



RESTORING AND MAINTAINING THE QUALITY OF WATERS

Supporting activities focusing on accession and non-EU countries towards achieving the Danube basin-wide goals



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OVERVIEW

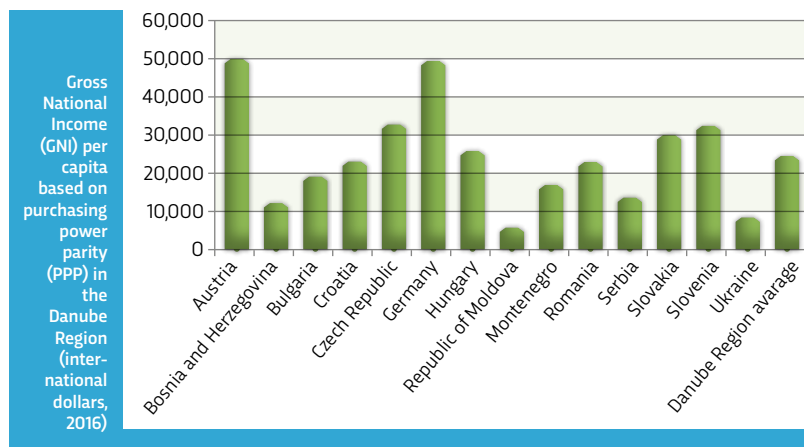
The Danube Region represents one fifth of the European Union's total area and is home to more than 100 million inhabitants. The region is comprised of 9 EU (Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Romania, Slovakia and Slovenia) and 3 accession/candidate countries (Bosnia and Herzegovina, Montenegro and Serbia) and 2 non-EU countries (Moldova and Ukraine). The states show significant regional disparities in economic and social development. In order to increase growth and strengthen cooperation at a macro-regional level, the European Union established the Danube Region Strategy with eleven priority areas, among them one focusing on water quality issues.



Source: <http://www.danube-region.eu/>

The countries of the Danube Region Strategy (EUSDR)





World Bank data, Diagram compiled by PA4

The EU pays special attention to the cooperation at water basin level and for that it adopted macro-regional strategies. Since 2009 four macro-regional strategies have been adopted, the EU Strategy for the Baltic Sea Region, the EU Strategy for the Danube Region (EUSDR), the EU Strategy for the Adriatic and Ionian region and one year afterwards the EU Strategy for the Alpine Region. One of these strategies, namely the EU Strategy for the Danube Region (EUSDR) was adopted and endorsed under the Hungarian EU Presidency in June 2011.¹ The EU emphasises the importance of early exchange of experience between macro-regional strategies on the best practices of the implementation of the water-related priority areas.

The water quality priority area of the EU Strategy for the Danube Region (EUSDR PA4) finds it inevitable to establish a closer link with the other macro-regional strategies, especially their water-related activities. From 2017 on the EUSDR PA4 initiates discussion with other macro regional strategies to exchange experiences and facilitate networking towards identifying common problems and solutions.

¹ Council conclusions of 13 April 2011 on the European Union Strategy for the Danube Region (doc. 8743/1/11 REV 1 –COM(2010)715 final)

The EUSDR addresses major challenges from transport to energy and environment, among others. The main objectives of the complex strategy include socio-economic development, the improvement of competitiveness, environmental management and resource efficiency, enhancement of security and the modernisation of transport corridors.

The 4 pillars of the Strategy are as follows:

- ▶ connecting the Danube Region,
- ▶ protecting the environment in the Danube Region,
- ▶ building prosperity in the Danube Region and
- ▶ strengthening the Danube Region.



The Priority Area

The Danube is Europe's second longest river, after the Volga River, and the longest in the European Union. The Danube is the most international river basin in the world, stretching over 2800 km across Europe. The river rises from a spring near the town of Donaueschingen, in the Black Forest in Germany and then flows southeast, passing through four capital cities before settling into the Black Sea via the Danube Delta in



Mayflies in the Tisza River, Hungary

Romania and Ukraine. The Danube Basin covers an area of over 800,000 km², stretches over 19 countries, 14 of which are contracting parties to the Danube River Protection Convention (DRPC) signed in Sofia in 1994. The drainage area of the Danube is also influenced by two major mountain chains: the Alps and the Carpathians. Water management is therefore a central issue to the Danube Region, as water does not recognise borders and its management requires strong coordination and cooperation.

