much progress has been made to reduce pollution, resulting in significant improvements in Danube chemical status and physical water quality. However, much still needs to be done in the coming years to safeguard ecosystems, biodiversity and ecosystem services in the basin. Further efforts are needed to reduce pollution and to restore and preserve habitats and appropriate hydrological conditions. In addition, the focus on efforts to reduce flood risks still needs to move from defensive action to more proactive, sustainable and dynamic management.

The ICPDR and its expert groups are developing tools and strategies to address and communicate these issues. Examples from 2017 of such activities include preparations for an updated Climate Change Adaptation Strategy, adoption of the Danube Sturgeon Strategy, testing of an Accident and Emergency Warning System, and discussions about the application of the agreed ICPDR Guidance on sustainable hydropower development, e.g. in the Western Balkans.

When applied by Contracting Parties, these tools and strategies will bring important benefits by contributing to restoring and preserving ecosystem services and mitigating the significant negative impacts that climate change and economic and demographic development can have on them in the basin. Access to the necessary finance for investments in water security, including climate adaptation finance, will be an important facilitator for successful implementation.

The EU Presidency has brought added value by focusing on the following specific activities:

Improved coordination of EU support mechanisms, with a particular emphasis on support to non-EU countries in the basin with a focus on support mechanisms and instruments under EU regional, research, agricultural and enlargement policies.

Applying a more integrated approach to mitigating agricultural pressures in water management, in line with what has been successfully developed by the ICPDR for hydropower, and better exploitation of potential synergies with the EU Common Agricultural Policy.

Improving the political visibility of the ICPDR, in particular vis-à-vis the general public and key EU institutions. Successful activities in this area include a meeting with the European Parliament and extensive communication through social media.

Finally, I would like to express my gratitude for the good cooperation with and the unfaltering support of the Contracting Parties, stakeholders and observers and, in particular, the ICPDR Secretariat.

I wish the German 2018 Presidency all success in taking forward all of these issues.



Peter Gammeltoft
2017 ICPDR President

ICPDR highlights in 2017

2017 was a year that saw further progress towards the ICPDR's long-term vision of sustainable integrated river basin management in the Danube Basin. This included the finalising of the updated Danube study on climate change adaptation and the Danube Declaration summary.

The following highlights are just some of the many ICPDR initiatives undertaken in the Danube River Basin in 2017:

- The revised draft of the Danube study on new scientific results in climate change research and the resulting impacts on water availability was finalised by the Ludwig Maximilian University (LMU) in Munich. The study provides the basis for a common Danube-wide understanding of the future impacts of climate change on water resources and suitable adaptation measures for the development of the updated [Danube Climate Adaptation Strategy](#). – see page 7
- The Kick-Off Meeting for [the Danube Sediment Project](#) took place in March, followed by a political kick-off event in April 2017 in Budapest. – see page 7
- A workshop on [the Relationship between Hydromorphological Alterations and the Response of Biological Quality Elements in Rivers](#) took place in late November in Vienna. – see page 8
- The ICPDR Hydropower Workshop took place in March 2017 in Vienna. – see page 8
- The ICPDR chairpersons meeting took place in February. – see page 8
- A [kick-off workshop](#) organized with the support of the [PM EG](#) took place in November 2017 in Bucharest to officially launch the waste water management initiative and to develop a roadmap to provide wastewater management solutions for all stakeholders. – see page 9
- The [TNMN Yearbook 2015](#) was prepared, finalised and approved. – see page 11
- Comprehensive multinational tests were carried out at all Principal International Alert Centres (PIACs) to check the functionality of the [Accident and Emergency Warning System \(AEWS\)](#). – see page 12



Wastewater

Bucharest host of the international Workshop on Wastewater Management in the Danube River Basin.



Danube Sediment Project Kick-off meeting
DanubeSediment aims at improving water and sediment management as well as the morphology of the Danube River



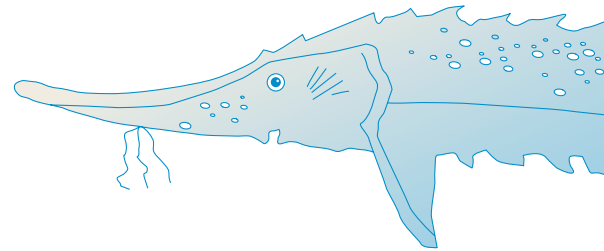
AEWS
Comprehensive multinational tests were carried out at all Principal International Alert Centres (PIACs).

- Work on the revision of the **Sturgeon Communication Strategy** continued with the aim of supporting the development of the **ICPDR Danube Sturgeon Strategy**. – see page 16
- The **Danube Declaration summary** was finalised following approval by the Heads of Delegation and is now available in print form in ICPDR design. – see page 16
- The **importance of social media** was emphasised in 2017. There is now a closed Facebook group for public participation and social media channels are planned for the future. – see page 16



The ICPDR also provided participation and partnership in important activities and events both throughout the DRB and across the world:

- The **JOINTISZA** Project started on 1 January 2017 and dominated activities in the Tisza River Basin throughout the year. – see page 18
- Preparation of the Sava RBMP continued to be the most important task in achieving one of the key objectives of the **Framework Agreement for the Sava River Basin (FASRB)**: the establishment of sustainable water management in the Sava River Basin. – see page 18



Danube Watch 1/17
Deep freeze on the Danube –
Cross-border actions avert danger



Hydropower Workshop, Vienna
Issues discussed included progress made,
solutions and remaining challenges.

EU visibility event in Vienna

The ICPDR and the Representation of the European Union in Austria, supported by the Austrian Ministry for Agriculture, Forestry, Environment and Water Management jointly organized an information event on Climate change in the Danube Region. This event was also an opportunity to mark the 2017 Presidency of the ICPDR with the European Union.



