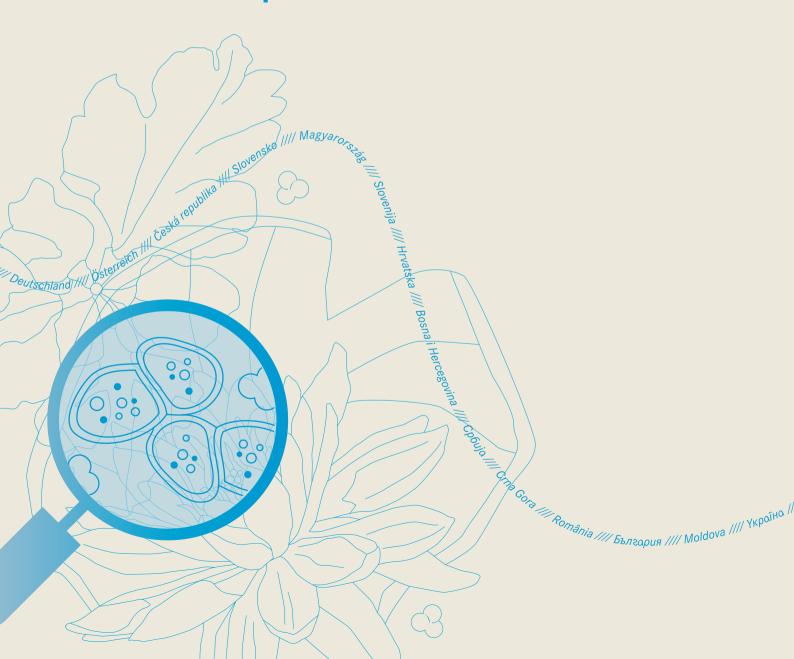


International Commission for the Protection of the Danube River

Internationale Kommission zum Schutz der Donau

# Shared waters — joint responsibilities

### **ICPDR Annual Report 2020**





At the beginning of 2020, it was clear this would be an important year for the ICPDR. With data and information collection by our contracting parties due to take place, along with additional data collection and analysis for the development of the next updates of the Danube River Basin Management Plan and Flood Risk Management Plan, it was certainly going to be one of the key moments in our six-year management cycle.

Having marked a 25-year milestone in the life of the ICPDR in 2019 – a quarter-century since the signing of the Danube River Protection Convention – the Moldovan Presidency also wanted to use the opportunity to begin the new decade for the Commission by focusing on crossing borders, in sectorial as well as geographical terms. We were very honoured to be taking over from the Hungarian Presidency in 2019, which produced such exciting results and improved cooperation in the Tisza Basin, and impressively nurtured unprecedented collaboration on display throughout the year.

Needless to say, however, 2020 turned out extremely differently from how any of us could have ever foreseen. Restrictions stemming from the pandemic moved almost all ICPDR meetings online and hindered the final stages of field and laboratory work for JDS4 – the We Pass project even had to seek an extension due to the pandemic. Nonetheless, the ICPDR Secretariat, plus our Expert and Task Groups did a tremendous job readjusting their work and shifting online.

Even under such strange new circumstances, the ICPDR can remain proud of its performance throughout 2020. Picking up where the 2019's energetic Hungarian Presidency left off, Moldova was excited for the opportunity to keep promoting and underlining urgent basin-wide climate change adaptation measures, and to lead the Commission through the next steps towards elaborating both the Danube River Basin Management (DRBMP) and Danube Flood Risk Management (DFRMP) Plan Updates, which will take place in 2021 according to the requirements of the EU Water Framework (WFD) and Floods Directive (FD).

Moldova can also be proud of the progress made by the ICPDR towards two of our key aims for the year. Firstly, for the development of a scientifically based scoping study for water balance calculation in the Danube catchment area based on the previously elaborated developments (EU Guidance and Scoping Study). This was planned in response to growing water scarcity in our region. Secondly, we wished to pursue the enhancement of cooperation between the ICPDR and the EU Strategy for the Danube Region, especially in the strategy's Priority Areas PA 4 (Water Quality), PA 5 (Environmental Risks) and PA 6 (Biodiversity and Landscape) to the benefit of all people living in the Danube River Basin. Such cooperation continues to strengthen under continued developments being made towards the aforementioned plan updates, not to mention the results due imminently from JDS4.

On behalf of Moldova, I thoroughly congratulate the ICPDR on its performance throughout a complicated and singular year, and hope that our joint efforts in 2020 have contributed towards a cleaner, healthier, and safer Danube River Basin. We wish to thank the ICPDR Secretariat and all Contracting Parties, partner organisations, Observers, and all other stakeholders, for their excellent support.

Finally, we wish the incoming 2020 Montenegrin Presidency every success. 2021 will be another important year for the ICPDR, finalising the DRBMP and DFRMP Updates 2021, and publishing the results of JDS4.

We hope that our common initiatives and efforts will definitely result in cleaner water and a better Danube environment overall – and let me assure you that Moldova will do all its best to contribute to achieving these results.



Radu Cazacu on behalf of the Moldovan ICPDR President 2020, Dorin Andros pictured

### ICPDR highlights in 2020

Despite the problems caused by a global pandemic, the ICPDR's activities throughout 2020 were still able to boast major developments in our overarching vision for the Danube River Basin. Analysis and reporting for JDS4's results and major preparations for the DRBMP & DFRMP Updates due for completion in 2021 took top priority.