Restoring and maintaining the quality of waters is focusing on the reduction of four main pressures coming from organic and nutrient pollution, derived from hazardous substances and from hydromorphological alterations. These pressures have resulted in strong eutrophication of the waters, sometimes causing risks or threats to human health, but also altering the aquatic ecosystem functions endangering the species of these systems.

Governance

Hungary, together with Slovakia has been assigned to coordinate the water quality issues (Priority Area 4) and to ensure integrated



8th Steering Group meeting of water quality priority area in Bratislava

water management towards reaching the good quality of waters in the Danube River Basin. The main decision making body is the Steering Group, comprised of representatives from all Danube Region countries.

To address the above mentioned issues the water quality priority area (PA4) has chosen the following tools for its approach:

- cooperation with relevant institutions;
- alignment of funding;
- facilitate project implementation and to create a platform for networking towards setting up project consortiums.

KEY CHALLENGES AND APPROACH

CHARACTERISTICS OF WATER QUALITY IN THE DANUBE REGION

The basin itself has unique natural resources and nearly 1500 protected areas have been designated in its territory. The Danube Delta forms the richest biodiversity area of Europe. There are also important natural resources utilized by industry, agriculture, transport and used for energy production and also for recreation. One of the most unique natural resources is water and the water-related habitat of the basin, therefore the preservation of its good quality is essential.

There are, however, significant threats which jeopardize the quality of water deriving/resulting from human activities. Several of the waters are affected by eutrophication and suffer from untreated wastewater loads or hazardous substances. Structural man-made changes influence aquatic ecosystem functions and, moreover, emissions from pollutants deteriorate groundwater quality.

Managing water quality

Since the Water Framework Directive came into force in 2000 the EU countries are obliged to report on the steps to be taken to reach and to preserve good status of the waters. To implement the objectives – set in the Water Framework Directive – and to achieve good status of waters in Danube River basin-wide scale, it is crucial to involve the accession and non-EU countries in the implementation process as well.

The International Commission for the Protection of the Danube River (ICPDR) is one of the platforms for the implementation of joint efforts in the Danube River Basin wide scale. This international organisation committed itself to developing the Danube River Basin Management Plan including measures from both EU and non-EU countries to accomplish goals set in the Water Framework Directive. The EUSDR 'water quality' priority area works in close cooperation with the ICPDR to manage joint objectives.

Involvement of accession and non-EU countries in the process

'Water quality' priority area *"To restore and maintain the quality of waters"* of the EUSDR emphasizes the importance of the involvement of accession/candidate and non-EU countries in the basin-wide work and has already valuable achievements in the following fields of activities:

- 1) supporting joint efforts in sub-basins – e.g. strengthening the Tisza River Basin cooperation (Slovakia, Ukraine, Hungary, Romania, Serbia);
- 2) alignment of funding – supporting Ukraine in exploring funds to modernize waste water treatment facilities in four cities of the basin;

- 3) stimulating steps to investigate the potential risk of abandoned salt mine in Solotvyno, Ukraine;
- 4) fostering the set up of projects consortiums and supporting the development of project proposals (involving non-EU countries into the projects).

Strengthening sub-basin cooperation

In the Danube River Basin there are four sub-basins with special importance:

- the Tisza River basin,
- the Sava River Basin,
- the Prut River Basin, and the
- Danube Delta.

Strengthening cooperation in the Tisza River Basin

The Tisza River Basin is the largest sub-basin of the Danube watershed. The Tisza River is the longest tributary of the Danube (966 km), and drains an area of 157,186 km² in five countries: Slovakia, Ukraine, Hungary, Romania and Serbia.

There is a long history of cooperation in the Tisza River Basin. The Tisza countries signed the Agreement on the protection of the Tisza and its tributaries in 1986² and also established the Tisza Forum to address flood issues in 2000.