World class expertise: the operational and institutional framework

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

The International Commission for the Protection of the Danube River (ICPDR) is the largest international body of river basin management experts in Europe. Its mission is to promote and coordinate sustainable water management for the benefit of all the people of the Danube River Basin.

The structure of the ICPDR

In 1994, the Danube countries signed the [Danube River Protection Convention](#) and established the ICPDR in 1998. The ICPDR is made up of [15 Contracting Parties](#) (Austria, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Moldova, Montenegro, Romania, Serbia, Slovakia, Slovenia, Ukraine and the European Commission) who have all committed themselves to implementing the Danube River Protection Convention (DRPC). The ICPDR serves as a forum for coordination on water management issues in which the Contracting Parties agree on legal, administrative and technical measures to maintain and improve the quality of the Danube River and its tributaries.

The ICPDR is steered by an [Ordinary Meeting Group](#), which establishes policy and strategy, and a [Standing Working Group](#) which provides guidance and prepares decisions. In addition, Expert Groups, Task Groups and representatives of stakeholder groups provide the scientific and technical basis for the ICPDR's work.

[Expert Groups](#) (EG) are a vital part of the structure of the ICPDR. They address the requirements specified under the Convention and also those related to implementation of the [EU Water Framework Directive](#) (WFD) and the [EU Floods Directive](#) (EFD).

The Expert Groups are:

- River Basin Management Expert Group (RBM EG)
- Monitoring and Assessment Expert Group (MA EG)
- Pressures and Measures Expert Group (PM EG)
- Flood Protection Expert Group (FP EG)
- Accident Prevention and Control Expert Group (APC EG)
- Information Management and GIS Expert Group (IMGIS EG)
- Public Participation Expert Group (PP EG)
- Strategic Expert Group (ST EG)

Expert Groups Chairpersons

Group name	Name	Nominated by	Organisation
RBM EG	Knut Beyer	Germany	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
RBM EG	Marija Šimunović	European Union	European Union
MA EG	Franz Wagner	Austria	Federal Ministry of Agriculture, Forestry, Environment and Water Management
PM EG	Elena Tuchiu	Romania	Romanian Waters – National Administration
FP EG	Károly Gombás	Hungary	North-Transdanubian Water Management Directorate (ÉDUVIZIG)
APC EG	Yurii Nabyvanets	Ukraine	Ukrainian Research Hydrometeorological Institute
APC EG	Janez Polajnar	Slovenia	Environmental Agency of the Republic of Slovenia
IMGIS EG	Dragana Ninković	Serbia	Institute for the Development of Water Resources - "Jaroslav Cerni"
PP EG	Susanne Brandstetter	Austria	Federal Ministry of Agriculture, Forestry, Environment and Water Management – Department IV – Water
S EG	Knut Beyer	Germany	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety



Task Groups (TG) are established under the responsibility of the permanent expert groups and comprise delegates from existing expert bodies or additional specialists and include professionals specifically needed for particular tasks. Task groups have been formed to deal with issues concerning hydromorphology, economics, groundwater management and nutrients.

The Task Groups are:

- Hydromorphology Task Group (HYMO TG)
- Economics Task Group (ECON TG)
- Groundwater Task Group (GW TG)
- Nutrient Task Group (N TG)

Task Groups Chairpersons

Group name	Name	Nominated by	Organisation
HYMO TG	Veronika Koller-Kreimel	Austria	Federal Ministry of Agriculture, Forestry, Environment and Water Management
ECON TG	Cristian Rusu	Romania	Romanian Waters – National Administration
GW TG	Andreas Scheidleder	Austria	Umweltbundesamt GmbH – Federal Environment Agency Austria
N TG	Franz Überwimmer	Austria	Office of the Upper Austrian Government

ICPDR Observers

Environmental protection is a community responsibility and the active involvement of the public is a core principle

in sustainable water management. 23 organisations have taken the opportunity to become observers to the ICPDR:

- | | |
|---|---|
| <ul style="list-style-type: none"> Black Sea Commission (BSC) Central Dredging Association (CEDA) Convention on the Protection and Sustainable Development of the Carpathians Danube Civil Society Forum (DCSF) Danube Commission (DC) Danube Competence Center (DCC) Danube Environmental Forum (DEF) Danube Parks Danube Tourist Commission (Die Donau) European Anglers Alliance (EAA) European Barge Union (EBU) European Water Association (EWA) Friends of Nature International (NFI) | <ul style="list-style-type: none"> Global Water Partnership (GWP/CEE) International Association for Danube Research (IAD) International Association of Water Supply Companies in the Danube River Catchment Area (IAWD) International Hydrological Programme of UNESCO (IHP/Danube) International Sava River Basin Commission (ISRBC) RAMSAR Convention on Wetlands Regional Environmental Center for Central and Eastern Europe (REC) VGB PowerTech e.V. viadonau World Wide Fund for Nature – Danube-Carpathian Programme (WWF DCP) |
|---|---|

River Basin Management: A sustainable future for the Danube

The River Basin Management Expert Group (RBM EG) is responsible for activities concerning the development and implementation of the Danube River Basin Management Plan. The Hydromorphology Task Group and Economics Task Group both report to the RBM EG.

The RBM EG continued to focus its attention on updating its work programme and timetable. 2017 saw a great deal of activity, including the update of the study on adaptation to climate change from the Ludwig Maximilian University Munich (LMU) and the Kick-Off Meeting for the Danube Sediment Project. The Chairpersons Meeting, Interim Report, Hydropower Workshop, Joint Statement and Sturgeon Strategy were also priority issues.

During ICPDR EG and TG meetings in autumn 2017, the outline and data collection template for the [Interim Report on the Implementation of the Joint Program of Measures \(2018\)](#) were discussed and key messages were drafted, presented and discussed at the 46th RBM EG meeting.