## The following highlights are just a few from the multitude of initiatives executed by the ICPDR in the Danube River Basin in 2020:

- With primary monitoring activities for JDS4 (the fourth Joint Danube Survey) largely completed before 2020, the focus of the ICPDR throughout the year was on drafting and finalising the Scientific Report in collaboration with dozens of scientists and laboratories throughout the DRB and Europe generally. The new approach taken including ground-breaking methodologies for eDNA monitoring, target and non-target screening of Danube River Basin Specific Pollutants, antibiotic resistance and microplastics analysis facilitated a renewed approach to drafting the report, coordinated via a newly developed online back-end system.
- Preparations continued within the ICPDR's various Expert and Task Groups ahead of the DRBMP & DFRMP Updates 2021, including continued data collection and drafting of the various chapters from both reports. Plans have also been put in place during 2020 for the Public Consultation Process for both updates, due to take place throughout 2021. The forthcoming updates to the Danube River Basin Management Plan and Danube Flood Risk Management Plan included discussions on expanding the list of Significant Water Management Issues (SWMIs) in the Danube River Basin District.
- Due to the COVID-19 pandemic, some of the field activities pertaining to the coordination of the sturgeon issue had to be postponed during 2020, leading to We Pass receiving an extension for one year, to remain active until November 2021. Away from the field, activities continued unabated though, and Steering Committee Meetings and project meetings were organised virtually.
- Within the framework of both JDS4 and the planned DRBMP Update 2021, updated and improved data on urban wastewater (UWW) and industrial wastewater (PRTR) discharges were collected by the ICPDR in spring 2020.



#### IDS4

The Joint Danube Survey — the most comprehensive investigative surface water monitoring effort in the world — harmonised water monitoring practices across the Danube countries, in support of the WFD committing member states to achieving good water status.



#### **DRBMP & DFRMP Updates**

Every six years, the ICPDR closes its management cycle, calling for an update of both the Danube River Basin Management Plan and Danube Flood Risk Management Plan. The process of re-drafting these two vital plans involves a Public Participation Process to ensure all citizens and stakeholders in the Danube get to #HaveTheirSay.



#### WePass

We Pass is an initiative aiming to facilitate fish migration in the Danube River Basin, set up by the ICPDR with the Jaroslav Černi Institute, DDNI, CDM SMITH I OAK Consultants, and the Norwegian Institute for Nature Research. Its focus is on the preservation and reestablishment of endangered fish species migration routes in the Danube River, its tributaries, and specifically at the Iron Gates dam.



- A nutrient pressure assessment with MONERIS is also being completed within the framework of the EU LIFE Grant, and consistent data collection for the model application was started in August 2020 focusing on the most relevant data with a high availability throughout the basin.
- The DANUBE HAZARD m3c project, funded by the Danube Transnational Programme, kicked-off in July 2020. The project aims to achieve a durable and effective transnational control and reduction of hazardous substances water pollution. The interim outcomes of the modelling work will provide direct inputs to the development of the DRBMP Update 2021.
- The 17<sup>th</sup> edition of Danube Day took place in 2020, with events shifted to an online-only format due to the COVID-19 pandemic. International youth arts competition Danube Art Master was also able to take place via a new remote method, and thanks to funding from Austria.
- In 2020, the APC EG tested the Danube Accident Emergency Warning System (AEWS) obtaining positive results showing that the system is working as expected.

 In the third year of the ICPDR's social media campaign, the 'country takeover' programme continued, and general activity continued to improve on all channels, with the PP EG noting an average 25% increase in followers across all platforms in 2020 by October.

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

- The 27th ICPDR Tisza Group meeting was planned for April 2020, but due to the COVID-19 developments a virtual meeting was organised in May 2020 in its place. During the meeting, country representatives, group members and Observers outlined potential topics to develop project proposals for the next call of the Danube Transnational Programme or any other potential funding source.
- The Trilateral meeting between PA4, ICPDR and ISRBC (International Sava River Basin Commission) took place in Bratislava in March, and the outline of the 2<sup>nd</sup> Sava RBM Plan was also drafted in 2020.



#### **EU LIFE Grant**

The European Union's funding instrument for the environment and climate action, LIFE Grant funds a large variety of conservation and other projects throughout Europe. Between 2014 and 2020, the programme financed some 4,600 projects, and its budget has been further increased to over 5.4 billion EUR for the 2021–2027 period.



#### Danube Art Master

The Danube Art Master competition is an opportunity for the children of the Danube River Basin to consider and discover the health of their local rivers, and a moment to decide how they wish to help preserve these waters for the future. All eligible young artists are encouraged to use material captured, inspired, or borrowed directly from the environment itself in the creation of their artworks, and to look at their local surroundings as a key source of inspiration in the process.





#### Social media campaign

Since the end of 2018, the ICPDR's Social Media campaigns have been promoting the activities of the ICPDR, and connecting the citizens of the Danube River Basin with key issues pertaining to water management. The ICPDR maintains an active presence on Twitter, Facebook, LinkedIn, and Instagram.

# A Shining Example for River Basin Organisations: the ICPDR's operational and institutional framework

Since 1998 when operations went underway, the International Commission for the Protection of the Danube River has been assembling top ministerial representatives from its various members and getting with together a variety of stakeholders — from scientific and technical experts to members of civil society and the private sector. Working in close harmony, the ICPDR and its partners continue to show the way forward for the Danube River Basin, and RBOs around the world.

As the largest international body of river basin management experts in Europe, the ICPDR's mission is to promote and implement sustainable methods of river and water management, that can work to benefit all citizens of the Danube River Basin.

#### Structure of the ICPDR

Upon its signing in 1994, the Danube River Protection Convention (DRPC) – which later came fully into force in 1998 – marked the ICPDR's various Contracting Parties' commitment to implement the shared goals described in the convention. Today, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Moldova, Montenegro, Romania, Serbia, Slovakia, Slovenia, Ukraine, and the European Union all work together within the ICPDR framework to improve the interconnected waters of the Danube River Basin, and build a sustainable administrative and legal framework for the future.

The ICPDR's operations are steered by two group meetings. Firstly, the Ordinary Meeting establishes policy and strategy, while the Standing Working Group Meeting provides the necessary guidance framework and prepares key decisions. Additionally, there are a range of Expert and Task Groups comprising stakeholder representatives and national experts, which form the scientific and technical basis behind all ICPDR work.

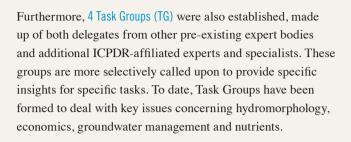
The 8 Expert Groups (EG) are one of the most active and vital parts of the ICPDR's structure. Together, these groups address various requirements specified by the DRPC, the EU Water Framework Directive (WFD) and the EU Floods Directive (FD).