In December 2004, at the first ministerial meeting of the ICPDR, ministers and high-level representatives of the five Tisza countries signed the

² Convention on measures to combat pollution of the Tisza River and its tributaries, adopted in Szeged in 1986



Tisza River in Ukraine

The Tisza Group countries following the identification of the key water management issues developed an integrated Tisza River Basin Management Plan with political endorsement at a ministerial meeting in 2011.³



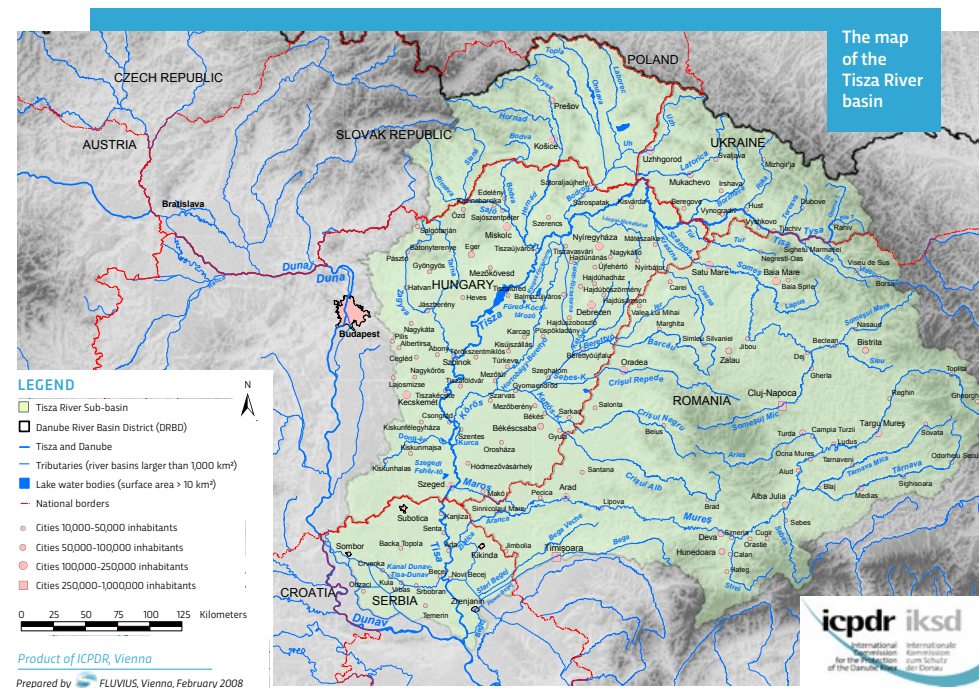
Since 2013 activities related to the Tisza river cooperation have been ongoing with the assistance of the 'water quality' Priority Area of the Danube Strategy. To manage national activities as well as to contribute to the international Tisza Group works – together with the ICPDR and EUSDR priority area on 'water quality' – the *National Tisza Office* has been established and was ceremonially opened in Szolnok in November 2014, in the heart of the Tisza River Basin.

³ <http://www.icpdr.org/main/danube-basin/tisza-basin>

Memorandum of Understanding (*Towards a River Basin Management Plan for the Tisza River Supporting Sustainable Development of the Region*) – which was further strengthened in 2011 – and established the ICPDR Tisza Group.

The Tisza Group is the platform for strengthening coordination and information exchange related to international, regional and national activities in the Tisza River Basin and ensuring harmonisation and effectiveness of related efforts.

Ukraine, Romania, Slovakia, Hungary and Serbia share the Tisza River basin and are also aware of the area's problems related to water supply, flooding, droughts, landslides and erosion, pollution by industrial and mining activities as well as from agriculture. These problems are influencing/affecting water quality and quantity, and the management of land and water.



