

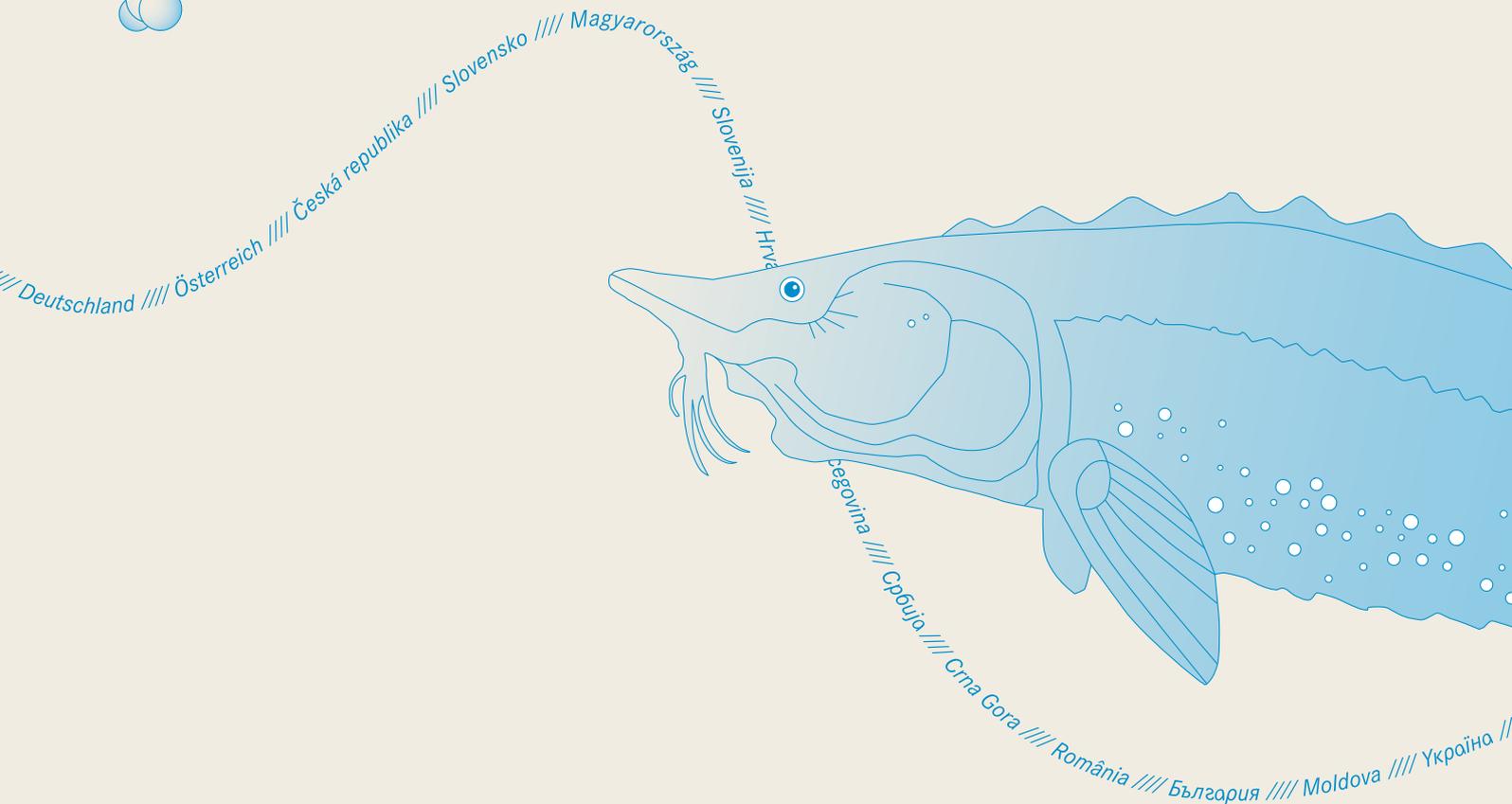
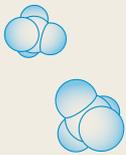
ICPDR IKSD

International Commission
for the Protection
of the Danube River

Internationale Kommission
zum Schutz der Donau

Shared waters – joint responsibilities

ICPDR Annual Report 2018





2018 marked the 20th anniversary of activity at the ICPDR – and it was again a year full of activities in this most international river basin of the world.

Based on the successful activities of the preceding Czech and EU Presidencies we focused under the German Presidency on three priorities: adaptation, implementation and integration.

We were able to adopt an update of the ICPDR Strategy on Adaptation to Climate Change in December 2018. Our strategy builds inter alia on a respective study of the Ludwig-Maximilian-University Munich and on the results of the ICPDR workshop on adaptation to climate change, which we held in March 2018 in Belgrade. I am confident that the Strategy will serve as an important guidance for the national level as well as for our next Danube River Basin Management Plan and Flood Risk Management Plan. It underlines ICPDR's role as a pioneer in addressing climate change adaptation in transboundary river basins and can be an inspiration for others, such as the UNECE Water Convention.

Our ongoing commitment to implement the Danube River Basin Management Plan 2015 and its Joint Program of Measures is exemplified in the “Interim Report on the Implementation of Measures”. This publication is a snapshot of the progress we made in improving the environmental situation of the waters in the Danube River Basin today and what is still yet to come to secure the future of our joint water resources. The report is well oriented towards a broader public and is the fruit of an excellent cooperation within the entire ICPDR family.

Our aim to increase the visibility of the ICPDR also included the successful launch of the ICPDR social media platforms in 2018. I would like to invite all readers to use these social media actively to promote the ICPDR and its work.

The ICPDR has a long tradition in reaching out to other policy areas and integrating water management issues in these sectors. The “Joint Statement on Navigation and Environment”, the “Guiding Principles on Sustainable Hydropower” and the “Strategy on Adaptation to Climate Change” are successful examples of the ICPDR's integrated approach. The ongoing work on a “Guidance Document for Sustainable Agriculture and Land Management”, the Sediment project and the Floodplains project, along with the preparatory work for a “Danube Hydrological Information System”, clearly show that we intend to take the next steps towards truly integrated water resources management.

Finally, I would like to express my thanks for the excellent cooperation and support of all ICPDR Contracting Parties, stakeholders and observers and, in particular, the ICPDR Secretariat. I wish the Hungarian Presidency all success in taking forward the ICPDR agenda for cleaner, healthier and safer waters in 2019.