#### 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	Jane Korck	Germany	Bavarian State Ministry for Environment and Consumer Protection
RBM EG	Daniela Buzica	European Union	European Union
MA EG	Franz Wagner	Austria	Bundesministerium für Landwirtschaft, Regionen und Tourismus
PM EG	Elena Tuchiu	Romania	Romanian Waters — National Administration
FP EG	Clemens Neuhold	Austria	Bundesministerium für Landwirtschaft, Regionen und Tourismus
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	Radu Cazacu	Moldova	Waters of Moldova — "Apele Moldovei"



#### 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	Petra Repnik	Slovenia	Slovenian Water Agency
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**

In the Danube River Basin, we take protecting and preserving the environment to be a community responsibility. We value active public involvement, and take it as a core principle when it comes to building sustainable water management practices. So far, the following 24 organisations have taken the opportunity to become ICPDR observers:

- 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)
- Danubeparks
- Danube Sturgeon Task Force (DSTF)
- 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 Service 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.
- via donau
- World Wide Fund for Nature –
   Central and Eastern Europe
   (WWF-CEE)

### River Basin Management: Securing a sustainable future for the Danube River

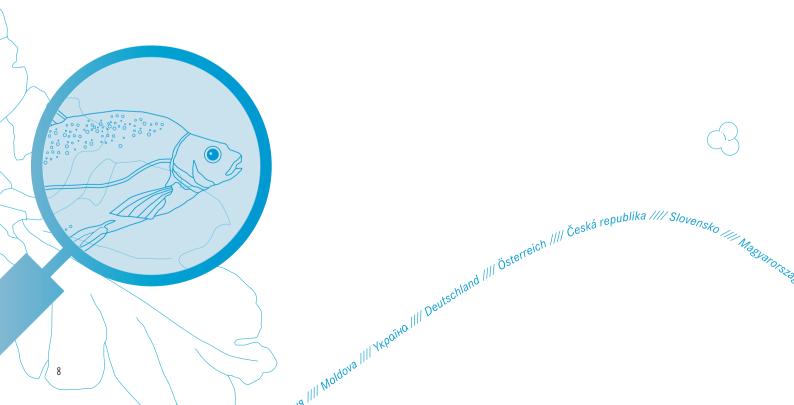
It is the responsibility of the River Basin Management Expert Group (RBM EG) to develop activities relevant to the implementation of the Danube River Basin Management Plan (DRBMP). Furthermore, the Hydromorphology Task Group and Economics Task Group both report to the RBM EG.

Throughout 2020, the RBM EG's key focus fell on further preparations for the 2021 Update of the Danube River Basin Management Plan, representing as it does, a huge leap forward towards long-term sustainability goals for the Danube River Basin. Additionally, the group continued their efforts towards the issues of both sturgeon conservation and sustainable hydropower development, plus much else within a new — and temporary — fully remote working approach.

Following the publication of the Significant Water Management Issues (SWMI) 2019 Report on 20<sup>th</sup> December 2019, comments were later received and compiled into a draft table to be taken into consideration during the drafting process for the DRBMP Update 2021.

The process of drafting the Danube River Basin Management Plan (DRBMP) Update 2021 continued, including adding annexes and maps, plus revised chapters already considering some comments and feedback.

While project documents for the GEF Danube River Basin Hydromorphology and River Restoration (DYNA) Project, were sent for endorsement to the GEF Secretariat in August 2019. The project is not currently envisaged to begin until 2021. The reason for the delayed project start is that the position of the GEF Implementing Agency is currently being transferred from WWF to UNDP.



Due to the COVID-19 pandemic, some field activities pertaining to the coordination of the Sturgeon Issue had to be postponed during 2020. This led to We Pass receiving an extension for one year, to remain active until November 2021. Away from the field, activities continued unabated though, and the 5th Steering Committee Meeting was organised virtually for October 2020, with the 4th Narrative Progress Report for We Pass delivered ahead of schedule in November. Additionally, a European Commission (DG ENV) call for a follow-up pilot project – "Making the Iron Gates Dams Passable for Danube Sturgeon" – was published in September 2020. The ICPDR, together with JCWI, DDNI, NINA and OAK (current We Pass partners), will act as subcontractors of sole tenderer CDM-Smith.

Activities for the feasibility study on the construction of an ex-situ facility for sturgeon species in the Upper Danube River Basin resulted in a concept note for the LIFE Boat 4 Sturgeons project. In November 2020, BOKU University was informed that the first step in the application process had been successful, thus a full proposal will be elaborated and submitted at the beginning of 2021.

The Guiding Principles on Sustainable Hydropower Development were previously made available in Bosnian, Croatian, Czech, German, Slovak, Slovene and Ukrainian, and are downloadable on the ICPDR website. The study, "Social and economic drivers for hydropower development in Danube countries" was finalised in January 2020, and was published on the ICPDR webpage and planned to serve as discussion document for the ICPDR Hydropower Workshop planned for 25th & 26th March 2020: "Sustainable Hydropower: Progress, Solutions and Challenges". Due to COVID-19, the workshop has however been postponed to March 2021.



Slo<sub>venija</sub> /// Hr<sub>vatska</sub> //// Bosna i Hercegovina //// Србијо //// Crna Gora //// Ro<sup>m</sup>

## Pressures and Measures: Measuring Fresh Challenges and Steering Our Priorities

Keeping the ICPDR's understanding of the variety of environmental and other pressures on the Danube River Basin is essential for our long-term sustainable development. No less important is the continued assessment of proposed measures' efficacy.

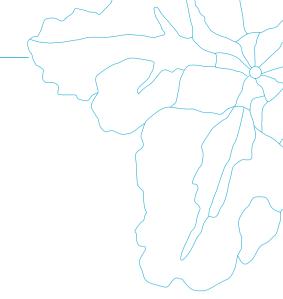
Throughout 2020, the PM EG prioritised the provision of data and input vital to the development of the DRBMP Update 2021. This included data regarding urban wastewater (UWW), industrial wastewater (PRTR), and nutrient pressure assessment. A new project for reducing and managing hazardous substance water pollution also kicked off (Danube Hazard m3c), and key position papers on wastewater management and sustainable agriculture came into fruition across the year. The Nutrient Task Group played a key role in the drafting of the latter position paper.