The ICPDR recognizes that Danube sturgeons are “living fossils” representing a natural heritage of the Danube River Basin and endorsed Danube sturgeons as flagship species for the Danube River Basin to advance broad public awareness and political commitment for the Danube sturgeons and the ecosystem of the Danube River Basin as a whole.

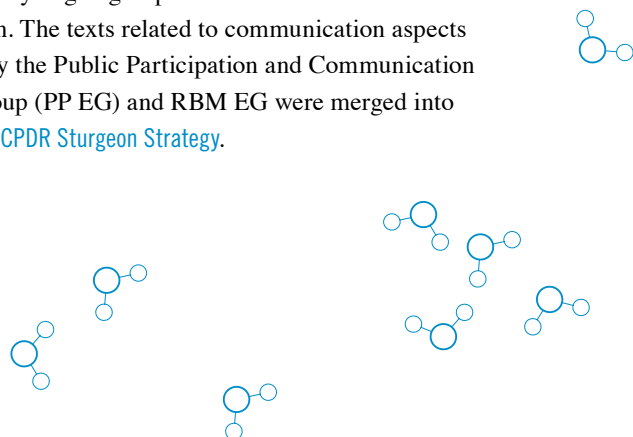
Some of the required actions for sturgeon conservation are clearly within the key competences of the ICPDR, such as the restoration of lost and altered habitats, the prevention of further habitat degradation, the enabling of fish migration as well as the improvement of water quality.

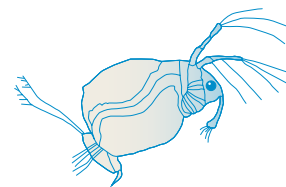
In 2017 it was agreed not to develop an [update of the Danube Basin Analysis Report 2013](#) in the year 2019, but to ensure the timely preparation of data collection for DRBMP 2021, in particular with regard to risk assessment.

The Kick-Off Meeting for the [Danube Sediment Project](#) took place in March, followed by a political kick-off event in April 2017. The main objective of this project is to improve Water and Sediment Management as well as the morphology of the Danube River. To close existing knowledge gaps, sediment data collection will be carried out, providing information for sediment data analysis and will lead to a handbook on good practices of sediment monitoring methods. Furthermore, a baseline document on the Danube Sediment Balance will also be prepared, explaining the problems which arise from sediment discontinuity negatively influencing flood risk, inland navigation, ecology and hydropower production.

The 8th meeting of the [Joint Statement on Inland Navigation and the Environment](#) saw the adoption of a proposal to set up a Mixed Environment Transport External Expert Team (METEET) to address all environmental issues that may arise during the planning and implementation phases of inland waterways transport projects in the Danube Region. The team will provide advice to competent authorities in developing sustainable strategies, plans and projects in the field of inland navigation on the Danube. The first METEET training mission took place in September in Vukovar, Croatia.

In December 2016 the ICPDR called on all contracting parties to actively support the revision of the [ICPDR Sturgeon Communication Strategy](#). In June 2017 the RBM EG was asked “to prepare a comprehensive overview of all sturgeon conservation measures that had already been implemented, were currently ongoing or planned for the future in the Danube River Basin. The texts related to communication aspects prepared by the Public Participation and Communication Expert Group (PP EG) and RBM EG were merged into a uniform [ICPDR Sturgeon Strategy](#).”





The updated study on adaptation to climate change was prepared for discussion at the 46th RBM EG Meeting. The RBM EG supported the main messages of the study and delivered detailed comments in written form to the Ludwig Maximilian University, Munich (LMU). The ICPDR Adaptation Strategy will be updated and finalised in 2018.

The [Guiding Principles on Sustainable Hydropower Development](#) were adopted by the ICPDR at the Standing Working Group Meeting in June 2013 and recommended for application by the Danube countries. The [ICPDR Hydropower Workshop](#) took place in March 2017 in Vienna. Issues discussed included progress made, solutions and remaining challenges. Good feedback from the water sector was received, but only a few representatives from the hydropower sector participated.

A workshop on [the Relationship between Hydromorphological Alterations and the Response of Biological Quality Elements in Rivers](#) took place in late November in Vienna.

The [ICPDR chairpersons meeting](#) took place in February with the purpose of discussing data collection and the outline of the 2018 and 2019 products, as well as coordination requirements between the EGs. The main proposals emerging from the meeting were summarized by the Secretariat for further discussion by the EGs in the spring 2017 meetings. The meeting served to align the activities of all expert and task groups towards the key milestones of the development of the RBM Plan, eg. Interim report and the roadmap for the development of the DRBMP 2021.



Pressures and Measures: assessing challenges, targeting priorities

Updating our understanding of the pressures affecting the Danube environment and the effectiveness of measures designed to alleviate them is vital if long-term sustainable development is to be achieved.

Eliminating untreated wastewater emissions, limiting eutrophication and reducing threats from hazardous substances are among the key basin-wide objectives. To this end, updating data on pollution, and modelling emissions are essential, as is the integration of EU policies into national strategies.

The PM EG discussed the concept of the [Interim Report on the Implementation of the Joint Program of Measures](#) for 2018, according to guidelines laid down by the RBM EG, and determined the structure of the pollution related chapters and drafted the titles of the respective key messages. The message titles are:

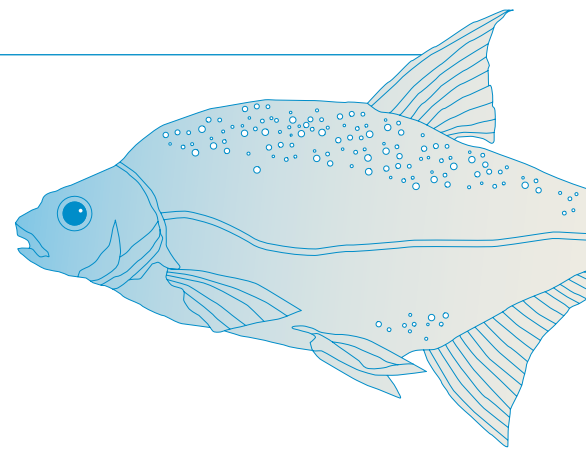
- **Organic pollution:** efforts made in urban and industrial wastewater management are significantly decreasing organic pollution, resulting in much cleaner and healthier waters for both the environment and people to enjoy.
- **Nutrient pollution:** enhanced wastewater treatment and good agricultural practices are reducing nutrient inputs, thereby ensuring stable healthy ecosystems and beneficial water uses.
- **Hazardous substances pollution:** advanced wastewater treatment and appropriate pesticide use is minimising and eliminating hazardous substances pollution, thereby safeguarding ecosystems and human health.