Helge Wendenburg
ICPDR President 2018

ICPDR highlights in 2018

Steps made during 2018 represent major progress in the ICPDR's overarching vision. Key actions have included a major overhaul of our river monitoring practices ahead of JDS4, and the launch of the ICPDR's social media channels.

The following highlights are just some of the initiatives undertaken by the ICPDR in the Danube River Basin in 2018:

- Following the ICPDR Climate Change Adaptation Workshop in March 2018 in Belgrade, the [Strategy on Adaptation to Climate Change](#) was updated to become more “action/measures-oriented”. It was later presented – and ultimately adopted – at OM-21 in December 2018.
- ‘Ten key messages’ to be included in the [Interim Report on the Implementation of the Joint Program of Measures \(2018\)](#) were presented at the 47th RBM EG meeting in May 2018. Following final comments and feedback in conjunction with the PP EG, the final draft of the Interim Report was adopted at the 21st Ordinary Meeting in December 2018.
- National stakeholder engagement workshops took place in October 2018 for the [GEF Danube River Basin Hydromorphology and River Restoration \(DYNA\) Project](#).
- In 2017 the PM EG launched an [initiative on wastewater management in the Danube River Basin \(DRB\)](#). This initiative aims at facilitating activities on capacity development in wastewater management.
- Preparations for [JDS4](#) began, and the MA EG agreed to start monitoring activities in all countries on the same date on the 29th June 2019 – also marking the annually celebrated Danube Day. Another key development included the microplastics monitoring preparatory meeting held on 14–15 June 2018 in Berlin.
- Preparations for the [2021 update to the Danube River Basin Management Plan \(DRBMP\)](#) continued throughout 2018 with the development of a roadmap towards the elaboration of the DRBMP. Proposed activities included preparations for an [Interim Overview on Significant Water Management Issues \(SWMIs\)](#) in the Danube River Basin District.



Sturgeon Conference

An international event took place on 9th and 10th July in Vienna within the framework of the Austrian Presidency of the EU. In attendance were 50 experts from national administrations, EU and international institutions, academia and NGO representatives, who can all potentially provide the long-term framework of action indispensable for the conservation of sturgeon stocks in Europe.



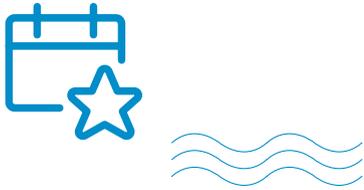
Joint Statement Meeting

The 9th Workshop on the follow-up of the Joint Statement on Guiding Principles on the Development of Inland Navigation and Environmental Protection in the Danube River Basin took place on 13th and 14th September at the Vienna International Centre in Vienna.



Danube Art 2018

The winner of the 'International Danube Art Master 2018' competition is 17-year-old Ion Zatic of Moldova. “Everything that man touched, has been transformed into a closed ecosystem!” is the name of the winning artwork. Its creator, Ion Zatic, is a student at the Corjova School, Moldova.



- In 2018, the APC EG regularly tested and maintained a variety of [updates to the Danube AEWS](#). The APC EG also began considering what actions to take in the exceptional case of an [accident with no transboundary effect](#), yet a strong media presence, ultimately amending the [AEWS Operations Manual](#). Successful AEWS tests were initiated at the APC EG meeting on 13th March 2018 and in the evening of Monday 5th November 2018.
- Following the ICPDR resolution of the 16th Standing Working Group adopted on 20 June 2017, the Secretariat launched the ICPDR’s [social media campaign](#).

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

- The [Black Sea Commission \(BSC\)](#) submitted its Annual summary report to the ICPDR in November 2018, (for 2015/16) showing data in selected stations from Romania and Ukraine reflecting the positive changes in Danube sediment loads on the marine ecosystem.
- The JOINTISZA Project continued to dominate activities in the Tisza River Basin in 2018, with various conferences, meetings and workshops held for the official endorsement of the updated ITRBMP and the update of the Tisza MoU (2011).
- A draft outline for the [Sava River Basin Management Plan \(SRBMP\)](#) was prepared in January 2018, along with an outline of the [Sava Climate Adaptation Strategy](#).

Danube Day celebration at the UN in Vienna

Danube Day 2018 Exhibition: the Vienna International Centre gets active for a healthier Danube.

On 4–6 July 2018, to mark International Danube Day 2018, the International Commission for the Protection of the Danube River (ICPDR) in cooperation with the Austrian Federal Ministry for Sustainability and Tourism, and the United Nations Information Service (UNIS) Vienna invited the staff of the Vienna International Centre (VIC) as well as interested attendees and journalists to a series of events for Danube Day.

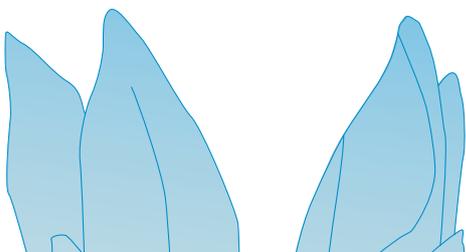


Gift to the Earth Award

ICPDR presented with the WWF’s highest award on 12 December 2018 in Vienna, The Gift to the Earth, in recognition of “the transformational role it’s played in promoting and securing clean flowing rivers as well as healthy habitats and species in the Danube River Basin, and in serving as a model for integrated river basin management across the world’s most international river basin,” said Andreas Beckmann, Managing Director of the WWF-CEE.

Public Participation Schedule starts

According to Art. 14 of the WFD, public participation in drafting River Basin Management Plans needs to be ensured. The ICPDR has thus provided a blueprint for Public Participation activities for the development of the third Danube River Basin Management Plan (3rd DRBMP) until 2021 and the second Danube River Basin Flood Risk Management Plan (2nd FRMP), the “Public Participation Schedule WFD & FD”. The public is invited to provide comments on this documents to the ICPDR Secretariat.



World-class expertise: the operational and institutional framework

Since its creation in 1998, the International Commission for the Protection of the Danube River has been bringing together representatives from the highest ministerial levels, technical experts, plus members of both civil society and the scientific community to improve conditions 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 countries of the Danube signed the [Danube River Protection Convention \(DRPC\)](#), going on to fully establish 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 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. Additionally, 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 ICPDR's structure. They address the various requirements as specified under the Convention, in addition to those of the [EU Water Framework Directive \(WFD\)](#) and the [EU Floods Directive \(FD\)](#).