In summer and autumn 2020, the PM EG completed, updated, and improved the data on urban wastewater (UWW) and industrial wastewater (PRTR) discharges collected in spring 2020. This was completed in preparation for the draft DRBMP Update 2021. A nutrient pressure assessment with MONERIS is also being completed within the framework of the EU LIFE Grant supporting the development of the DRBMP Update 2021. A consistent data collection for the model application was started in August 2020 focusing on the most relevant data with a high availability throughout the basin. The overall input data situation is promising but some data still need to be obtained by several countries. Therefore, a second round of data collection was launched with a deadline of end of November 2020.

The PM EG drafted the pollution-related chapters of the DRBMP Update 2021, with particular focus on the relevant parts of the pressure assessment and the Joint Program of Measures. Assessments on point source organic, nutrient and hazardous substances emissions were developed in 2020, while assessments of diffuse nutrient emissions, investigations on hazardous substances (in the framework of the Danube Hazard Project) and scenario analyses will be incorporated in 2021.

Finally, the PM EG also prepared specific inputs for the DRBMP Update 2021 related to climate change effects, as related to the SWMIs. This was pieced together via a questionnaire focusing on how to take into account climate change effects for pollution assessment and what kind of measures could be included into the Joint Program of Measures (JPM) addressing both, pollution, and climate change effects.





In the framework of the World Bank-ICPDR wastewater initiative, two dedicated workshops will be organised for 2021, focusing on financial sustainability of wastewater management and rural and small-scale wastewater management. The Rural Wastewater Management Workshop will be organised in January 2021 in the form of an online webinar, while the financing workshop is aimed to be held in spring/summer 2021. Moreover, a scientific workshop will be dedicated to the sludge management issue, to be organised in cooperation with the World Bank and the EUSDR PA4.

The PM EG further discussed the planned ICPDR position paper on wastewater management. The paper intends to communicate the overall challenges, specific needs and potential solutions related to wastewater management in the Danube Region. Moreover, this paper aims at delivering ideas to the ongoing UWWTD revision process at the EU level. To support the work on the paper, a short questionnaire was developed and filled in focusing on specific aspects and challenges that should be raised in the position paper and potential issues and recommendations addressing the UWWTD revision process.

In 2020, the PM EG finalised the short summary report on the ICPDR-SOLUTIONS wastewater effluent sampling campaign carried out in summer 2017. The report along with all measured data will be shared with the relevant countries for further water management and scientific purposes, plus the outcomes of the monitoring exercise will be combined and jointly assessed with those of the WWTP sampling campaign organised within JDS4 (once said results are available).

The DANUBE HAZARD m3c project, a highly important activity towards managing hazardous substances pollution in the DRB funded by the Danube Transnational Programme, kicked-off in July 2020. The project aims to achieve a durable and effective transnational control and reduction of hazardous substances water pollution. The interim outcomes of the modelling work will provide direct inputs to the development of the DRBMP Update 2021 by Autumn next year, whereas the final results will be extremely useful even for the 4th DRBMP (due in 2027) and will contribute to guiding the related water management activities in the DRB for many years to come.

The draft Guidance Document and Policy Paper on Sustainable Agriculture were first elaborated by summer 2020, and later further consulted on within the agricultural sector. Following support of ICPDR Heads of Delegations, the texts were forwarded to the relevant stakeholders such as farmers associations, management authorities for public agriculture and rural development funds, farm advisory services, agriculture research institutes, etc. The Nutrient Task Group (NTG) amended the documents, due to be made available for the Danube countries to support the development of the River Basin Management Plans and Common Agricultural Policy (CAP) Strategic Plans in good synergy. The documents will be kept as living documents subject to further extensions or revisions where necessary.

## Monitoring and Assessment: Quantifying key issues and monitoring our progress



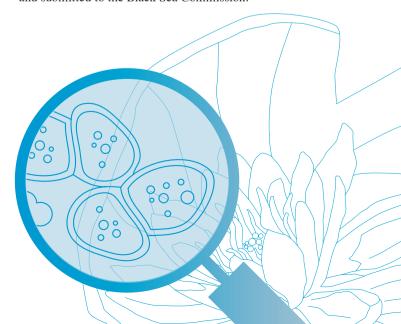
The Monitoring and Assessment Expert Group (MA EG) is responsible for all water quality and assessment issues, including the Joint Danube Survey (JDS). The group's scope covers operations of the Trans-National Monitoring Network (TNMN) including its Analytical Quality Control (AQC) programme. Its top priorities in 2020 were the continued large-scale reporting operations for JDS4, and the provision of preparatory input ahead of the DRBMP Update due in 2021.

The working deadline for JDS4 scientists to submit their contributions to the final manuscript of the Scientific Report was June 2020. However, due to COVID-19 outbreak restrictions – which directly impacted laboratory activities throughout Europe – delays were expected and a contingency plan put in place, including bespoke respective deadlines for differing situations and authors, and an accelerated subsequent review process. Such adaptive management was essential for keeping the planned publishing deadline. JDS4 reports were approved by the ICPDR in December 2020 and submitted for publishing.

TNMN and JDS data have been integrated into one database, and the MA EG agreed on the name for this integrated ICPDR water quality database: DanubeTNMN. A Communication Strategy for JDS4 has been prepared by the PP EG to be followed shortly by a JDS4 Communication Roadmap, including a set of fish cards to be used by experts, the interested public and also to be disseminated as an educational tool for schools. Since the very beginning of the JDS4 preparation the working relationship between the MA EG and PP EG has been increasingly successful, and the MA EG Chair spoke at the 28th PP EG Meeting, emphasising the excellent working relationship.

