



European  
Commission

## JRC TECHNICAL REPORTS

# Developing Danube R&I Projects across Borders – How to Make the Joint Use of EU-Funds a Reality?

*S3 Policy Brief Series*  
*No. 10/2014*

Ales Gnamus  
Fatime Barbara Hegyi  
Susana Elena Perez

September, 2014



Report EUR 26805 EN

**European Commission**

Joint Research Centre  
Institute for Prospective Technological Studies

**Contact information**

Institute for Prospective Technological Studies  
Address: Edificio Expo, c/ Inca Garcilaso, 3. E-41092 Seville (Spain)  
E-mail: [jrc-ipts-secretariat@ec.europa.eu](mailto:jrc-ipts-secretariat@ec.europa.eu)  
Tel.: +34 9544 88318  
Fax: +34 9544 88300

<https://ec.europa.eu/jrc>  
<https://ec.europa.eu/jrc/en/institutes/ipts>

This publication is a Technical Report by the Joint Research Centre of the European Commission.

**Legal Notice**

This publication is a Technical Report by the Joint Research Centre, the European Commission's in-house science service. It aims to provide evidence-based scientific support to the European policy-making process. The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of this publication.

JRC91447

EUR 26805 EN

ISBN 978-92-79-39693-9 (PDF)

ISSN 1831-9424 (online)

doi:10.2791/11712

Luxembourg: Publications Office of the European Union, 2014

© European Union, 2014

Reproduction is authorised provided the source is acknowledged.

Printed in Spain

# Developing Danube R&I Projects across Borders – How to Make the Joint Use of EU-Funds a Reality?

Ales Gnamus, Fatime Barbara Hegyi and Susana Elena Perez <sup>a</sup>

European Commission, JRC-IPTS, Seville (Spain)

S3 Policy Brief Series n° 10/2014 – June 2014

S3 Platform, JRC-IPTS

## Abstract

This Policy Brief analyses the opportunities and challenges that need to be addressed and handled with an integrated approach in order to assure a well-supported and effective transnational cooperation in the Danube macro-region. Cooperation among Danube countries has particular importance as regards to coordination of Research and Innovation (R&I) activities since they contribute significantly to competitiveness and economic growth of the macro-region and are at the same time the areas where cooperation and knowledge sharing across borders may crucially contribute to achieving best results. The purpose of this Policy Brief is to identify and examine the key issues that can contribute to the enhanced R&I cooperation in the Danube macro-region. On the other hand the report also briefly summarizes discussions among the experts at the workshop organised by DG REGIO and DG JRC in Brussels in April 2014. The report thus aims to take a stock of the state-of-the art of the current Danube cooperation activities and provide some guidance to the stakeholders on how to best enhance R&I cooperation in the Danube macro-region. The guide attempts to highlight some concrete suggestions on how to better implement governance mechanisms of transnational R&I cooperation, to revise the existing financing tools of cross-border and transnational cooperation in support of the project holders, and points out some synergies between EU funding sources that may be exploited to facilitate transnational R&I cooperation in the Danube macro-region.

**Keywords:** Danube region, research and innovation, synergies, transnational cooperation, EU funds.

## Acknowledgements:

The authors would like to thank cordially to the colleagues of DG REGIO, especially Eva Nussmueller, for her careful reading of the report and many useful suggestions making the text clearer. Many thanks are going also to Alessandro Rainoldi (JRC-IPTS) for his valuable suggestions. Special thanks to Prof. Dr Miroslav Veskovíc (Rector of the University of Novi Sad and EUSDR PA7 Coordinator) and Ana Condeco (JRC-IPTS) for their valuable quality review.

<sup>a</sup> The views expressed are purely those of the authors and may not in any circumstances be regarded as stating an official position of the European Commission.

## Table of Contents

Executive Summary	3
1. Introduction	4
2. Governance mechanisms supporting transnational R&I projects in the Danube macro-region	5
3. Financing tools supporting transnational projects	10
4. Synergies between EU funding sources for research and innovation	15
5. When EUSDR could be considered successful?	18
6. Conclusions and Recommendations	18
7. References	22
Annex. Results of the discussion of the Workshop	23

## Executive Summary

This Policy Brief focuses on the key elements for developing and facilitating Research and Innovation (R&I) projects across borders in the Danube macro-region and on the guidance on how to make the joint use of the EU-funds a reality.