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 (S EG)

List of Expert Group Chairpersons

Group Name	Name	Nominated by	Organisation
RBM EG	Knut Beyer	Germany	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
RBM EG	Daniela Buzica	European Union	European Union
MA EG	Franz Wagner	Austria	Federal Ministry of Sustainability and Tourism
PM EG	Elena Tuchiú	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 Sustainability and Tourism
S EG	Knut Beyer	Germany	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety



Task Groups (TG) are established under the responsibility of our permanent expert groups and comprise delegates from existing expert bodies and additional specialists. They include professionals specifically needed for a particular task. 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)

List of Task Group Chairpersons

Group Name	Name	Nominated by	Organisation
HYMO TG	Veronika Koller-Kreimel	Austria	Federal Ministry of Sustainability and Tourism
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 of

sustainable water management. The following organisations have taken the opportunity to become observers to the ICPDR:

Black Sea Commission

Carpathian Convention

Central Dredging Association (CEDA)

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)

Global Water Partnership (GWP/CEE)

International Association for Danube Research (IAD)

International Association of Water Supply Companies (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.

via donau

World Wide Fund for Nature – Central and Eastern Europe (WWF-CEE)



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 (DRBMP). Additionally, the Hydromorphology Task Group and Economics Task Group both report to the RBM EG.

In 2018, the RBM EG made major progress in a variety of key areas furthering long-term sustainability in the Danube River Basin. Preparations for the 2021 update to the Danube River Basin Management Plan, the adoption of the Interim Report on the Implementation of the Joint Program of Measures, and the initiation of key actions on the issues of climate change and sturgeon conservation in the basin were major priorities. Other milestones included a proposal for a study related to our Guiding Principles on Sustainable Hydropower Development.

A template pertaining to the ‘ten key messages’ to be included in the [Interim Report on the Implementation of the Joint Program of Measures \(2018\)](#) was presented at the 47th RBM EG meeting in May 2018. A full draft of the report was created (with support from professional editor Ms Kirstie Shepherd) and distributed to all relevant EGs and TGs ahead of their Autumn 2018 meetings. Following final comments and feedback in conjunction with the PP EG, the Interim Report was adopted at the 21st Ordinary Meeting in December 2018.

The 23-page Interim Report is both a snapshot of the progress being made, and a look at the future of the ICPDR’s three main aims: to make Danube waters “cleaner”, “healthier”, and “safer”. It’s also the first such publication by the ICPDR to take on a new design-focused look, deploying more images and a clearer language in a public-friendly format.





Preparations for the [2021 update of the Danube River Basin Management Plan \(DRBMP\)](#) continued throughout 2018 with the development of a roadmap towards the elaboration of the updated DRBMP. Proposed activities include the update of an [Interim Overview on Significant Water Management Issues \(SWMIs\)](#) in the Danube River Basin District, to be formulated taking into consideration potential candidates for new SWMIs such as sediment, climate change adaptation, plus water scarcity and droughts. The PP EG in close collaboration with the RBM EG, prepared the [timetable and work programme for the production of the DRBMP Update 2021](#), ensuring adequate collection of data during the period 2019–2021. The HYMO TG and ECON TG were also asked to update their work programmes based on the final revised work programme for the RBM EG.

National stakeholder engagement workshops took place in October 2018 for the [GEF Danube River Basin Hydromorphology and River Restoration \(DYNA\) Project](#). The validation workshop will see the five beneficiary countries (BA, RS, UA, MD and ME) serve as Project Steering Committee with all other HYMO TG members acting as advisory board.

[Coordination of the Sturgeon Issue](#) lay at the heart of many activities in 2018. The approval of the “MEASURES: Managing and rEstoring Aquatic bio-corridors for migratory fish species in the danUbe RivEr baSin” project for funding was welcomed at the 16th Standing Working Group meeting, and the RBM EG was asked to cooperate with the project team in enhancing sturgeon conservation activities in the Danube River Basin. The MEASURES project kicked off on 1st October 2018 in Vienna.

The DG REGIO Grant to support for the [Implementation of the Feasibility Study](#) analysing options for migratory fish species (including sturgeon) at Iron Gate I & II with the ICPDR as coordinator, and the Danube Delta National Institute for Research and Development (Romania) and the Institute for Water Resources Development Jaroslav Černi (Serbia)

as co-applicants was prepared for signature. This grant will enable the most urgent activities outlined in the ToRs of the Feasibility Study to reduce the obstacles caused by the Iron Gates. Furthermore, Austria made a commitment to finance an ex-situ feasibility study for the upstream Danube, including the identification of potential locations for the “ex situ facility” in Austria/Slovakia/Hungary in collaboration with the Austrian University of Natural Resources and Life Sciences (BOKU).

Following the ICPDR Climate Change Adaptation Workshop in March 2018 in Belgrade, the [Strategy on Adaptation to Climate Change](#) was updated to become more “action/measures-oriented”. It was later presented – and ultimately adopted – at the OM-21, in close collaboration with the PP EG. The strategy offers guidance on the integration of climate change adaptation into ICPDR planning processes, and promotes multilateral and transboundary cooperation action in the context of climate change adaptation, serving as a reference for national policy makers and other officials. The strategy has been made available to the public online.

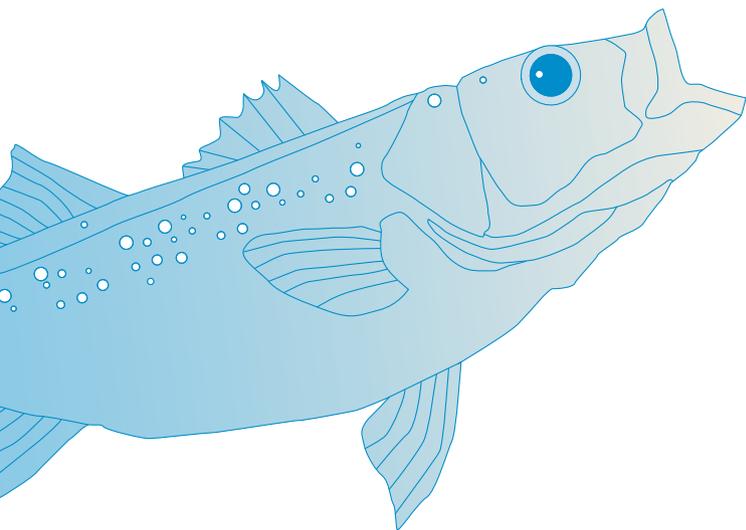
Following the ICPDR’s hydropower workshop in 2017, the [Guiding Principles on Sustainable Hydropower Development](#), it became clear the ICPDR needs to enhance its knowledge base in the field of social and economic drivers. A study into the key social and economic drivers for hydropower development in view of future renewable energy strategies in those Danube countries, which have a high potential for hydropower development, is to be contracted at the end of the year 2018/beginning of 2019; first results should be available in the first quarter of 2019. The final results of the study will be presented at the next ICPDR Hydropower Workshop in the beginning of 2020. Furthermore, Slovak and Ukrainian translations of the Guiding Principles are being finalised.