During 2020, the MA EG contributed to the draft DRBMP Update 2021. Special attention was given to revising criteria for the confidence levels of the high status and giving agreement to keep the current delineation of the 10 Danube River sections. The MA EG discussed re-delineation of surface water bodies (SWB) between 2015 and 2020 and analysed possibilities to compare SWB status in 2015 and 2021. The MA EG also discussed producing additional maps on chemical status for the DRBMP Update 2021.

The MA EG also approved the TNMN Yearbook 2018 prepared by Slovakia. The 2019 data on loads at Reni was produced and submitted to the Black Sea Commission.



# Accident Prevention and Control: Mitigating risks and building responses to water emergencies

Maintaining the ICPDR's rapid response Accident Emergency Warning System (AEWS), identifying risk sites and possible cross-border mitigation actions for a safer Danube.



The Accident Prevention and Control Expert Group (APC EG) focuses on testing and maintaining the Danube Accident and Emergency Warning System (Danube AEWS) and updating inventories of accident hazard sites (AHS). Activities in 2020 focused on continued assessment and improvement of these systems, as well as capacity building with regards to mining Tailings Management Facilities (TMF) hazards in the DRB.

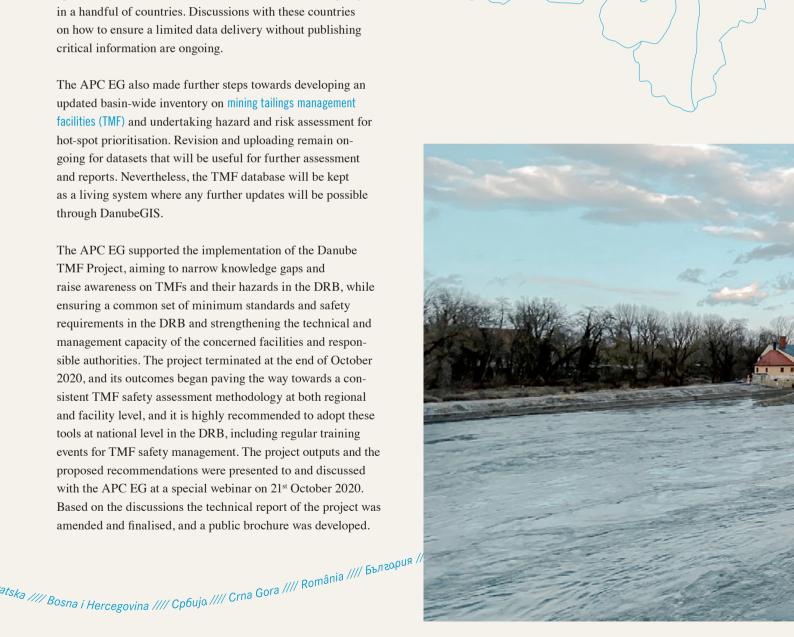
The comprehensive multinational test of the Danube Accident Emergency Warning System (AEWS) took place on 12<sup>th</sup> May 2020 and simulated the case when a pollution plume in a river moves downstream through the territory of several countries before it can be eliminated, and the danger has subsided. The test was accompanied by a Zoom online conference to discuss the test proceedings and share experiences. 12 out of 14 PIACs participated actively in the test. All actively participating PIACs were able to perform the major tasks within the system as required by the test instructions (creating an incident report, confirming receipt of incoming messages, and closing the incident). The Danube AEWS system was working as expected. The reactiveness of and connectivity to the server was very smooth all the time.

The ICPDR Secretariat initiated another preparedness test of the Danube AEWS on 5<sup>th</sup> November 2020 in the evening hours, with the main objective of testing the functionality of the system and the 24/7 operability of Principal International Alert Centres (PIAC). The test confirmed that the system itself is working as expected without problems from a technical point of view.

The APC EG continued its work on the harmonization and completion of the basin-wide inventory on Accident Hazard Sites (AHS) related hazard assessment. As of November 2020, 9 countries managed to fully update their datasets and to upload them to DanubeGIS, while revision remains ongoing in a handful of countries. Discussions with these countries on how to ensure a limited data delivery without publishing critical information are ongoing.

The APC EG also made further steps towards developing an updated basin-wide inventory on mining tailings management facilities (TMF) and undertaking hazard and risk assessment for hot-spot prioritisation. Revision and uploading remain ongoing for datasets that will be useful for further assessment and reports. Nevertheless, the TMF database will be kept as a living system where any further updates will be possible through DanubeGIS.

The APC EG supported the implementation of the Danube TMF Project, aiming to narrow knowledge gaps and raise awareness on TMFs and their hazards in the DRB, while ensuring a common set of minimum standards and safety requirements in the DRB and strengthening the technical and management capacity of the concerned facilities and responsible authorities. The project terminated at the end of October 2020, and its outcomes began paving the way towards a consistent TMF safety assessment methodology at both regional and facility level, and it is highly recommended to adopt these tools at national level in the DRB, including regular training events for TMF safety management. The project outputs and the proposed recommendations were presented to and discussed with the APC EG at a special webinar on 21st October 2020. Based on the discussions the technical report of the project was amended and finalised, and a public brochure was developed.



14

# Sustainable flood protection for the entire Danube River Basin

The Danube Flood Risk Management Plan (DFRMP) encourages movement away from merely defensive actions, and envisages a shift towards proactive and sustainable forms of flood risk management.

The task of the Flood Protection Expert Group (FP EG) is to assess, map, manage and mitigate flood risks, and thus it forms the foundation for integrated basin-wide flood protection in the Danube River Basin. 2020 was dominated by continued preparations for the DFRMP Update 2021, including updates to the flood hazard and flood risk maps.

A variety of work throughout 2020 continued to aim at elaborating preparations for the forthcoming Danube Flood Risk Management Plan (DFRMP) Update 2021.

To better demonstrate the key actions of basin-wide importance, measures described in DFRMP are combined with best practices, and all countries were encouraged to submit best practice examples for the DFRMP 2021 covering various objectives of the plan. These examples would provide brilliant information on the progress made and show how the objectives of the DFRMP are being achieved.