The main policy recommendations (reflecting also the café session discussions at the workshop held in April) are grouped around four groups of interrelated elements:

- **Project governance mechanisms**, reflecting the issues related to the creation and management of “facilitatory” governance mechanisms such as: (i) practice-based tools (e.g. flexible additions to existing projects, boundary spanners, mutual learning); and (ii) legislation-based tools (e.g. harmonisation of administrative rules governing financing tools in different countries or territorial levels).
- **Financing tools**, mainly based on the EU-funded tools and their connections with limited availability of budgetary resources at national and regional level. These identified issues refer to: (i) the use of genuine trans-national tools (e.g. the EGTC); (ii) synergies between different funding tools supporting different EU policies (e.g. Horizon 2020 vis-à-vis European Structural and Investment Funds); and (iii) to the trans-national dimension of each EU funding tools (e.g. consortia under Horizon 2020 or existing facilities under the ESI Funds Regulations).
- **The role of smart specialisation**. This category highlights the new angle and perspective brought by smart specialisation into R&I policy-making and its role in the framework of regional/territorial development strategies. This means that the enhancement of trans-national co-operation does not necessarily need to be boosted top-down (via legislative changes and adaptation of the rules) or stimulated bottom-up (via transfer of practice), but can be influenced at an intermediate, more sophisticated level, which relates to strategy formulation and implementation, be it at the regional/national level (i.e. where the territorial dimension prevails) or at the R&I/STI level (i.e. where the thematic dimension prevails).
- **Alignment of strategic roadmaps**. This category refers to the discussions carried out on the potential of developing sort of a “European system of R&I-related strategies” under the umbrella of the Europe 2020 goals and the appropriate territorial and thematic declinations. Alignment of priorities across strategies would therefore act as a crucial facilitator to the design of more streamlined governance and funding tools across EU countries and regions.

As a final recommendation, and considering the peculiar articulation of the Danube region, the Policy Brief suggests fostering **the improvement of the administrative capacities of especially the non-EU Danube countries** to address the challenges of trans-national cooperation within the Danube macro-region. In this regard, the capacity building facility within the priority area 11 of the EUSDR should be better exploited.

## 1. Introduction

The latest comprehensive and comparative study of the Danube macro-region called "[Socio - Economic Assessment of the Danube Region: State of the Region, Challenges and Strategy Development](#)" published in March 2014 has confirmed that many challenges remain to be addressed by the Danube countries in order for the macro-region to improve cohesion and increase its competitiveness through cooperation. Cooperation among Danube countries has particular importance as regards to scientific cooperation since research and innovation (R&I) activities contribute significantly to competitiveness and economic growth and are fields where cooperation is a crucial factor for achieving results. Therefore knowledge produced across borders must be shared and made easily accessible. Dynamics of innovation in Europe may be better utilised if opportunities and challenges are addressed with an integrated approach on a macro-regional level. Issues embedded in a multilateral setting that go beyond borders of Member States (MS) are better handled in cooperation and any obstacles may be overcome by coordinated actions. Therefore, the goal of the Danube research and innovation (R&I) cooperation across borders is to reach synergies and value added at economic, environmental and social level. The basis of macro-regional cooperation is incorporating the principles of integration, coordination, cooperation, multi-level governance, and partnership in the issues of strategic relevance. In the Danube area many similarities and complementarities may be detected which call for transnational collaboration, moreover for joint financing of initiatives that transcend borders. Since the adoption of the [EU Strategy for the Danube Region \(EUSDR\)](#) stakeholders of the region have been meeting and working together in diverse settings, be it conferences, workshops, platforms, working groups or other initiatives to achieve a more strategic thinking in issues of common interest.

Realising the significance and potential of macro-regional R&I cooperation for the development of the Danube macro-region, the Joint Research Centre (JRC) of the European Commission (EC) provides dedicated support to [Research and Innovation Strategies for Smart Specialisation \(RIS3\)](#) in the Danube Region as a horizontal priority of the JRC Scientific Support to the Danube Strategy. "Looking beyond boundaries" is one of the RIS3 core concepts. It signals the need for outward dimension of smart specialisation with aims to avoid fragmentation, lack of critical mass and a syndrome of repeating research investments in the areas where others excel successfully. A high importance is given to urge regions and countries to invest in the field of R&I in a limited number of areas that prove to have the most significant strategic potential for the territory. Strategic potential lies in the process of identification of position of a territory's industry, sector or activity within the global or European value chains, which requires the identification of competitive advantages through benchmarking of other territories to detect complementarities, synergies, linkages and patterns. These synergies warn against duplications of efforts and investments thereby on one hand fragmentation is easier to avoid and on the other hand critical mass is easier to be reached. Despite the popularity of initiation of project mobilisation and the creation of shared responsibility surrounding international cooperation, the implementation of such initiatives is very challenging. This calls for more efficient governance mechanisms supporting real actions in the implementation of transnational projects. In this context, the S3 for Danube workshop jointly organised by DG REGIO and DG JRC of the European Commission (EC) was held in Brussels on 3<sup>rd</sup> of April 2014, which provided an opportunity to discuss the possibilities to use existing and new EU funded instruments for a more effective cross-border and transnational R&I cooperation. The workshop aimed to explore how to best integrate and plan possibilities in the EU funded cohesion policy programmes for 2014-2020, and how to build synergies between existing funding sources.