Pressures and Measures: Assessing Challenges, Targeting Priorities

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

For the PM EG in 2018, key basin-wide objectives included planning and carrying out data collection ahead of the 2021 update to the DRBMP, initiating the DANUBE HAZARD project to address hazardous substances pollution, and developing a new wastewater strategy. The Nutrient Task Group focused on sustainability in agriculture and improving the comparability of agri-environmental indicator data collected through the basin.

The PM EG began assembling data needed for the development of the [Interim Report on the Implementation of the Joint Program of Measures](#). Countrywide sectorial data collection was conducted for both pressure and measure indicator, focusing on three pollution-related chapters proposed by the group in 2017: organic pollution; nutrient pollution; and hazardous substances pollution.



Three technical background documents were developed, each summary showing the key message, an introductory text explaining the context of the key message, the collected data for each country in tabular form, the best-case examples and a basin-wide overview on the gaps and challenges. These technical papers are considered as background information to support the development of both, the JPM Implementation Report and the next DRBM Plan. The documents will be further amended once all data are delivered and sound conclusions can be drawn on the progress in measure implementation. In addition, the countries have offered further lighthouse projects, and the outlook to future challenges will also be extended

In relation to data collection for the [2021 Update to the Danube River Basin Management Plan](#), the PM EG agreed that assessments must continue for comparability and continuity. Moreover, the future efforts of the PM EG should be linked to the existing strategies, e.g. on wastewater, agriculture and hazardous substances. The PM EG agreed to develop three short position papers on the pollution-related Significant Water Management Issues (SWMIs) to present the needs and challenges of these working fields and to highlight what strategies the PM EG has initiated and what concrete steps will be taken to cope with the challenges. It will also feed into the update of the ICPDR SWMI paper, which will be done in 2019.

In 2017 the PM EG launched an [initiative on wastewater management in the Danube River Basin \(DRB\)](#). This initiative aims at facilitating activities on capacity development in wastewater management, and tries to bring together different institutions for working together towards better wastewater management within the framework of compliance with all relevant EU Directives. On 1st August 2018, an informal meeting was held in Vienna for follow-up discussions with partner organisations on how to develop the strategy, and which concrete actions should be initiated to implement it.



A close cooperation is foreseen with the World Bank, IAWD, and GWP to elaborate a basin-wide wastewater strategy, to develop national wastewater curriculum and to organise thematic workshops and seminars.

The PM EG has started elaborating a project proposal to address [hazardous substances pollution and emissions](#) in the Danube River Basin. In the first step, a preparatory project called [DANUBE HAZARD](#) is being implemented, financed from the Danube Strategic Project Fund. Project concept and partnership has been developed and the background technical work has been started including selection of substances and pilot catchments, elaboration of measuring and modeling concept, designing capacity building activities, communication channels and management tools. The planned large-scale project will make use of the results of other projects being/ to be implemented related to hazardous substances (e.g. SOLUTIONS Project, JDS4, SIMONA Project). Future cooperation with the lead institutes of these projects is foreseen. The ICPDR asked its Contracting Parties to support the further development of the proposal ahead of submitting the finalized proposal for funding in 2019.

[The Nutrient Task Group \(NTG\)](#) began an activity on improving the knowledge on regional nutrient surplus of agricultural soils in the Danube countries. The work aims to develop a consistent and homogeneous methodology for calculating nutrient surplus in the Danube countries, according to different data availability at the regional level. Currently, impacts of data aggregation over space and temporal variability of the input data have been investigated. Further work includes a comparison of different methodologies, a sensitivity analysis for different factors and assumptions and the development of a modeling approach to disaggregate national or regional data. The NTG experts have been asked for further collaboration and data sharing on a voluntary basis to improve the assessments and make the study more practically useful.

The NTG and the Secretariat also established a core expert group on water and agriculture to support the preparation of the [guidance document on sustainable agriculture](#). The document already underwent drafting and amendments in 2018, but bearing in mind the on-going discussion process on the new Common Agricultural Policy (CAP) post-2020 and its new features (CAP Strategic Plans, Farm Sustainability Tools, enhanced cross-compliance, eco-schemes, strengthening innovation, etc.), the work on this guidance document is being sped up in order to ensure that Danube countries could make use of the guidance when designing their national CAP Strategic Plans. The focus of the guidance should thus be strongly related to the CAP-reform process.

An ICPDR [position paper on sustainable water and agriculture](#) has also been recommended, which would highlight the key messages and principles of the guidance document (also in a CAP-reform context). This position paper had originally been intended for submission to the Austrian EU Presidency in November 2018, to both put the ICPDR initiative at high policy level and potentially to influence the CAP-Reform process. However, due to the on-going discussion on the CAP-reform, the upcoming EU workshops on water and agriculture and the comprehensive agenda of the AT Presidency, the Secretariat decided to delay submission. The position paper was drafted by the core group in Autumn 2018, and was earmarked to be submitted to the Romanian EU Presidency in 2019, and to be introduced at the EC workshop on water and agriculture in Bucharest in February 2019.

Monitoring and Assessment: Quantifying problems... and progress

Ongoing water assessment is a vital process that both ensures our water is fit for consumption, and targets actions to enhance its 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 the operations of the Trans-National Monitoring Network (TNMN) and the Analytical Quality Control (AQC) programme. Priorities for 2018 included renewing AQC contracts, data collection for the DRBMP, a new outlook for assessing invasive alien species and managing the important transboundary groundwaters in the DRB, plus a variety of preparations for JDS4.