Details regarding the collection of data needed to support assessments, along with the reference period and spatial scope of the data to be collected, were ascertained. Assessment of the data and drafting of the respective chapters of the report will be completed in 2018.

The PM EG agreed to start activities to foster joint discussions on [wastewater management](#) to strengthen capacity related to the identified key challenges among the three levels involved: (1) national / regional authorities, (2) local authorities and (3) the utilities. A number of activities for wastewater management are planned, comprising of a set of workshops and training events. The first event was a kick-off workshop in November 2017 in Bucharest to officially launch the initiative and to develop a roadmap to provide wastewater management solutions for all stakeholders. The event was co-organised with the International Association of Water Supply Companies in the Danube Catchment Area (IAWD), the World Bank (both jointly managing the Danube Water Program) and the Joint Research Centre of the EC. The workshop was based on three pillars that the countries have identified: (1) investment & financing, (2) management & operation and (3) innovation & technology. The potential follow-up activities will be discussed with the partner organisations in 2018.

The SOLUTIONS Project cooperated with the PM EG to carry out a specific monitoring campaign to sample and analyse urban wastewater treatment plant (WWTP) effluents for [hazardous substances](#) pollution. The exercise adopted a harmonised sampling strategy, with analyses being undertaken in two high quality laboratories to provide information for a wide range of organic emerging chemicals and heavy metals. In total, 12 WWTPs in nine countries (DE, AT, CZ, SK, HU, SI, HR, RS and RO) were sampled between July and September 2017. Assessment and dissemination of the results will be completed in 2018.

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Modelling experts from SOLUTIONS were invited to the 27th PM EG Meeting for joint discussions on modelling issues. The PM EG agreed to ensure further information exchange with the SOLUTIONS Project in order to make use of the modelling activities and their results for pollution control purposes in the DRB.

The PM EG also finalised a pre-study on hazardous substances pollution aimed at investigating data availability, not only in selected pilot countries but also for a basin-wide emission assessment on certain hazardous substances. Its objective was also to prepare the technical background for a project proposal on investigating hazardous substances emissions in the DRB. The status of the study report and the next steps towards finalisation were presented for discussion at a workshop in Budapest in November 2017. The outcomes of the study will be used for completing a large project proposal on hazardous substances pollution. To support this activity a preparatory project will be implemented in 2018 funded by the Danube Strategic Project Fund (DSPF) managed by EUSDR PA10.

The Nutrient Task Group (NTG) started cooperating with the Vienna University of Technology, to develop a consistent methodology for regionalised nutrient surplus calculations. The work will be financed by the EU LIFE Grant project. The objective of the project is to develop a consistent and homogeneous methodology to calculate time series of nutrient surplus for the Danube countries according to regional data.

NTG also finalised the pre-study on agriculture, consisting of two desk studies. The first study focuses on the current situation of the agricultural sector in the Danube countries. It also offers an overview (toolbox) of potential measures to be applied on agricultural fields to reduce nutrient losses from soil and nutrient transportation towards waterbodies.

The second study aims to provide an analysis of the current economic situation and challenges to the agricultural sector in the Danube countries. It is also looking at potential future economic development scenarios in order to better understand the possible future economic drivers and development scenarios of agriculture under current and projected socio-economic and policy conditions.

Both studies will feed into further work on sustainable agriculture with the aim of developing a guidance document for the DRB. The NTG will establish a core group for the guidance preparation, i.e. analysing the pre-study outcomes in order to move from the information accumulated in the knowledge base towards recommendations to be provided by the guidance.

The NTG and the Secretariat developed an ICPDR Voluntary Commitment to the UN Ocean Conference held on 5–9 June 2017 in New York. The aim of the high-level conference was to support the implementation of UN Sustainable Development Goal 14: to conserve and sustainably use the oceans, seas and marine resources for sustainable development. The conference called for voluntary commitments which were initiatives voluntarily undertaken by stakeholders aiming at contributing to the implementation of Sustainable Development Goal 14. ICPDR's commitment highlighted the guidance document on sustainable agriculture as a tool for ensuring the reduction of nutrient pollution arising from the DRB and the protection of the coastal and marine ecosystems of the Black Sea.

Monitoring and Assessment: quantifying problems... and progress

Ongoing water assessment is a vital process that ensures that our water is fit for consumption and targets action to enhance chemical, ecological and quantitative status.

The Monitoring and Assessment Expert Group (MA EG) is responsible for water quality and assessment issues, including the Joint Danube Survey (JDS). Its remit covers operation of the Trans-National Monitoring Network (TNMN) and the Analytical Quality Control (AQC) programme. Priorities for 2017 included analysing the effect of climate change on water temperatures, establishing the coherent monitoring of mercury in waterbodies, updating data from JDS3 and preparing for JDS4.

The first draft list of the [Danube River Specific Substances](#) produced by JDS3 was revised by the SOLUTIONS project with the intention of incorporating the SOLUTIONS modelling results.

The final version of the [TNMN Yearbook 2015](#) was prepared and approved by the MA EG.