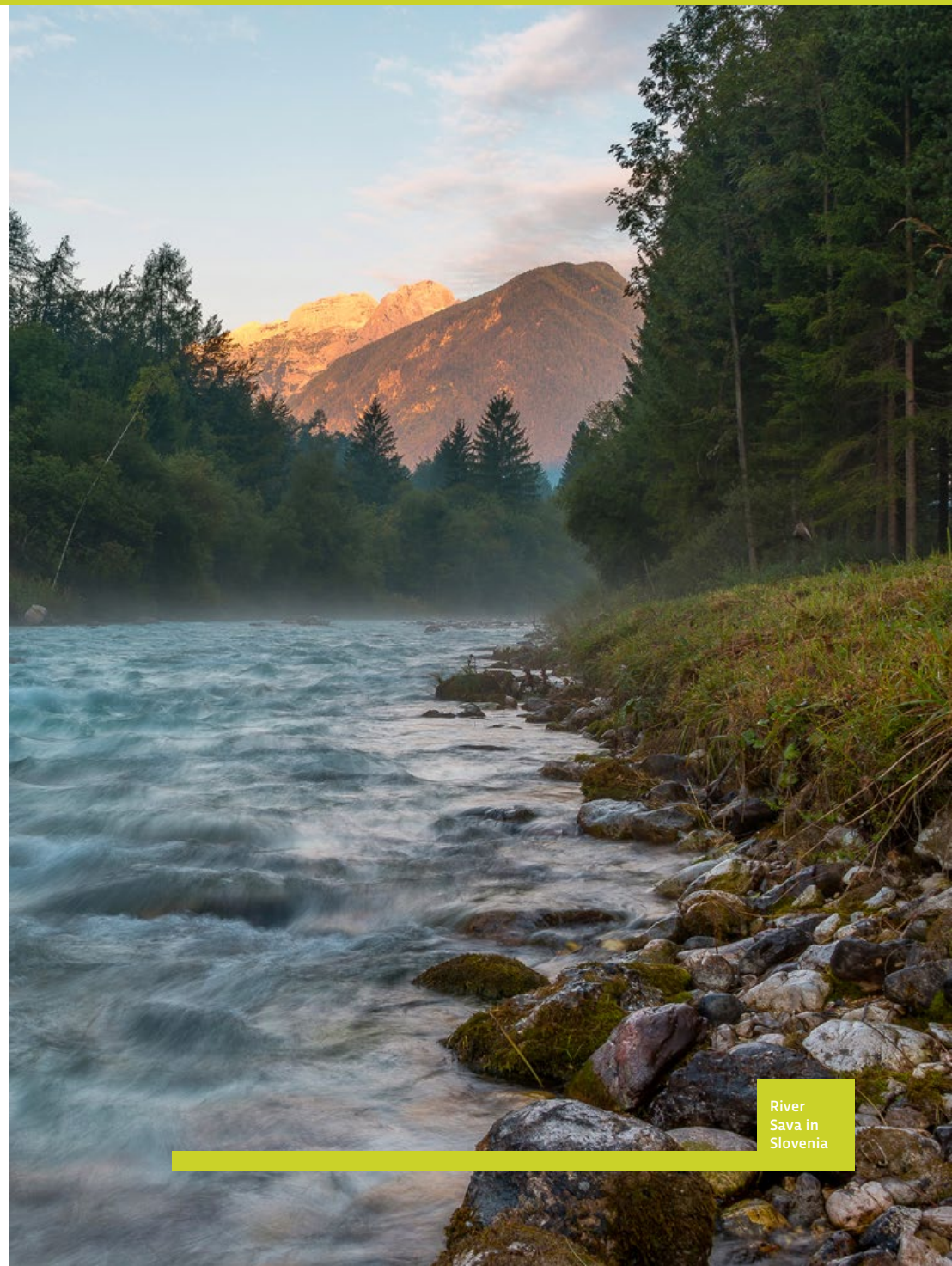


The opening ceremony of the Tisza Office in Szolnok, Hungary (2014)

The EUSDR 'water quality' priority area facilitates the ICPDR Tisza Group activities jointly with the ICPDR Permanent Secretariat and prepared the project proposal JOINTISZA, which had been successfully approved in 2016 and is financed by the Danube Transnational Programme since January 2017.