Most vital to the MA EG in 2018 were preparations for JDS4, due to take place in 2019. The formulation of the [JDS4 Survey Plan](#) was compiled to describe the program, its concept and objectives, the parameters to be monitored, the survey logistics, the detailed time plan including sampling sites and the description of necessary consumables and equipment. It was prepared based on JDS4 Preparatory Paper, and with a view to filling existing knowledge gaps in the implementation of the EU Water Framework Directive in the Danube River Basin and achieving a harmonized approach to the evaluation of biological quality elements necessary for the assessment of the ecological status. In this respect training workshops on benthic macroinvertebrates, fish and phytobenthos & macrophytes & phytoplankton have been organized in summer 2018. They contributed to achieving of better harmonisation in the assessment of the ecological status throughout the DRB.

The MA EG agreed at its 25th meeting to start the [JDS4](#) monitoring activities in all countries on the same date on the 29th June 2019 – marking the annually celebrated Danube Day. In September 2018, the Secretariat distributed its list of 51 agreed JDS4 sampling sites, and asked the countries to

check all coordinates of all sites, confirm their correctness, and (when possible) to indicate for each quality element the planned date of sampling at a given site. Another key development included the microplastics monitoring preparatory meeting held on 14–15 June 2018 in Berlin, at which it was agreed that the SOP for sampling has to be developed.

A draft update of the guidance document on [Invasive Alien Species](#) in the Danube River Basin (including updated list of the IAS and the selection of the tributaries to be involved in Risk Assessment Procedure for the IAS) has been produced. Additionally, the Outline of the Manual for IAS monitoring in the DRB and the Outline of the Standard Operational Procedure for IAS monitoring during JDS4 have both been developed.

Along with all relevant ICPDR EGs and TGs, the MA EG was asked to discuss data collection for the [DRBPM Update 2021](#) in their autumn 2018 meetings. Discussion concluded to updates being based on the MA EG chapters in the DRBPM 2015, plus to exploring the availability of risk assessment (RA) and status assessment (SA) data from member countries.

The Secretariat prepared a draft to the [MA EG Work Program 2019–2021](#), and the MA EG amended it and subsequently adopted with the final version of the new work program for 2019–2021.

The MA EG also approved the [TNMN Yearbook 2016](#), and for the first time, it contains data on mercury in fish. Furthermore, using an accelerated procedure, 2017 data on loads at Reni (UA) was submitted by Romania to, and subsequently approved by, the MA EG.

Following the nomination of JDS4 sampling sites throughout the region, the [GW TG](#) agreed to focus on the same target pollutants as for surface water during the survey. Furthermore, analysis was made of the TNMN Yearbook on GWB parameters of basin-wide importance measured between 2016–2017.

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, plus planning for cross-border emergency responses, are guaranteeing a cleaner and safer Danube environment.

The work of the Accident Prevention and Control Expert Group (APC EG) involves testing and maintaining the Danube Accident and Emergency Warning System (Danube AEWS) and updating inventories of accident hazard sites (AHS) and contaminated sites (CS). The focus of activities in 2018 was on testing the functionality of our warning systems, inventorying tailings management facilities in the DRB, and improving AHS data sets.

In 2018, the APC EG discussed and adopted a variety of regular system and minor security [updates to the Danube AEWS](#). Consensus was reached that the system shouldn't be extended to include local accidents, so as not to overload it – the group also reiterated the AEWS' aim to only record accidents with transnational impact. The APC EG reconfirmed the key principle that “an alert should be triggered whenever there exists a chance that the pollution caused by an accident could have adverse transboundary impacts even though the calculated threshold values would not be exceeded”. The APC EG also agreed that a short list of AEWS “warning messages” would be presented to annually to the ICPDR Heads of Delegations including the first of such detailed lists into the APC EG Chairpersons' report.

The APC EG also began considering what actions to take in the exceptional case of an [accident with no transboundary effect](#), yet a strong media presence. After an extensive discussion, the APC EG agreed that the text in the chapter 3 of the AEWS Operational Manual on triggering an AEWS alarm should be expanded by the following statement: “The accidents of major public interest may be considered to be reported as information.” The Secretariat amended the [AEWS Operations Manual](#) accordingly.

A successful multinational AEWS test was run at the APC EG meeting on 13 March 2018 checking the ability of Principal International Alert Centers to follow the provisions of the AEWS Operational Manual. Another AEWS test was initiated in the evening of Monday 5th November 2018. The main objective was to test the functionality of the system, the 24/7 operability of PIACs, and basic usage of the system. The test succeeded and confirmed the system's functionality, with 12 PIACs reacting fast, i.e. 8 in less than 10 minutes, 4 within 2 hours and thus faster than the 3 hours required response time. All countries were also actively encouraged to use the recently developed [self-contained “playground”](#) – an empty copy of the AEWS where users can try out features of the system and send messages without triggering a warning – for their individual training purposes.



In spring 2018, the APC EG finished data collection on the [Accident Hazard Sites](#) (AHS, formerly called ARS) and Contaminated Sites (CS). The Secretariat then elaborated an updated draft technical report showing basin-wide assessments of AHS and CS, yet latest basin-wide inventories show significant imbalances, inconsistencies and data gaps. Therefore, the APC EG decided to revise and fine-tune the data set based on better-harmonized selection criteria, and the Secretariat proposed the development of new harmonized criteria to be used throughout the basin. According to this criteria all SEVESO sites or UNECE sites (for non-EU MS if SEVESO sites are not defined yet) should be reported in the national territory regardless whether they have permanent discharges into surface waters and how far they are from the state borders and from the Danube or its tributaries. The countries were asked to revise to a deadline of February 2019. Once a consistent data set is available and the basin-wide inventory is balanced and realistic, the APC EG will amend the risk assessment report on AHS. The updated basin-wide inventory and the fine-tuned risk assessment report will be discussed at the next APC EG meeting.

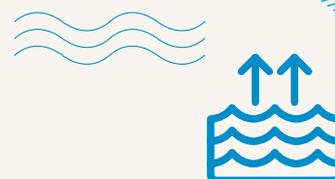
The APC EG developed a draft structure and outline for a [public report on accident prevention and control](#) in spring 2018. The PP EG welcomed the document's development, and suggested it be elaborated into two different publications based on the draft.

One, a more appealing technical report in simple language with eye-catching illustrations (e.g. photos, graphs and maps); the, a short brochure or leaflet for dissemination and awareness raising, highlighting the key features and messages of the ICPDR in the field of accident prevention and control. The APC EG in cooperation with the PP EG is elaborating an amended technical report and a draft brochure to be discussed at the respective EG meetings in spring 2019. The reports are scheduled to be finalized and published in summer 2019.