[QualcoDanube AQC 2017](#) test samples were dispatched on schedule in September. QualcoDanube AQC 2017 covered nutrients and priority substances / heavy metals, whereas QualcoDanube AQC 2018 will focus on nutrients and priority substances / organic micropollutants.

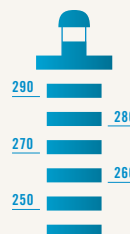
As part of the [investigative monitoring programme for climate change](#), the MA EG prepared an analysis of long-term trends in water temperature. This analysis was incorporated into the paper “Review of impacts of climate change on surface water temperature and quality in the Danube River Basin”.

The DRBMP – Update 2015 highlights the emerging problem of the concentration of mercury in biota in excess of environmental quality standards (EQS) in all surface waterbodies monitored to date. StWG-13 therefore encouraged ICPDR Contracting Parties to establish the [monitoring of mercury in fish at TNMN sampling sites](#). The MA EG has agreed that TNMN will report on mercury in fish in three-year cycles. The first cycle was between 2014-2016. DE, AT, CZ, HU, SI, BG and SK delivered data for this period so that it could be reported in the TNMN Yearbook 2016.

GW TG considered the potential of JDS4 for both further investigation of groundwater quality and raising public awareness concerning groundwater protection. All countries were invited to nominate JDS4 sampling sites and to submit a list of substances found in groundwater that they would like to have analysed during JDS4 by 31 January 2018.



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Accident Prevention and Control: Reducing risks and responding to emergencies

The rapid execution of the ICPDR Accident Emergency Warning System (AEWS), along with identification and action at risk sites, and planning for cross-border emergency responses are resulting in a cleaner, safer Danube environment.

The work of the Accident Prevention and Control Expert Group (APC EG) involves testing and maintaining the Accident and Emergency Warning System (AEWS) and updating inventories of accident hazard sites (AHS) and contaminated sites (CS). The focus of activities in 2017 was on ensuring the functionality of systems, fine-tuning AHS data, improving training facilities and enhancing tailing management.

Comprehensive multinational tests were carried out at all Principal International Alert Centres (PIACs) in the spring of 2017 to check the functionality of the system and the cooperation of PIACs in handling an accident moving downstream in a large international river. The test was a success, improving the skills of the AEWS operators by giving them hands-on experience and helping to fix bugs in the AEWS system. The APC EG recommends continuing with such tests on a regular basis in the future.

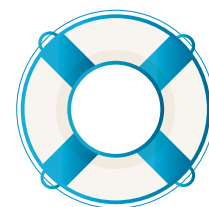
The Secretariat initiated the Danube AEWS 24/7 operability test in November 2017 to test the functionality of the system and 24/7 preparedness of the PIACs. The test confirmed that the Danube AEWS is working as expected and without technical problems. All 14 PIACs reacted quickly; most of them within 16 minutes and all within two hours, thus all responding within the designated three-hours response time. AEWS operation training also took place during the 9th APC EG meeting in April 2017.

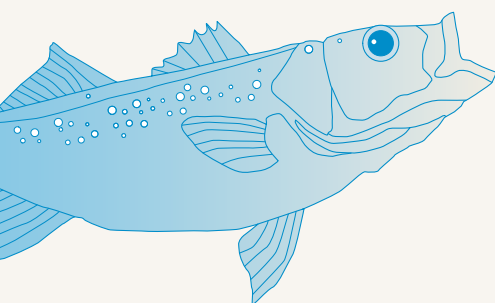
As part of ongoing efforts to enhance training, a self-contained “playground” has been developed where individual users can try out features of the system and create messages without actually triggering an alert. All countries’ PIACs are encouraged to use the AEWS playground for training purposes.

The APC EG finalised the basin-wide Accident Hazard Sites (AHS) and Contaminated Sites (CS) inventories. Fine tuning of data concerning industrial classification was completed in 2017. AHS data is currently available from 13 countries, with no information available from Montenegro. In stark contrast, eight out of 14 of the DRB countries were unable to obtain the information needed to undertake risk assessment for CS. Data is currently only available in Germany, Austria, the Czech Republic, Slovakia, Hungary and Ukraine. The APC EG agreed that AHS and CS inventories will be kept as living databases in DanubeGIS for further data revision / submission by all countries.

The APC EG finalised the analysis of the inventories based on the latest data submissions, and fine-tuning and updated the draft assessment report and its maps and annexes. The updated draft version will be presented and discussed in 2018. The APC EG will develop a final technical assessment report based on the outcomes of the discussions.

The APC EG has developed a draft structure and outline for a public report on accident prevention and control. The necessary information was collected in winter 2017; based on this, a draft public report will be developed in spring 2018 in cooperation with the PP EG for further discussions.





At the 9th APC EG Meeting all countries supported the initiative to start activities relating to safety issues regarding **tailings management facilities (TMF)** in the DRB. Competent authorities in most DRB countries will be asked to provide basic data on TMFs in order to identify TMF hot-spots and to prioritise sites in terms of necessary safety improvements. The APC EG agreed that data collection on the TMFs would be started in summer 2018 in those countries where the issue is most relevant. The Secretariat assigned a specific task and budget to this work within the framework of the EU LIFE Grant project.

The APC EG also agreed to start a project on capacity building relating to the TMF issue. The project will organise regional training events for authority inspectors and facility operators on how to improve safety conditions at the TMFs. Training events will be organised in Romania and Serbia, where a high number of TMFs exist (one for the Sava region and another one for the eastern and southern countries). The project proposal will be developed in 2018 and submitted to the German Environment Agency for funding.



Sustainable flood protection across the Basin

The ICPDR's Action Programme for Sustainable Flood Protection and its Danube Flood Risk Management Plan encourage moving away from defensive action against hazards in favour of proactive, sustainable and dynamic flood risk management.