The implementation of EU FD and WFD requires a coordinated approach. 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". With this respect a discussion paper on risks and opportunities for applying lood risk measures under the Water Framework Directive was developed by the FP EG and HYMO TG. The document is available on ICPDR.ORG (link).

A new Danube Hydrological Information System (Danube HIS), which is under development, aims to display data on the water level, discharge, water temperature and precipitation for the Danube and its major tributaries. Provision of data, however, is not mandatory, and availability remains up to countries' discretion. The scope of the Danube HIS is providing Danube basinwide level basic hydrological and meteorological near-real-time data in a standardised format, and, if possible, the validated long-term data series, for flood risk management or for any water related scientific activities in the DRB. The development of the system is supported by the DAREFFORT project, and the project team has prepared the draft Data Exchange Policy that the ICPDR will take into consideration when preparing the final ICPDR Data Exchange Policy. Testing of the DAREFFORT's hydrometeorological data exchange software, and installation for national data providers began in 2020 as planned.

<sup>(H</sup>rv<sub>atska</sub> //// Bosna i Hercegovina //// Србијо //// Crna Gora //// Român<sup>ia</sup> //// Бълго

# Geographical Information Systems: mapping out the Danube's bright future

Developing measures suitable for basin-wide problems relies on thoroughly detailed and up-to-date foundational knowledge, enabling accurate modelling and evaluation.

The Information Management and Geographical Information System Expert Group (IMGIS EG) plays a vital role in conceptualising, and presenting the ICPDR's tasks. 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 and its utilisation, thereby presenting context for analysis of future water management scenarios, and pinpointing areas of top potential.

The IMGIS EG's preparations for the 2021 DRBMP/DFRMP Updates continued during 2020. The group discussed and clarified several issues related to appropriate filling of the templates and upload of datasets into DanubeGIS, while national experts the reviewed all maps prepared from this data by the Secretariat in the drafting of the plans. Based on the requirements of the MA EG, template changes were proposed and it was agreed to prepare 3 new maps on chemical status assessment. Based on the requirements of the FP EG, a minor change in the template for heritage sites in Flood Risk Areas was implemented. All relevant documents were updated accordingly in 2020, and technically reviewed by the IMGIS EG.

In addition to the forthcoming Plan Updates, JDS4 reporting entered its final stages in 2020, thus the JDS4 data collection portal is available for all experts involved in JDS4. It presents interactive online maps with the JDS4 sites, including samples and results of analysis. Some of the layers from DanubeGIS are integrated as optional background layers. It is planned to complete and improve the portal and make JDS4 data available to self-registered users after the JDS4 reports are finalised and published in 2021.

It's also planned to migrate TNMN and previous JDS data to the same platform and publish it as the DanubeTNMN portal.

DanubeHIS is a close coordination between the ICPDR, particularly the FP EG and the IMGIS EG, and the national hydrometeorological services. The FP EG agreed that the Danube Hydrological Information System (DanubeHIS) shall display data on water level, discharge, water temperature and precipitation (from the station closest to the gauging station). None of these data are mandatory, and countries were asked to voluntarily provide data from the stations with automatic registration, and only the data that they have available. For each gauging station providing water level data, the flood defence levels will be also shown if available, for comparison. The exchanged information will consist of data from the stations on the Danube and its major tributaries. The DAREF-FORT project is providing support to the development of the data exchange software necessary for the future Danube-HIS. The draft Data Exchange Policy and the draft outline of the future DanubeHIS were presented at both FP EG and IMGIS EG meetings, and respective experts were asked for comments and input to the proposed contents and base functionalities.

Additionally, the IMGIS EG continues to follow various projects where the ICPDR is an Associated Strategic Partner (ASP) and which have potential DanubeGIS usage: the Danube Sediment project came to a close in 2020 and provided map data which will later be made available for the public via the DanubeGIS. The Danube FL00DPLAIN project is ongoing until May 2021, and also intending to publish their final map data in DanubeGIS, plus the MEASURES project would also like to provide the map data and metadata for publication in the DanubeGIS and aims to discuss possible linkages of the Measures Information System with the ICPDR in the near future.

# Promoting public participation throughout the Danube River Basin

Publicising information about the Danube River Basin and encouraging public involvement is central to the ICPDR and its aims. Actions spread messages about sustainable development or conservation, and encourage solidarity and good practices throughout the region.

The Public Participation Expert Group (PP EG) spent 2020 making key preparations for public consultation of the DRBMP & DFRMP Updates in 2021 and the publication of JDS4 results — along with its usual array of annual events and highlights.

For the consultation on the draft DRBMP & DFRMP Updates 2021, a number of additional activities are required to be pursued and key deliverables planned. Their aim is to actively involve stakeholders and interested public. This process required the PP EG to prepare a Public Consultation Plan outlining all planned activities, to execute an Online Public Consultation Questionnaire to be implemented on ICPDR.org (and planned to be translated into various Danubian country languages), and to host a Stakeholder Consultation Workshop to discuss both plans in detail. The latter is currently planned to be held in Budapest in May or June 2021 with up to 100 participants, though flexibility has been put in place to adhere with all possible COVID-19 restrictions, which should be planned for ahead of 2021. It is also foreseen that this workshop would require a preparatory WFD-FD preworkshop meeting for the PP EG members and other key actors to adequately prepare for the consultation. Finally, a Report on Public Consultation Activities detailing all consultation carried out, and input received from all sources during the public consultation will have to be developed in time for the formal adoption of the Management Plans. In 2020, the PP EG began drafting and planning these essential activities and deliverables.

18

The second major PP EG activity in 2020 was providing cooperation and support to the MA EG in the organization of JDS4's related communications agendas. The PP EG drafted a communication roadmap to plan the next activities, including a set of specially made JDS4 "fish cards" to be used by experts, the interested public, also to be disseminated as an educational tool for school children to assist in the identification of fish species in the Danube River. Also, the JDS4 Public Report (a derivative product of the JDS4 scientific report) is planned for publication, and its basic outline was delivered for approval at OM-23. It should be noted that the cooperation between the MA EG and PP EG has been consistently outstanding throughout the process of communicating the findings of JDS4.