The APC EG began activity on the [Tailings Management Facilities \(TMFs\)](#), which pose a high hazard of accidental pollution in the DRB. The Secretariat contracted Mr. Dmitry Rudakov from the Ukrainian Mining University to perform hazard assessments (financed from the EU LIFE Grant). The initial deadline for data collection was end of November 2018, and based on the data provided, a hazard assessment will be performed to prioritise the TMFs located in the DRB in terms of their hazard and necessity to implement safety measures.

In addition to the hazard assessment, the APC EG also decided to support [capacity development](#). The project is to be implemented in two phases: firstly focusing on Eastern Danube countries, secondly targeting the Sava region and Bulgaria. Participants from Romania, Hungary, Ukraine, the Czech Republic and Slovakia will be invited to a training event ahead of the first phase. The final proposal has been submitted to the Umweltbundesamt Germany in November 2018, so that the project could be implemented in 2019–2020.

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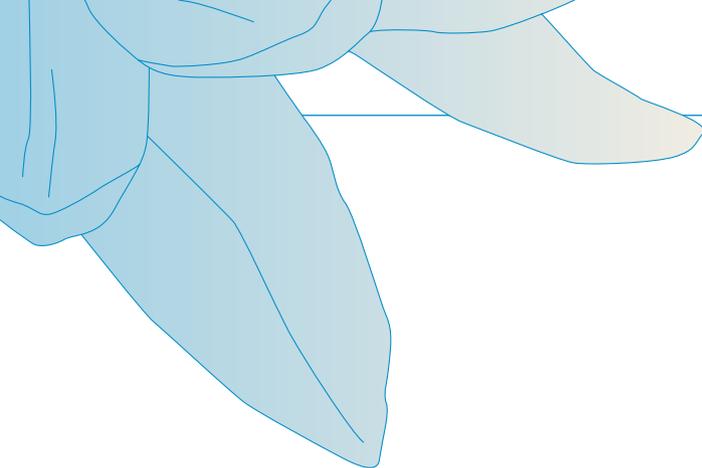
Sustainable flood protection across the Danube River Basin

The ICPDR's Action Programme for Sustainable Flood Protection and its Danube Flood Risk Management Plan encourage movement 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. A series of EUSDR PA5-supported projects progressed in 2018, developing the way we manage sediment, mitigate icy flooding, and support flood management practitioners throughout the basin amongst much else.

A variety of projects ensued and ideas emerged regarding the future of Danube River Basin flood risk management in 2018. The [DAREFFORT](#) and [DanubeFloodplain](#) projects received funding. The [DAREFFORT](#) project aims to explore the current status of the national forecasting abilities from which the partners and the stakeholders could derive common goals in order to develop the existing system in an inclusive way, and therefore improve the forecasting system of the area. DAREFFORT supports the development of the ICPDR Danube Hydrological Information System. Danube-Floodplain aims to reduce the flood risk through floodplain restoration along the Danube and other rivers in the basin while at the same time contributing to the integration of the EU Floods Directive, EU Water Framework Directive and EU nature protection legislation as well as biodiversity and climate policies.





The [DAREnet](#) project is now to support flood management practitioners across the Danube River region and from different disciplines to deepen and broaden their Research, Development and Innovation related collaboration (RDI). DAREnet will build a multi-disciplinary community of practitioners, operating in a network of civil protection organizations, and supported by a broad range of stakeholders from policy, industry and research. Together they will build a transnational and interdisciplinary ecosystem to foster synergies, innovation and its uptake. The DAREnet Consortium Meeting took place on 16–17 October in Sofia, Bulgaria.

In the process of reviewing/updating [flood hazard and flood risk maps](#) (in accordance with *FD Article 14 (2)*), the FP EG agreed to prepare a similar set of flood risk maps, based on modified map layouts from the first cycle, and to add a map of affected cultural heritage sites. The Secretariat & the IMGIS EG thus reviewed the existing data templates, and prepared a respective new template, for a new map covering UNESCO heritage sites by 31 October 2018. The FP EG was asked to deliver the data on UNESCO sites by 31 December, in order to enable the Secretariat to prepare a draft map by 28 February 2019.



Following 2017's requests to all countries that they review the [Preliminary Flood Risk Assessment \(PFRA\)](#) report and submit all necessary revisions by February 2018, further review was sought through to December 2018. At the FPEG-34 it was recognized that in several countries the update of the national PFRA reports and APSFR maps had not been finalized, and thus the FP EG agreed to wait for all data before finalizing the report. The working deadline for the delivery of updates was agreed as February 2019.

The FP EG explored the need of amending the objectives from the first [DFRMP](#) for its update in 2021 and agreed to keep them unchanged. The FP EG reiterated the need to keep a separate chapter on water retention to highlight the high importance of water retention for level A especially for downstream countries and for reflecting the solidarity principle.

A discussion paper on risks and opportunities for applying flood risk measures under the [Water Framework Directive](#) has been prepared, relating to the implementation of FD and WFD requirements. A key issue is the coordination of measures in order to gain synergies for flood risk management and towards the achievement of good ecological status. This discussion paper aims to increase awareness among Danube countries on linkages between the two directives. The FP EG agreed with the paper as a final version and submitted it to the HYMO TG for a final commenting.

GIS: mapping out a positive future for the Danube



Developing measures that address basin-wide problems relies on an accurate knowledge base, enabling 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's 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 the spatial context for analysis of future water management scenarios and pinpointing areas with optimal potential.

At the core of the IMGIS EG's activities in 2018 were preparations for the [2021 DRBMP/DFRMP Updates](#), which included taking into account the lessons learned from the 2015 data collection.

As support to the APC EG, [Accident Hazard Sites](#) (AHS, formerly known as ARS) are collected in DanubeGIS, and the Secretariat updated the data collection template accordingly and asked the countries to complete the data sets. The APC EG started an activity on the tailings management facilities (TMF), and the Secretariat – in cooperation with the consultant performing the hazard assessment – prepared a data collection template with supporting documents and launched the data collection in summer 2018 via DanubeGIS.

As support to the MA EG within the intensive preparations for [JDS4 data collection](#), a common coding for sites and samples, and a mobile application to collect this data in the field, as well as data collection sheets (for Biological Quality Elements) was developed by the Secretariat. The working map for JDS4 sampling sites nominations in the DanubeGIS was updated,

and it is foreseen that the Secretariat supports the collection of datasets via a new web portal, and later use it as a source for integration with DanubeGIS.