The work of the Flood Protection Expert Group (FP EG) is to understand, map, and mitigate flood risks, and forms the foundation for integrated basin-wide flood protection. The planning and implementation of existing projects and upcoming projects such as DAREFFORT, along with the development of the Danube Hydrological Information service (DanubeHIS), are all seen as major contributions to mitigating the risk of flooding in the DRB.

The DAREnet project to support flood management practitioners across the Danube River region continued its efforts to build a multi-disciplinary community of practitioners, operating within a network of civil protection organisations. The project is supported by a broad range of stakeholders with expertise in the fields of policy, industry and research. The ICPDR will provide DAREnet with technical and political feedback and use the DAREnet outcomes in order to contribute to the [Danube Flood Risk Management Plan update 2021](#). The DAREnet project has received funding from the European Union's Horizon 2020 research and innovation and the project kick-off meeting was held in September 2017 in Germany.



Planning for the [DAREFFORT](#) project continued in 2017. Due to start in mid-2018, this Interreg project will enhance the possibilities of flood and ice monitoring and forecasting by improving access to recorded hydrological data. It will also support the development of the [Danube Hydrological Information service \(DanubeHIS\)](#). The project will run until mid-2021.



The FP EG agreed that the [DanubeHIS](#) should display data on water levels, discharge, water temperatures and precipitation for the Danube and its major tributaries. None of this data is mandatory and countries will submit whatever is available.

All countries were asked to review the [Preliminary Flood Risk Assessment \(PFRA\)](#) Summary Report and report all necessary revisions. The FP EG agreed to use the same Areas of Potentially Significant Flood Risk (APSFR) map criteria which were applied in the first cycle. All FP EG members were asked, in cooperation with IMGIS EG colleagues, to check and, if necessary, update APSFR data in the Danube GIS.

The FP EG agreed to prepare a report on the [ice event in January and February 2017](#). The report was presented and distributed to the FP EG and PP EG for comments before being revised and submitted to the OM-20.

The FP EG developed a [discussion paper on risks and opportunities for applying flood risk measures under the Water Framework Directive \(WFD\)](#). Aimed at increasing awareness among the Danube countries, it provides a snapshot of Natural Water Retention Measures (NWRM). FP EG members were asked to submit examples of how other measures (WFD, nature conservation, etc.) affect flood risk management objectives.

GIS: mapping out a positive future for the Danube

Developing measures that address basin-wide problems relies on an accurate knowledge-base that allows different scenarios to be modelled and evaluated.

The Information Management and Geographical Information System Expert Group (IMGIS EG) plays a vital role in conceptualising, informing, presenting and supporting the tasks of the ICPDR. It is responsible for the development and maintenance of datasets, maps and online systems such as the ICPDR DanubeGIS website. GIS maps provide a detailed picture of the state of the basin, its utilisation and management, thereby presenting future scenarios and pinpointing areas with optimal potential.

The [integration of data into DanubeGIS](#) continued with the PM EG asking to extend the published map layers of DRBMP 2015 data to include all available detailed values. APC EG data was also integrated, with corrections and data submission of AHS and CS datasets provided by countries by August 2017. The assessment report and maps were finalised in autumn 2017.

The Water Quality Database is also planned to be integrated into DanubeGIS, starting with templates for [JDS4](#) to address the more complex data collection needs during this survey. The data collection templates are to be developed in the JDS4 preparation phase, in close cooperation with JDS4 core team members.

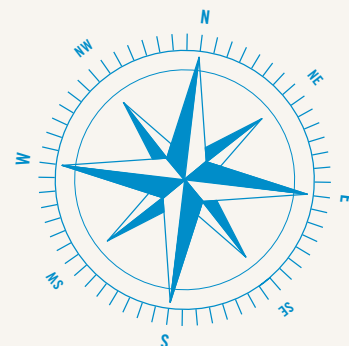
The scope and contents of the future [DanubeHIS](#) was further discussed by IMGIS and FP EG and the relevant policy document for data exchange has been drafted. An overview map of the nominated stations will be prepared. Close coordination with the national hydrometeorological services will be crucial for efficient system development.

Several [updates for DanubeGIS](#) have been implemented. These provide a new access level for project users (JOINTISZA) and are a major improvement that will be useful in the integration of datasets including the DRBD and Tisza basin, JDS sampling sites, MONERIS data, and the results of future projects. The IMGIS EG also agreed on further development steps for DanubeGIS to be implemented in the near future.

A number of improvements have been made to [Danubis](#) relating to event registrations and navigation between group meetings. Due to changes in the hosting infrastructure at UN Vienna, the ICPDR has also established its own mail server and is now using [icpdr.org](#) as its email domain. The new mail system will be closely integrated with Danubis and provide for more possibilities in mail management.

PP EG together with IMGIS EG started an initiative to make [DanubeGIS maps](#) more visible. The ICPDR website will feature a series of maps with information that is accessible to a non-technical audience. The two expert groups also suggested adding links from websites of national competent authorities to DanubeGIS to further promote its usage; the numbers of visits to DanubeGIS are still lower than other ICPDR websites.

IMGIS EG is following projects with [potential DanubeGIS usage](#), such as the recently launched JOINTISZA project. DanubeGIS has the potential to facilitate data collection and the preparation of tables, graphs and maps as a basis for the report. Project partners will be able to use DanubeGIS functions and data related to the project.



Promoting public participation and communicating the Danube

Publicising information about the Danube River Basin and encouraging involvement is central to the activities of the ICPDR. Actions spread messages about sustainable development, environmental conservation, Danube solidarity and good practice throughout the region.

The Public Participation Expert Group (PP EG) continued to promote ICPDR activities by utilising an extensive range of integrated communication tools. 2017 saw the launching of an initiative to create social media channels to make communications more accessible to the public.