The third year of ICPDR social media activity saw the continuation of a monthly 'country takeover', where mainly country-specific content will be published on the ICPDR's social media channels (Facebook, Twitter, LinkedIn and Instagram). RAFFEINER REPUTATION continued to provide social media consultancy services during the year, noting an average 25% increase in followers across all platforms in 2020 by October.

Danube Day 2020 marked the 17<sup>th</sup> event of its kind, and festivities were unable to take place in member countries as a result of the global pandemic this year, largely shifting online instead. Signature Danube Day branded bags were nonetheless sent out to our partners as normal, the number of bags distributed was halved however for budgetary reasons. The future of Danube Day, however, is very uncertain. Without ICPDR investment in Danube Day, the PP EG believes they risk completely losing the connection with young people.

2020's Danube Art Master competition was made possible thanks to generous funding by Austria, along with a short teaser on the ICPDR YouTube channel. International winners were announced by the PP EG Chairperson at the Ordinary Meeting, and additional information regarding them can be found online (link).

# Partnership and cooperation: planning with the Danube's sub-basins

Our ability to forge strong, successful partnerships at the local, national, and international levels continues to make the work of the ICPDR a model for the rest of the world.

The ICPDR supports the development of sub-basin programmes within the DRB as well as partnerships with neighbouring regions. Such cooperation is vital for sustainable integrated river basin management (RBM) in the Danube region.

#### Sava River Basin (SRB)

The Trilateral meeting between PA4, ICPDR and ISRBC (International Sava River Basin Commission) took place on 3<sup>rd</sup> March 2020 in Bratislava, with the next meeting planned as an online event due to the pandemic. The 11<sup>th</sup> Joint Statement (on Inland Navigation and the Environment) meeting was also organised in close cooperation between the ICPDR and the ISRBC and held online for the first time on 16<sup>th</sup> & 17<sup>th</sup> September 2020. The outline of the 2<sup>nd</sup> Sava RBM Plan was also drafted in 2020. Sadly, the 9<sup>th</sup> Sava Youth Parliament was not held as originally planned on 30<sup>th</sup> & 31<sup>st</sup> of May this year at Banja Luka (BA), with the them, "Let's protect our cultural heritage", due to pandemic caused by COVID 19 virus. At its last session held in September 2020, the ISRBC decided unfortunately to definitively cancel the Youth Parliament for 2020.

#### Tisza River Basin (TRB)

Following the finalisation of the JOINTISZA Project in 2019, the group's 2020 activities focused on elaborating future such projects. The 27th ICPDR Tisza Group meeting was planned for 15th April 2020, but due to the COVID-19 developments a virtual meeting was organised on 6th May 2020 in its place. During the meeting, country representatives, group members and Observers outlined three potential topics to develop project proposals for the next call of the Danube Transnational Programme or any other potential funding source. Outline documents are being elaborated, and three virtual expert meetings on each topic were organised in October 2020.

#### EU Strategy for the Danube Region (EUSDR)

In 2020, the presidency of the EUSDR (EU Strategy for the Danube Region) was held by Croatia. The 9<sup>th</sup> EUSDR Annual Forum was organised as an online event held from 22<sup>nd</sup> to 23<sup>rd</sup> October 2020. The first online meeting of the EUSDR PA Disaster Management Work Group (DM WG) was also held earlier in the year on 23<sup>rd</sup> June. Furthermore, the joint results of the work with EUSDR PA5 experts and Global Water Partnership Central Eastern Europe, the *Drought Policy Review*, was officially published. Finally, the EUSDR PA5 18<sup>th</sup> Steering Group meeting was organised on 19<sup>th</sup> November 2020 as an online event due to the pandemic.

#### **Cooperation with the Black Sea Commission**

At its 32<sup>nd</sup> BSC Regular Meeting on 12<sup>th</sup> & 13<sup>th</sup> October 2016, the Black Sea Commission (BSC) adopted the text of the Black Sea Integrated Monitoring and Assessment Program (BSIMAP) for 2017–2022. In order to assess the current status of monitoring and assessment of Danube loads on the Black Sea ecosystem and to regularly exchange the necessary data flows between both Commissions, the Black Sea Commission's Permanent Secretariat is currently preparing the Draft annual summary report from the BSC to ICPDR for 2018/19. This Annual report is planned to be submitted to the ICPDR Secretariat in mid-December 2020.

entual topics to develop of the Danube Transnational funding source. Outline nd three virtual expert ised in October 2020.

Deutschland

Deutschland

19

# Regular Budget and Financial Contribution

#### Regular Budget for the Financial Year 2020

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 1st January to 31st December 2020.

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 2020

Contracting Party	Contribution in %	Contribution in EUR	Actual payment in EUR
Austria	8.33	98,564.99	98,564.99
Bosnia & Herzegovina	4.72	55,849.56	55,849.56
Bulgaria	8.33	98,564.99	98,564.99
Croatia	8.33	98,564.99	98,564.99
Czech Republic	8.33	98,564.99	98,564.99
Germany	8.33	98,564.99	98,564.99
Hungary	8.33	98,564.99	98,564.99
Moldova	1.40	16,565.56	16,565.56
Montenegro	3.36	39,757.32	39,712.82
Romania	8.33	98,564.99	98,564.99
Serbia	8.33	98,564.99	98,564.99
Slovakia	8.33	98,564.99	98,564.99
Slovenia	8.33	98,564.99	98,564.99
Ukraine	4.72	55,849.56	0.00
European Union	2.50	29,581.34	29,581.34
Total	100.00	1,183,253.24	1,127,359.18

#### **Expenditure – Financial Year 2020**

Budget Line	Approved Budget in EUR	Expenditure in EUR	Balance in EUR
1. Staff	769,000.00	768,646.22	353.78
2. Office Running	132,293.06	132,195.64	97.42
3. Publications	60,572.50	60,507.96	64.54
4. Travel & Meetings	6,209.00	6,204.53	4.47
5. Services	215,178.68	213,590.82	1,587.86
Total	1,183,253.24	1,181,145.17	2,108.07

## **Contracting Parties** and Heads of Delegations

#### **Austria**

Günter Liebel. Federal Ministry of Agriculture, Regions and Tourism www.bmlrt.at

#### **Bosnia and Herzegovina**

Boško Kenjić until approx. Nov. 2020, from Nov. 2020: Mirza Huiić. Ministry of Foreign Trade and Economic Relations www.mvteo.gov.ba

#### **Bulgaria**

Krasimir Zhivkov until July 2020, from July 2020: Atanaska Nikolova. Ministry of Environment and Water www.moew.government.bg

#### Croatia

Elizabeta Kos. Ministry of Economy and Sustainable Development www.mingor.gv.hr

#### **Czech Republic**

Lukáš Záruba.