In coordination with the FP EG, the overview map of the nominated DanubeHIS stations was prepared. By the end of 2018, 244 stations were proposed on Danube and its tributaries. A first DanubeHIS Data Providers conference was held as a part of the DAREFFORT kick-off meeting, where the draft for the future DanubeHIS Data Exchange policy document was presented and discussed.

A number of improvements have been made to [Danubis](#) (the internal web platform for information sharing in the ICPDR) 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 uses icpdr.org as its email domain. The new mail system is closely integrated with Danubis and provides for more possibilities in mail management.

The IMGIS EG prepared an update of the [DanubeGIS Data Policy](#), introducing several agreed practices (e.g. data input rights for other groups on agreement, specific access rights for project users), and a few other issues (e.g. handling of users whose nomination is withdrawn or expired) plus minor editorial improvements. The updated DanubeGIS Data Policy document was approved by the Ordinary Meeting of the ICPDR in December.

Improvements in promotion of DanubeGIS (via the ICPDR website) were also prepared. The Secretariat, in cooperation with the PP EG and IMGIS EG, developed a DanubeGIS icon and motto for use by countries. The PP EG selected also the DanubeGIS motto "*DanubeGIS: your window to the Danube Basin*". The PP EG members will provide national translations.

Promoting public participation and communication on 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 practices throughout the region.

The Public Participation Expert Group (PP EG) continued to promote ICPDR activities by utilising an extensive range of integrated communication tools. 2018 saw the launching social media channels to make communications more accessible to the public, a full draft of the Interim Report on JPM Implementation, plus flagship Danube Day and Danube Art Master events.

The PP EG completed the first full draft of the [Interim Report on JPM Implementation 2018](#), circulating it to all other ICPDR EG's and TG's for discussion and review prior to their autumn 2018 meetings. The final review generated comments that were included in the final draft submitted to the ICPDR for review and adoption at the Ordinary Meeting.

Following the ICPDR resolution of the 16th Standing Working Group adopted on 20 June 2017, the Secretariat launched the ICPDR's [social media campaign](#). Following a tendering process, RAFFEINER REPUTATION was contracted in as the social media consultant to best meet the needs of the ICPDR. Furthermore, the Secretariat established a centralised e-mailbox where all social media-related messages and suggestions for posts can be sent.

[Danube Day 2018](#) marked the 15th event of its kind. Main festivities took place in Ukraine, Slovakia, Serbia, Romania, Moldova, Hungary, Germany, Croatia and Bulgaria and, for the first time, in Montenegro. (Slovenia, the Czech Republic, Bosnia-Herzegovina and Austria celebrated in June and many of the country events extended into July.) Danube Day 2019 entered its planning phase too, the PP EG having agreed on the motto, "Get active for a safer Danube".

The [Danube Art Master](#) competition took place once again in 2018, with participation in 13 countries. The PP EG also created a working group to revisit the concept of Danube Art Master. Additionally, the ICPDR's broader social media presence is to be used to promote Danube Art Master online and facilitate its organisation in each country in future. While no funds have yet been committed for organising Danube Art Master in 2019, the PP EG believes the long-term outlook of Danube Art Master is promising and that revisions being considered by the working group will help it continue to grow and is, therefore, making it a priority to secure funding for this interesting and important public outreach activity.

The PP EG drafted a document titled "[WFD & FD Public Participation Plan regarding public consultation and communication as required for developing the 3rd Danube River Basin Management Plan and the 2nd Flood Risk Management Plan for the Danube River Basin](#)". The document pertains to the implementation cycle 2015 to 2021 and will serve as blueprint for Public Participation activities for the development of the 3rd Danube River Basin Management Plan and 2nd Flood Risk Management Plan until 2021. Each will identify the potential relationships and cooperative actions contemplated by EU Water Framework Directive and EU Flood Directive. This document, drafted by the PP Expert Group under consultation of the RBM Expert Group and FP Expert Group, was presented, discussed and underwent slight revisions at the 47th RBM EG meeting and was submitted for further comments.



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

Forging strong, successful partnerships at local, national and international levels 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.

Sava River Basin (SRB)

A draft outline for the [Sava RBMP](#) was prepared in January 2018, while the [Interim overview of Significant Water Management Issues](#) (with an overview of PoM implementation) was accepted by ISRBC in February 2018. Still under finalization is a programme for development of a Sava Sediment Management Plan. An outline of the [Sava Climate Adaptation Strategy](#) was also finished in November 2017, with a workshop on Climate Change Adaptation organized on 24–25th May 2018 in Zagreb.

Progress was also made regarding developments in Flood Management on the Sava. Web-based consultation on the draft [Sava Flood Risk Management Plan](#) (Sava FRMP) started on October 31, 2018. Establishment of the [Flood Forecasting and Warning System for the Sava River Basin](#) was also achieved in February 2018. The final (operational) Sava FFWS version 2.0 and other deliverables were handed over to ISRBC and beneficiary countries in October.

Integration activities regarding existing navigation management applications within the [SavaGIS platform](#) were ongoing, with data from the 1st Sava RBMP, the joint Sava PFRA report and numerous metadata on the flood related projects and activities are now [publically](#) available on [savagis.org](#).

Tisza River Basin (TRB)

The JOINTISZA Project continued to dominate activities in the Tisza River Basin in 2018. 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.

Hungary organised a ministerial/high-level meeting to be held in May 2019 for the official endorsement of the updated ITRBMP and the update of the Tisza MoU (2011).

EU Strategy for the Danube Region (EUSDR)

In 2018, the EUSDR presidency sits with Bulgaria, and the 7th Annual Forum of the EU Strategy for the Danube Region, took place in October in Sofia. Following the current activities of the EUSDR Action Plan revision, the ICPDR prepared a document on gaps, remaining challenges and future tasks until 2027. The Trilateral meeting between PA4, ICPDR and ISRBC took place in September 2018 in Budapest. Furthermore, EUSDR PA4 organised a workshop on “New experience in implementation of the Article 4.7 WFD in the Danube Region” with the aim of sharing the experience, knowledge and information related to implementation of the Article 4.7 of the Water Framework Directive in the Danube Region on 12th September 2018 in Bratislava (SK).