Details of the [Interim Report on JPM Implementation – 2018](#) were finalised. The report will be concise, with ten key messages, and is expected to be more appealing to the broader public. The overriding message will be “Public participation is bringing everybody in the Danube Basin on board!”

The draft version of the [ICPDR Sturgeon Communication Strategy](#) was finalised in October 2017. Parts of the document relevant to specific communication measures have been integrated into Chapter 5 of the RBM EG document “ICPDR Sturgeon Strategy”.

The [Danube Declaration summary](#) was finalised following approval by the Heads of Delegation and is now available in print form. The open files have been made available for translation in national languages, thereby helping the countries in their efforts to disseminate the messages of the Declaration.

[Danube Day 2017](#) marked the 14th event of its kind. It was a celebration of cleaner rivers following 23 years of ground-breaking international cooperation. Riverside festivals, public meetings and fun educational events paid tribute to the Danube rivers, their people and the progress being made. Festivities took place in June in Austria, Bosnia-Herzegovina, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Moldova, Romania, Serbia, Slovakia, Slovenia and Ukraine, with many of the country events extended into July.

The [Danube Art Master](#) competition took place once again in 2017, led by the Global Water Partnership (GWP) in close cooperation with the PP EG. Organisation and coordination at country level was exceptional and saw the creation of many excellent pieces of art. A special video category was launched this year with three winners receiving a “special prize” in this creative category.

The [importance of social media](#) was emphasised at the 21st PP EG Meeting in 2017. There is now a closed Facebook group for public participation. It was proposed that PP EG include this issue on its agenda with the aim of launching ICPDR social media channels. The PP EG is asking for the support of contracting parties to develop a strategy for the future launch of ICPDR social media communication. The objective is for PP EG communications to become more visible and more transparent and accessible to the public.

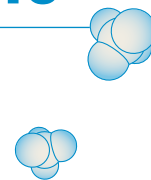
The outcome of the [input of the stakeholder mapping](#) by the PP EG members and representatives of the countries was compiled in a first evaluation document. The questionnaire was then passed to the other expert and task groups. The results of the stakeholder mapping exercise and the outcome was then presented to the PP EG at its autumn meeting. The next step is to create a communication matrix to develop a more targeted ICPDR communication strategy that will help to prioritise efforts, resources and budgetary resources.

A list of PP EG nominees for national communication coordinators was submitted, based on a template provided by MA EG. The PP EG considers sufficient coverage of JDS4 by the communication process to be of great importance. It is essential for the ICPDR to show just how transboundary cooperation works. The focus will be on three main areas: press work and a PR campaign, the public report, and online dissemination.



Partnership and cooperation: river basin planning in the sub-basins

Forging strong, successful partnerships at a local, national and international level makes the work of the ICPDR a model for the rest of the world.



The ICPDR supports the development of sub-basin programmes and partnerships with neighbouring regions. Such cooperation is vital for sustainable integrated river basin management (RBM) in the Danube region. As an acknowledged global leader in RBM, it has particular expertise in fostering international cooperation.

Sava River Basin (SRB)

Preparation of the Sava RBMP continued to be the most important task in achieving one of the ultimate goals of the [Framework Agreement for the Sava River Basin \(FASRB\)](#) – the establishment of sustainable water management in the Sava River Basin. The main achievement in 2017 was the finalisation and approval of the second Sava River Basin Analysis Report (SRBA). An analysis of significant water management issues (SWMI) in the basin was also successfully completed.

In the field of accidental pollution management, parties to the FASRB utilised the [Accident Emergency Warning System \(AEWS\)](#), developed and maintained by the ICPDR. Steps to establish the Flood Risk Management Plan in the Sava River Basin (Sava FRMP) and the Sava Flood Forecasting and Warning System (Sava FFWS) also yielded significant results in 2017.

Integration activities regarding existing navigation management applications within the [SavaGIS platform](#) were ongoing, with the ultimate goal of incorporating the data related to navigation into the SavaGIS Geoport. Further upgrades of the system to extend capabilities are planned.



Tisza River Basin (TRB)

The ongoing JOINTISZA Project dominated activities in the Tisza River Basin in 2017. The key objective of the project is to strengthen cooperation between river basin management planning and flood risk prevention to enhance the status of the waters of the Tisza River Basin. In 2017 a large number of conferences, meetings and workshops were held to promote the initiative.

EU Strategy for the Danube Region (EUSDR)

The 6th Annual Forum of the EU Strategy for the Danube Region, took place in October in Budapest, and was jointly organised by Hungary, the European Commission and the Danube Transnational Programme. “A secure, connected and prospering Danube Region” was the title of the Forum, which emphasised the different challenges and perspectives of, energy security, transportation development, clean connectivity issues and financing opportunities. The question of how to best transform political commitments into operational policies and measures dominated the proceedings.

Cooperation with the Black Sea Commission

The Black Sea Commission adopted the text of the Black Sea Integrated Monitoring and Assessment Programme (BSIMAP) for 2017-2022. The data for this programme is based on existing annual reporting formats of the Black Sea Commission Advisory Groups, and includes new environmental challenges and legislation, as well as approaches introduced by relevant global and regional organisations, such as the provisions of the EU Marine Strategy Framework directive (EUMSFD). Data from the Danube on loads of pollution entering the Black Sea is being presented each year based upon the TNMN water quality yearbook. The load assessment data is generated based upon the regular monitoring carried out by Romania at the Reni water quality station.

Regular Budget and Financial Contribution

Regular Budget for the Financial Year 2017

Three independent auditors, appointed by the Contracting Parties, audited the consolidated financial statement including the accounting records of the ICPDR for the financial year from 1 January to 31 December 2017.

The Audit Team certified that the Statement of Accounts is correct and the contents, structure and details are in accordance with ICPDR rules and regulations and accounting principles, thereby assuring transparency of financial management.

