# Danube: Future – A Promising Path to Connecting the Danube Region

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Abstract: The aim of this paper is to present the participation and involvement of the University of Ruse in the Danube: Future Project for sustainable development of the Danube Region. A white paper on integrated sustainable development of the Danube River Basin produced by representatives of Danube Rectors' Conference and Alps-Adriatic Conference member universities. Case study of the participation of the University of Ruse in the 3 editions of the DIANET International School, the 1st Danube:Future Workshop, and in the Management Committee of the Project. The general conclusion drawn in the paper is that the Danube:Future project has allowed the University of Ruse to be more engaged in the scientific development in the Danube Region, and has improved its visibility among other universities and stakeholders. The paper results can serve as a motivation for other researchers and universities to join the project and contribute to its growing Knowledge Base. The study will contribute to finding new paths for developing research in the Danube Region by making the environmental and cultural heritage of the DRB visible and bringing it into the context of sustainable development.

**Keywords:** Danube; Future flagship project; sustainable development; knowledge base

JEL Classification: F640; I230; Q560

#### 1. Introduction

Danube:Future is an EUSDR-Priority Area 7 Flagship Project for research and integration. The project has begun in September 2013 and is planned to continue until 2020. The three project modules are: core module, capacity building module, and research module. In 2015 the University of Ruse has been accepted by the other core universities as the fifth core partner. This pivotal event opens new horizons for a bright future and reaffirms the position of the University in the lower Danube River Basin (DRB).

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## 2. Context of the Project

### 2.1. The European Union Strategy for Danube Region (EUSDR)

The European Union faces some grand challenges related to its sustainable development (EUSDR, 2016). These challenges also pertain to the Danube River macro-region, and in some cases are even more pressing than in the Western European countries. As formulated in (COM, 2010) "An EU Strategy for the Danube Region can contribute to EU objectives, reinforcing major EU policy initiatives, especially the Europe 2020 strategy." This document proposes an action plan in response to the challenges of the Danube Region and the opportunities which can make it "a truly 21st century region, secure and confident, and one of the most attractive in Europe."

The Danube:Future project aims to contribute to Priority Area 7 "To develop the Knowledge Society (research, education and ICT)" which falls into the third of the four main pillars of the EUSDR - *Building prosperity in the Danube Region*. Danube:Future focuses on the preservation of natural and cultural heritage through investment in young researchers and better networking between knowledge providers, companies, and policy-makers. This is no easy task because achieving the EUSDR goals requires trans-national, inter-sectoral, inter-institutional, and transdisciplinary teams of involved stakeholders.

## 2.2. The International Commission for the Protection of the Danube River (ICPDR)

The basis for the work of ICPDR is the "Convention on the Cooperation for the Protection and Sustainable Use of the Danube River" (Danube River Protection Convention), which has been signed in Sofia back in 1994. ISPDR is involved in the EUSDR, implements the EU Water Framework and Flood Directives, maintains sophisticated database related to water management, and helps raise awareness about sustainability issues in the Danube River Basin.

After more than 20 years of successful initiatives, on 9 February 2016, a new "Danube Declaration" has been adopted. It calls for integration and solidarity in the most international river basin in the world. This vision of the ICPDR is echoed in the Danube: Future project which targets all 19 countries in the Danube catchment. The project can contribute with researchers' expertise in the efforts of the ICPDR to achieve its main goals:

- Safeguarding the Danube's Water resources for future generation;
- Naturally balanced waters free from excess nutrients;
- No more risk from toxic chemicals;
- Healthy and sustainable river systems; and
- Damage-free floods.

Danube: Future can support an efficient protection of water resources by introducing comparative studies, for example protecting the Danube River by applying lessons learned from other sites, countries, or even historical periods.

## 2.3. The Danube Rector's Conference and the Alps-Adriatic Rectors' Conference

Both the Danube Rector's Conference (DRC) and the Alps-Adriatic Rector's Conference (AARC) are of great importance for the Danube:Future project.

The **DRC** embodies the interests and the scientific potential of 71 universities from 15 European countries (see Figure 1). DRC aims the advancement of its member universities by establishing and facilitating bilateral and multilateral contacts between them. (DRC, 2016).



Figure 1. Map of Danube Rectors' Conference universities Source: (DRC, 2016)

The DRC organizes conferences, workshops, and summer schools. It also participates in EU funded projects and actively contributes to various Workgroups for the EUSDR Priority Areas. The University of Ruse has contributed to DRC by organizing a scientific conference along with DRC meetings in 2010 in Ruse. This benefited the host university by popularizing it among its DRC partners, and has intensified the interactions between young and renowned researchers alike.

The Rector of the University of Ruse has served as President of the DRC during the term of 2011-2012. (University of Ruse, 2016). The Bulgarian involvement with the DRC will be strengthened later this year when, on 9 November, the President of the Republic of Bulgaria will deliver a keynote speech in the context of the Annual Conference of the DRC in Krems, Austria.