Cooperation in the Sava, Prut and Danube Delta sub-basins

The four riparian countries of **the Sava River basin** - Bosnia and Herzegovina, the former Federal Republic of Yugoslavia, Republic of Croatia and Republic of Slovenia signed a "Letter of Intent" in 2001 on launching the joint activities regarding the Sava River and its tributaries, which was signed in Sarajevo (B&H) on November 29, 2001, by the ministers of foreign affairs of the four countries. In 2002 the Sava countries signed the Framework Agreement on the Sava River Basin (FASRB), which integrated all aspects of the water resources management. The countries established the (joint) International Sava



River Sava in Slovenia

● River Basin Commission (ISRBC) for the implementation of the FASRB, with the legal status of an international organization. The permanent Secretariat of the Sava Commission started to work on January 2006.⁴

● The water quality priority area works in close cooperation with the Sava Commission and an important action in relation to the EUSDR is the establishment and completion of the SavaGIS, which was achieved in the frame of the ISRBC.

● With regard to the **Prut River and Danube Delta**, specific projects are facilitating the work and progress. The project “*Environmental protection of international river basins (EPIRB)*” started in 2012. The project is funded by the EU (ENPI) and focuses on the Prut River as a pilot area aiming at developing a joint River Basin Management Plan according to the EU WFD requirements with the involvement of Ukraine and Moldova and in close exchange with the ICPDR.

⁴ <http://www.savacommission.org/>

Prut River and waterfall Probiy in Ukraine



Danube delta, Romania

● In the Danube Delta, a project, managed by the ICPDR, financed by the Environment and Security Initiative (ENVSEC) is focusing on improving cross-border cooperation and building capacities for introducing a river basin approach for the management of natural resources in the Danube Delta Region. The draft Danube Delta Analysis Report (DDAR), including the evaluation of important water management issues of the region, is finalised.





COORDINATING WATER QUALITY ISSUES

Alignment of funding

One of the most important tasks is to facilitate the alignment of funding. The aim is to assist the improvement of water quality by incorporating the tasks/standards of the EUSDR to the documents and operational programs of the European Structural and Investment Funds as well as other financing frameworks.

The EUSDR contributed to facilitating the alignment of funding in a structured and systematic way and made effective actions to embed the priority interventions to the EU programs of the “2014-2020 Multiannual Financial Framework”.

The priority area jointly with other priority areas led by Hungary organised Stakeholder Conferences in November 2015 as well as in May 2017, where financing programmes were demonstrated/represented to a wide range of interested stakeholders. Within the framework of the conferences, several funding possibilities have been introduced, among others the Danube Transnational Programme, Horizon 2020 and LIFE. The event also provided a platform for stakeholders for cooperation and networking for the sake of establishing future consortiums.

Exploring funds to modernize wastewater treatment in four Ukrainian cities of the Danube River basin

Continuous exchange of data, early warning mechanisms and discussion of problems are at place and ongoing in all bilateral water committees of Hungary and also operating within the Danube Transnational Monitoring Network.



Aerial view of storage tanks in sewage water treatment plant

In case of four Transcarpathian cities (Mukachevo, Uzghorod, Hust and Bereghovo) information was obtained about outdated and/or improperly operating wastewater treatment plants directly polluting the tributaries of the Tisza River. The plants were built in the Soviet era with outdated technology and limited capacities. Since the amount of wastewater is measured neither at the wastewater treatment plant, nor at any other parts of the networks, the volume of sewage loading can be estimated only. Following the workshop organized by the EUSDR Hungarian National Coordinator in June 2015 and with his assistance, the related cities applied in February 2016 for a long term preferential European Investment Bank (EIB) loan that was awarded by the Ukrainian government in the amount of 400 million EUR. Also,



Ukrainian partners presented a project package to create the pre-feasibility study of wastewater treatment plants reconstruction that the Danube Strategy 'water quality' priority area high level managing group (the Steering Group) awarded with a letter of recommendation in September 2015. As a result, an EUSDR START project CleanRiver – creation of feasibility study for improvement of wastewater treatment facilities in Ukraine was implemented in 2016.