Contributions – Financial Year 2017

Contracting Party	Contribution in %	Contribution in EUR	Actual payment in EUR
Austria	8.45	98,500.00	98,500.00
Bosnia & Herzegovina	4.50	52,455.62	52,455.62
Bulgaria	8.45	98,500.00	98,500.00
Croatia	8.45	98,500.00	98,500.00
Czech Republic	8.45	98,500.00	98,500.00
Germany	8.45	98,500.00	98,500.00
Hungary	8.45	98,500.00	98,500.00
Moldova*	1.00	11,656.81	11,656.81
Montenegro	3.00	34,970.41	34,970.41
Romania	8.45	98,500.00	98,500.00
Serbia	8.45	98,500.00	98,500.00
Slovakia*	8.45	98,500.00	98,500.00
Slovenia	8.45	98,500.00	98,500.00
Ukraine	4.50	52,455.62	52,455.62
European Union	2.50	29,142.01	29,142.01
Total	100.00	1,165,680.47	1,165,680.47

* Payments settled in 2018

Expenditure – Financial Year 2017

Budget Line	Approved Budget in EUR	Expenditure in EUR	Balance in EUR
1. Staff	696,000.00	683,695.15	12,304.85
2. Office Running	151,000.00	148,553.37	2,446.63
3. Publications	72,700.00	55,626.34	17,073.66
4. Travel & Meetings	125,000.00	123,421.71	1,578.29
5. Services	120,980.47	106,790.85	14,189.62
Total	1,165,680.47	1,118,087.42	47,593.05

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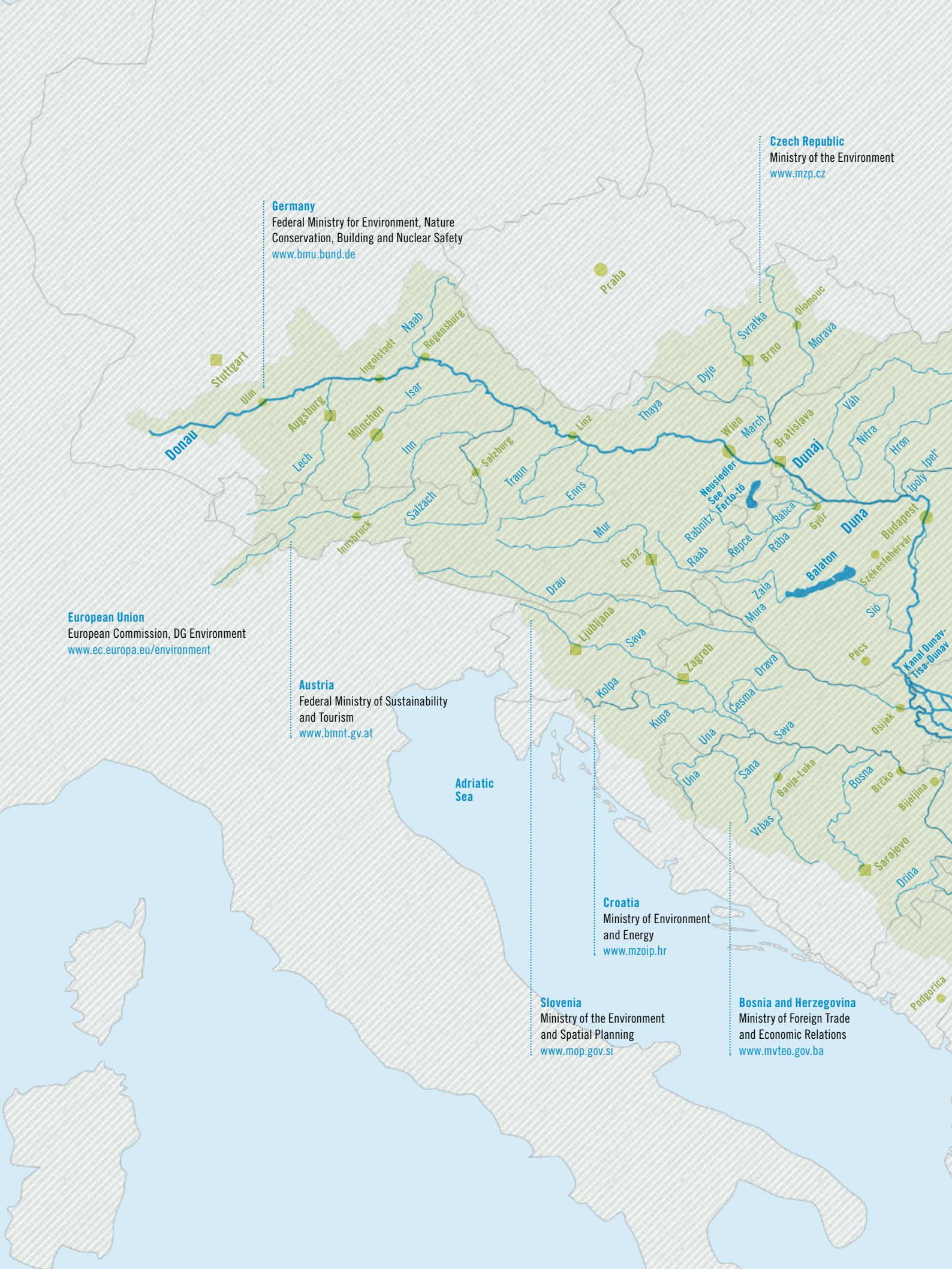
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Austria
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Croatia
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Slovenia
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Adriatic Sea



Slovakia

Ministry of Environment
www.minzp.sk

Romania

Ministry of Waters and Forests
www.mmediu.ro

Hungary

Ministry of Interior
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Ukraine

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Republic of Serbia

Ministry of Agriculture
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www.minpolj.gov.rs

Black
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