Cooperation with the Black Sea Commission

Last year, the Black Sea Commission (BSC) adopted the text of the Black Sea Integrated Monitoring and Assessment Programme (BSIMAP) for 2017–2022. This programme includes new environmental challenges and legislation, plus provisions of the EU Marine Strategy Framework directive (EUMSFD). Data on Danube pollution loads entering the Black Sea is being presented each year based upon the TNMN water quality yearbook.

BSC submitted the Annual summary report to the ICPDR in November 2018, (for 2015/16) showing data in selected stations from Romania and Ukraine reflecting the effect of the Danube loads on the marine ecosystem. The progress in the report is welcome, stating that a “slight improvement in the status of the marine ecosystem in the area under the influence of the Danube is generally observed”.



Regular Budget and Financial Contribution



Regular Budget for the Financial Year 2018

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 2018.

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 assuring transparency of financial management.

Contributions – Financial Year 2018

Contracting Party	Contribution in %	Contribution in EUR	Actual payment in EUR
Austria	8.41	98,523.90	98,523.90
Bosnia & Herzegovina	4.52	52,952.20	52,952.20
Bulgaria	8.45	98,523.90	98,523.90
Croatia	8.45	98,523.90	98,523.90
Czech Republic	8.45	98,523.90	98,523.90
Germany	8.45	98,523.90	98,523.90
Hungary	8.45	98,523.90	98,523.90
Moldova	1.20	14,058.10	14,058.10
Montenegro	3.16	37,019.67	36,995.17
Romania	8.45	98,523.90	98,523.90
Serbia	8.45	98,523.90	98,523.90
Slovakia	8.45	98,523.90	98,523.90
Slovenia	8.45	98,523.90	98,523.90
Ukraine	4.52	52,455.62	0.00
European Union	2.50	29,287.70	29,287.70
Total	100.00	1,171,508.87	1,118,523.17

Expenditure – Financial Year 2018

Budget Line	Approved Budget in EUR	Expenditure in EUR	Balance in EUR
1. Staff	716,005.06	715,316.15	688.91
2. Office Running	126,196.17	126,302.91	-106.74
3. Publications	96,245.17	93,090.17	3,155.00
4. Travel & Meetings	96,720.60	96,924.07	-203.47
5. Services	136,341.87	139,875.06	-3,533.19
Total	1,171,508.87	1,171,508.36	0.51

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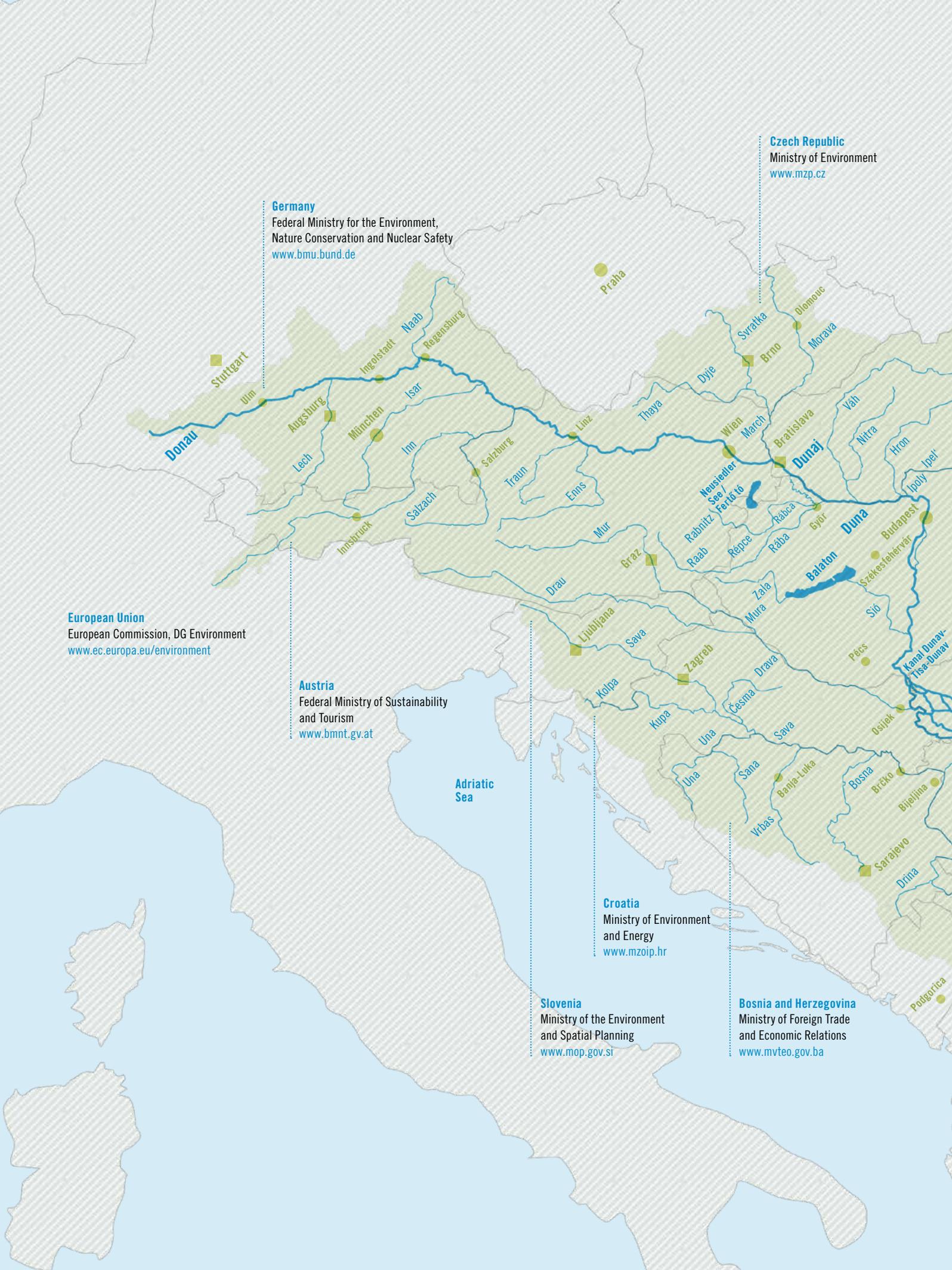
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European Union
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Croatia
Ministry of Environment
and Energy
www.mzoip.hr

Slovenia
Ministry of the Environment
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Romania

Ministry of Waters and Forests
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www.moew.government.bg

Black Sea

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