Stimulating steps to investigate the potential risk of abandoned salt mine in Solotvyno, Ukraine

One example wherein immediate action was taken to alert in case of potential water quality problems in the Danube basin was the case of the Solotvyno salt mines in Ukraine.

After a fact-finding mission in summer 2015, the EUSDR Hungarian National Coordinator found that it is of mutual interest to improve the emergency in the area of salt mines taken into account the uncontrolled development of crisis management of the region. The

National Coordinator requested Hungarian members of the European Parliament to enquire after the possible financial sources to be mobilized for assessing the environmental risk in Solotvyno Ukraine. Mr Johannes Hahn, Commissioner for European Neighbourhood Policy & Enlargement Negotiations, in his answer, highlighted the EU Civil Protection Mechanism as well as the Hungary-Slovakia-Romania-Ukraine ENI CBC Programme besides the importance of effectively utilizing the framework of the EUSDR.

As a result, a joint letter was sent to the European Commissioner for Humanitarian Aid and Crisis Management to ask for an EU expert risks and threats assessment study. Considering the high impact and urgency of the situation, Commissioner Stylianides declared in February 2016 that the Commission will organise a fact-finding mission composed of EU experts, which then took place in September 2016.

Based on the findings of the fact-finding mission a project proposal is currently under preparation to be submitted in September 2017 for the Hungary-Slovakia-Romania-Ukraine European Neighbourhood Instrument Cross-border Cooperation Programme 2014-2020.



Solotvyno, Ukraine: Start of the ecological disaster – sinkhole in the territory of an abandoned mine, which previously mined salt

PROJECT SUPPORT

Fostering the set up of project consortiums

Nearly 20 Danube basin water-related projects and ideas were introduced into the framework of the high level working group of water quality priority area (Steering Group meetings) between the years of 2013-2017.

The Danube Strategy organized workshops and stakeholder conferences to disseminate knowledge related to available funds and financial possibilities. The stakeholder conferences on European funding opportunities, held in November 2015 and May 2017 in Budapest, aimed at facilitation of networking and available financial possibilities for project generation and implementation in the Danube basin. The conferences also served as a networking platform to potential project partners.

PA4 was active in selecting the projects for Seed Money Facility START Danube Region Project Fund under the EUSDR and voted the best projects to be funded in 2014 and 2015 - STAWA (*Towards the assessment of ecological status of water bodies in the Sava River Basin*); REWATER (*Revitalization of Eutrophic Waters for Different Degrees of Pollution and the Size of Water Areas*); CleanRiver (*Creation of feasibility study for improvement of wastewater treatment facilities in Ukraine*) and project SANDANUBE (*Sustainable sanitation in small settlements of the Danube Region*). These projects were selected for START support.

PA4 was also supportive in 2016-2017 for proposals to be set up for the Danube Strategic Project Fund (DSPF) and forwarded 4 project proposals to be funded. Currently we are waiting for a DSPF decision on which project will obtain funding.

Supporting the development of strategic project issues

It is also an important goal of the EUSDR 'water quality' priority area to assist in the development of project proposals with basin-wide relevance.

Two main topics are of strategic importance for the priority area, one dealing with the sediment balance of the Danube River (DanubeSediment project), and another dealing with sub-basin – Tisza – integration issues (JOINTISZA project).

The lead partners together with the involved Danube countries, the ICPDR and EUSDR PA4 made big efforts to develop successful project proposals. Thanks to the joint efforts both projects have been selected by the Danube Transnational Programme for funding in 2016 and started their activities in January 2017.

JOINTISZA
kick-off
meeting,
1-2 March
2017,
Szentendre





The DanubeSediment project's (entitled the "Danube Sediment Management – Restoration of the Sediment Balance in the Danube River") major objective is to review the current status of the sediment regime of the Danube, including the inputs of major tributaries. It also aims to analyse pressures and impacts, assess the potential for restoration of sediment balance and propose actions to be taken in order to improve the sediment continuum and river morpho-dynamics along the Danube. The project has strong EUSDR relevance and fully supports the implementation of the EUSDR PA4 Action Plan, which is one of the outputs of the Strategy approach.