The **AARC** adds to the DRC another significant group of 39 universities from 9 European countries. The AARC was founded in 1979 and "is constituted to promote dialogue among the higher educational institutions of the Alps Adriatic regions in the fields of education, scientific research and didactics." (AARC, 2016). Along with the annual Summer School at Bovec, the projects of Danube:Future are central to the activities endorsed by the AARC.

The context in which Danube:Future has been established and still operates allows good alignment with EU strategies and policies, provides opportunities for exchange of best practices, and in fact 'taps the largest pool of institutionalized knowledge in the Danube River Basin' (Danube: Future, 2016).

## 3. The Danube: Future Project

#### 3.1. Project Goals

Being a Flagship project of the EUSDR, Danube:Future has set out several goals which are both relevant to European priorities, and to the specialization of the project partners and stakeholders. The overall project goals are:

- To have a lasting effect on research and teaching in the humanities in the region;
- To develop, support and promote projects of smart specialization, engaging with the sustainability questions in the DRB;
- To create living heritage by making the environmental and cultural heritage of the DRB visible and bringing it into the context of sustainable development;
- To develop a series of in-depth analyses of the long-term evolution of the DRB and its implications for sustainable development.

#### 3.2. Project Partners

The four main types of partners of the project are presented on Figure 2. The functioning of the project is assured by the **core partners** which are:

- Alpen-Adria-Universität in Klagenfurt, Austria;
- University of Trieste, Italy;
- University of Natural Resources and Life Sciences Vienna (BOKU), Austria;
- University of Novi Sad, Serbia; and
- University of Ruse "Angel Kanchev", Bulgaria.

The aforementioned DRC and AARC are not only **endorsing partners**, but also key members of the Management Committee of the project. This decision-making consortium comprises of the project manager, the project coordinator, the project administrator, two representatives of the core universities, and one representative from each of the DRC and the AARC.

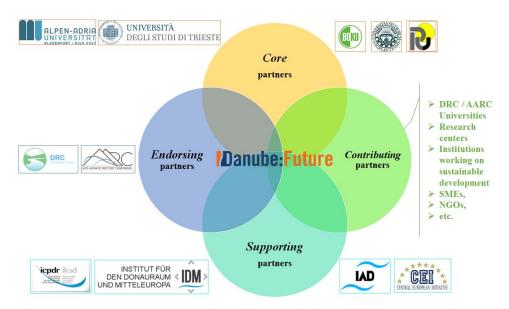


Figure 2. Venn diagram representing the Danube: Future partners

Currently, the Danube: Future project has four **supporting partners** which are:

- The International Commission for the Protection of the Danube River (ICPDR),
- The Institute for the Danube Region and Central Europe (IDM),
- The International Association for Danube research (IAD), and
- The Central European Initiative (CEI).

The ICPDR undoubtedly sets the pace for Danube:Future. The IDM addresses current issues regarding the Danube region, Central and Southeast Europe in an effort to better understand the region and to promote good relations among neighbouring nations. The IAD is the longest existing international scientific network in the Danube Region, established in 1956. Its main goal is to promote and coordinate activities in the fields of water management, water protection, and sustainable development in the DRB. The fourth supporting partner- the CEI, combines multilateral diplomacy and project management, both as donor and recipient of EU funding, while bridging European macro-regions.

Last but not least, Danube:Future relies on valuable inputs from its more than 35 **contributing partners** which represent a wide range of universities, research centres, small and medium-sized enterprises, and non-governmental organizations.

#### 3.3. Project Modules

#### Core module

Danube:Future is aimed at establishing an open-access knowledge base, generating a "green job" idea pool, and providing a decision support facility. The dynamic **knowledge base** (see Figure 3) to which capacity building and research projects can contribute, can increase their visibility and accessibility. The outcomes of the Danube:Future project are available to organizations, institutions and decision-makers. The project encourages researchers from various fields of knowledge to contribute to the sustainable development of the Danube Region through Danube:Future, and to become its members.

Currently, all DIANET Schools' (see below) lecturers and participants are members who contribute to enriching the knowledge base. A Member (Danube: Future Knowledge Base, 2015) is entitled to:

- Propose to the Management Committee to link a project to Danube:Future;
- Participate in the Working Groups activities;
- Create a new Sub-Working Group for developing a new project; and
- Contribute his/her expertise to the WIKI.