#### Germany

Heide Jekel, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety www.bmu.de

#### Hungary

Gabriella Jelinek, Peter Kovács, Acting Head of Delegation, Ministry of Interior www.kormany.hu/hu/ belugyminiszterium

#### Moldova

from 8 May 2019: Radu Cazacu, Waters of Moldova www.mediu.gov.md

#### Montenegro

Momčilo Blagojević, Ministry of Agriculture, Forestry and Water Management www.gov.me

#### Republic of Serbia

Natasa Milic. Ministry of Agriculture, Forestry and Water Management www.minpolj.gov.rs

#### Romania

Adriana Petcu until Feb. 2020, from Feb. 2020: Leonard Achiriloaie, Ministry of Environment, Waters and Forests www.gov.ro

#### Slovakia

Vladimír Novák until Aug. 2020, from Aug. 2020: Roman Havliček, Ministry of Environment www.minzp.sk

#### **Slovenia**

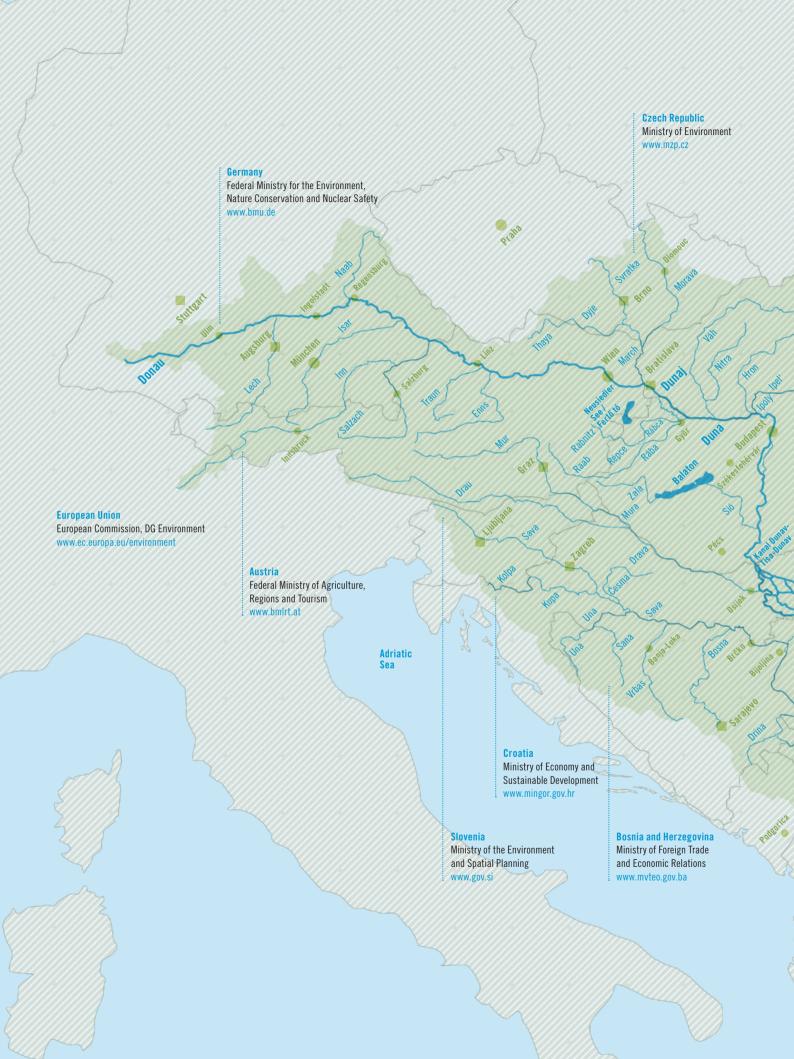
Mitja Bricelj, Ministry of the Environment and Spatial Planning www.gov.si

#### **Ukraine**

Mykola Kuzyo until Oct. 2020, from Oct. 2020: Iryna Stavchuk, Ministry of Environmental Protection and Natural Ressources www.mepr.gov.ua

#### **European Union**

Bettina Doeser. European Commission, DG Environment www.ec.europa.eu/environment





Deutschland Mostereich IIII Cesta renublika IIII Slovensko IIII

#### Contact

ICPDR — Permanent Secretariat
Vienna International Centre / D0412
Wagramer Strasse 5 / 1220 Vienna / Austria
T: +43 (1) 26060-5738 / F: +43 (1) 26060-5895
secretariat@icpdr.org / www.icpdr.org

#### **Imprint**

Editor: Hélène Masliah-Gilkarov

Text: Tristan Bath
Layout: Barbara Lewall

**Photos:** page 2: Unsplash/Joachim Pressl, page 3–5: ICPDR, page 7: Unsplash/Gloria Cretu, page 9: Unsplash/Razvan Mirel, page 10: Unsplash/Ivan Bandura, page 13: Unsplash/Mika Baumeister, page 14/15: Unsplash/Katja Rooke,

page 16: Unsplash/Pavol Svantner.

**Print:** Printed on Munken Lynx, 100% TCF, FCS, awarded with the Nordic swan



Handard IIII Bosna i Hercegovina IIII Cyfolia III Cyfolia IIII Cyfolia III Cyfolia III