The Danube Sediment project contributes to the implementation of the Danube River Basin Management Plan. Through contributing to a reduction of flood risks, the link to the Danube Flood Risk Management Plan and to the EU Floods Directive (Directive 2007/60/EC) is also ensured.

Nine Danube countries are participating in the project and among the project partners relevant stakeholders are also contributing to the successful implementation of the main objective. The project Lead Partner institution is situated in Hungary.

Further information is available in the following website: <http://www.interreg-danube.eu/approved-projects/danubesediment>

The **JOINTISZA project** (entitled "Strengthening cooperation between river basin management planning and flood risk prevention to enhance the status of waters of the Tisza River Basin") focuses on interactions of two key aspects, the river basin management and flood protection, taking into account the relevant stakeholders who play a fundamental role in the Tisza River Basin Management planning process. The main aim of the project is to further improve the integration of the water management and flood risk prevention planning and actions in the next River Basin Management planning cycle, in line with the



The little egret flying over the River Danube at Zemun in the Belgrade, Serbia

relevant EU legislations. The project ensures better embedding of flood risk management planning into the River Basin Management planning process and also encourages the involvement of relevant sectors (such as flood risk management, water resource management, urban hydrology management, drought management) and interested stakeholders. In the long run the project will initiate the change of better contribution to the implementation of the Flood Risk Directive and Water Framework Directive.

The JOINTISZA project contributes to the implementation of the EUSDR Action Plan aiming at strengthening cooperation in the Tisza River Basin as well as to update the Integrated Tisza River Basin Management Plan. The project activities ensure the continuation of investments and support the information collection systems already developed by the International Commission for the Protection of the Danube River (ICPDR).

All countries of the Tisza River Basin are participating in the project and among the project partners several organisations with transboundary relevance are involved. The ICPDR participates as a project partner in the project. The project Lead Partner institution is situated in Hungary. Further information is available in the following website: <http://www.interreg-danube.eu/approved-projects/jointisza>.



CAPITALIZATION

Beside the above mentioned JOINTISZA and DanubeSediment projects, other DTP projects, namely CAMARO-D and DriDanube belong to the DTP Capitalisation Thematic Pole 4: Water Management that was launched in January 2017 and being co-coordinated by EUSDR PA4. Networking with further projects (STREAM, DANUBEparcsCONNECTED, FramWat, DREAM, Sturgeon 2020) in the frame of capitalization is under progress as well.

SYNERGIES WITH OTHER REGIONAL INITIATIVES

Joint cooperation with the ICPDR

Cooperation with international organisations operating in water quality-related topics has crucial relevance in the working process of the EUSDR. As part of the implementation of the Danube River Basin Management Plan, one of the main goals of the EUSDR a 'Joint Paper on Cooperation and Synergy for the EUSDR Implementation' has been developed outlining the main fields of joint activities between the ICPDR and EUSDR.

Collaboration with the UNEP Carpathian Convention

The UNEP Carpathian Convention is a sub-regional treaty to foster the sustainable development and the protection of the Carpathian region. The Convention was signed by seven Carpathian States (Czech

Republic, Hungary, Poland, Romania, Serbia, Slovak Republic and Ukraine). Within the framework of the EUSDR Annual Forum, in 2015 a Joint Declaration was signed between ICPDR Tisza Group and the Carpathian Convention during a workshop organised by the EUSDR priority area on 'water quality'. The declaration – among others – aims to reinforce cooperation especially in the Tisza sub-basin, to cooperate in the field of education and awareness raising (on the level of the local communities) and to strengthen the relationship between the sustainable development of the Carpathian Mountains and the Tisza river basin management. Achieving these objectives and further elaborating the topics of the future enhanced cooperation are part of our mutual intentions to develop and implement joint, coordinated and complementary activities and projects.

In 2016 a Memorandum of Cooperation was signed between the Carpathian Convention and the EUSDR PA4 to ensure the coordination of all relevant activities of the two organisations.

Integrated Workshop during the 4th Annual Forum of the EUSDR in Ulm (2015)





Interreg



Danube Transnational Programme



**DANUBE REGION
strategy**

Water Quality