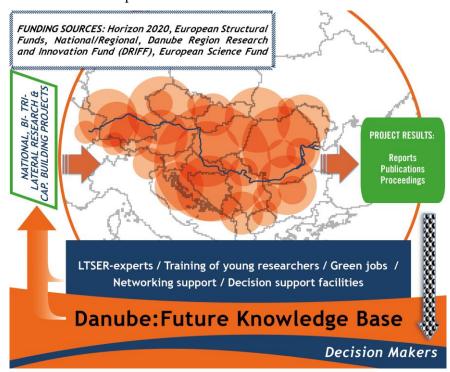


Figure 3. Danube: Future Project map (Danube: Future, 2016)

An integral part of the core module are the **international workshops** which "aim to identify challenges and potentials for research to create a knowledge base for the sustainable development of the Danube Region". The first international Danube:Future Workshop on the role of cultural and natural heritage for the sustainable development of the Danube Region has been held in the period of 8-10 April 2015 at the facilities of the Alpen-Adria Universität, Klagenfurt. 33 participants from 11 countries and 25 institutions, including two members from the University of Ruse, contributed actively to the elaboration of a **White Paper** (Winiwarter & Haidvogl, 2015).

The White Paper calls for the support of the DRC, the AARC and decision makers. Furthermore, it advocates that integrated sustainable development of the DRB can only be achieved with the cooperation of universities in the macro-region.

## The White paper aims to:

- Support member universities of the DRC and the AARC in their efforts to promote a sustainable knowledge society in the DRB;
- Support the implementation of the EUSDR by taking into account the challenges and opportunities of the DRB;
- Foster inter- and transdisciplinary research in the DRB within the Horizon 2020 program, especially within Societal Challenges; and
- Provide DRC and AARC presidencies with a document they can share with the EU Directorate General "Research".

A number of specific recommendations for policy makers are the main outputs from the discussion about existing challenges and opportunities in the DRB (Winiwarter & Haidvogl, 2015):

- To use the Danube Region as a **real laboratory** for the European transformation to a sustainable future;
- To establish **national contact points** to ensure national participation in international sustainability networks such as Danube:Future;
- To develop of a joint **knowledge base** on research and capacity building as information brokers and networking agents;
- To secure **funding** of long-term, integrated sustainability **research** on the roles of cultural and natural heritage and for the identification and compilation of long-term data about natural and cultural heritage in cooperation with the Long-Term Socio-Ecological Research (LTSER- see Figure 3) community;
- To invest in **training** programs for a sustainable development of the Danube Region with a specific focus on long-term, integrated research. This will contribute to pass on innovative research output; and

- To set up local, regional and national **stakeholder** (international science-policy) **dialogues** for developing program priorities.

### Capacity Building Module

The thematic focus of the capacity building module takes into account existing initiatives and frameworks dealing with sustainable development research. Danube:Future is aimed at developing trainings in cultural and natural heritage, institutional capacity building for green jobs, and strengthening regional networks. The picturesque town of Gorizia provided a perfect ambience for carrying out the three editions of the DIANET School:

- First edition "Interdisciplinary methods for the sustainable development of the Danube Region", April 13<sup>th</sup> 22<sup>nd</sup>, 2013: 37 participants from 18 universities and 12 countries;
- Second edition "The role of natural heritage for the sustainable development of the Danube Region", March 22<sup>nd</sup> 31<sup>st</sup>, 2014: 35 participants from 17 universities and 11 countries:
- Third edition "The role of cultural heritage for the sustainable development of the Danube Region", March  $14^{th} 23^{rd}$ , 2015: 40 participants from 16 universities and 10 countries.

The University of Ruse has been invited and has sent a participant in each of the three editions of the DIANET International School. The challenge to work in an intensive international and interdisciplinary environment and still come up with meaningful projects has allowed all participants to benefit from the competence of their colleagues, lecturers and mentors. The final presentations and the resulting publications in the proceedings from the DIANET School clearly demonstrate the potential of young researchers when they have specific guidance from the organizers, and when they invest their diverse knowledge and professional experience in achieving a common goal.

#### Research Module

This module of the project is a natural continuation of the "capacity building module" and the "core module". Danube:Future takes into account the long-term legacies of the troubled history of the Danube Region with a strong focus on humanities and social sciences through new interdisciplinary approaches.

Environmental problems hamper and impede economic growth and sustainable development in the EU, and on a global scale. The knowledge of such problems, and also of effective solutions to environmental disasters, is sometimes unavailable to international researchers. Having local 'ambassadors' of natural sciences in each DRB country will provide better access to information which has never been translated and published in a widely used language, for example, in English.

The research module will provide access to the Knowledge Base from the core module to both young and experienced researchers. This will allow smoother transfer of knowledge and ultimately will lead to better understanding of similarities and differences, generating new ideas, projects, and sustainable solutions to pressing issues of our societies.

#### 4. Conclusions

The University of Ruse is the most recent member in the core partnership of the Danube:Future project.

Danube:Future offers many new opportunities for connecting the Danube Region such as:

- Training young scholars in international and interdisciplinary research topics, e.g. long-term sustainable development perspective including social sciences and humanities;
- Providing visibility of research projects and results via the Danube: Future Knowledge base and WIKI;
- Networking of researchers in the DRB to encourage cooperation for developing new projects;
- Designing specific tools for science-policy cooperation; and
- Designing specific tools for transforming research into business.

## 5. Acknowledgement

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