The rest of this report is structured as follows. The Section 2 describes the governance mechanisms for supporting of transnational projects. Section 3 then analyses the financial tools supporting transnational projects. Section 4 deals with the basic principles and ideas behind combined funding and synergies. Section 5 briefly discusses when is it possible to consider the EUSDR cooperation successful. The final chapter (Section 6) summarises the conclusions concerning each of these issues and their implications for future policies and highlights the main recommendations in relation to four main categories: project governance mechanisms, financing tools, the role of smart specialisation, and the alignment of strategic roadmaps. The main outcomes of the discussions which took place at the workshop are included in the Annex.

## 2. Governance mechanisms supporting transnational R&I projects in the Danube macro-region

One of the principal challenges of involvement of countries/regions in the transnational R&I projects is the governance of such transnational cooperation. Transnational projects, especially major ones, typically involve numerous stakeholders from different regions/countries and it is often difficult to keep track of their development, administrative needs as well as to get a comprehensive macro-regional overview. Moreover, the involvement of the regional/national authorities through decentralised programme structures including many decision makers and the financial support to such trans-national projects through the combined EU and national/regional funding is adding to the complexity of such cooperation endeavours. Often the cooperation is facing a traditional "this is my money" approach in some participating regions/countries which is not contributing to smooth running of such projects. Fairly complex transnational projects might therefore represent a notable supplementary administrative burden for the Managing Authorities (MAs) which are challenged by numerous tasks in managing, administrating, monitoring and revising the regional and/or national programmes and coordinating many of the activities co-financed by the [European Structural and Investment Funds \(ESIF\)](#). Furthermore, rather general guidance is given to the MAs through the general principles of the Union support for the ESI funds (Articles 27(3) and 70); and specific provisions in the programming part (Article 96(3e)) of the [Common Provision Regulation](#) (CPR). Practical guidance and additional support to the Danube stakeholders are therefore well on demand. Yet, some examples of good practices in the Danube region have managed to persist even in the current settings.

A large project "[Danube River rEsearch And Management \(DREAM\)](#)" managed by the BOKU University from Vienna is the first scientific EUSDR flagship project with combined investments reaching in total almost 70 million EUR. The project has since 2012 succeeded to successfully "navigate" through numerous administrative, financial and organisation challenges, combine funding from different sources and integrate scientific partners from 11 Danube countries (Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Moldova, Romania, Serbia, Slovakia and Ukraine). The project and its network of laboratories have been recently further supported by the EU grant scheme of Technical Assistance Facility for Danube Region Projects in order to prepare and submit an application on hydraulic engineering and computer based river flow simulations for additional funding from the HORIZON 2020 Programme.

On the other hand, governance of transnational R&I partnerships through the EUSDR Priority Areas' Working Groups and some important regional institutional networks (e.g. the [Danube Rectors' Conference](#) liaising 67 universities from 14 countries in the broad Danube macro-region; the [Danube Alliance](#), providing a platform for governments, organisations, communities and people to seek out new and strengthen the existing partnerships, etc.) actively contribute to the mapping of the Danube knowledge hubs, to enhanced interpersonal relations in the field of education, research and innovation and to creation of transnational R&I cooperation framework. These activities topping up the EUSDR Priority Areas' activities additionally assisted by the [Technical Assistance Facility of the Danube Strategy](#) and the [START – Danube Region Project Fund](#) significantly facilitate the transnational R&I cooperation and support the development of the EUSDR flagship projects in the macro-region.

Equally, examples of successful transnational R&I partnerships are available also from transnational science and technology (S&T) cooperation in the [EU Strategy for the Baltic Sea Region \(EUSBSR\)](#). An interesting successful case of enhanced transnational R&I cooperation in the Baltic is BONUS that started as a loose ERANET programme cooperation in 2002 but has grown through pilot BONUS+ calls 2007-2011 and a more strategic cooperation phase (2010-2012) to the joint programming (2012-2017) pioneering the implementation through the [Art. 185 TFEU](#). A joint BONUS+ call funded 16 BONUS+ projects that integrated over 100 research institutes and universities from 8 Baltic MS in cooperation activities worth of a total of 22 million EUR during 2007-2011. The initiative, set out to test the mechanisms of enhanced collaboration among the national funding institutions, has been positively analysed and has created a basis for the next



generation of [BONUS 2012 projects](#) aimed at the new BONUS R&D programme to protect the Baltic Sea (2010-2017) including the coordination of the future BONUS research agenda around sustainability research with combined innovation and research components worth of 100 million EUR. The latest [BONUS in Brief](#) provides further information on the ongoing BONUS cooperation activities and reports on the 7 already started research projects and another 13 innovation projects still in the pipeline.

Another coordinated effort to build transnational cooperation was made by the leaders of the BSR Stars flagship project. This EUSBSR flagship project aimed at strengthening competitiveness and economic growth in the Baltic Sea Region (BSR) to be achieved by fostering transnational linkages between specialized research and innovation nodes, leading to strategic innovation alliances that tackle common “grand challenges” such as health, energy, sustainable transports and digital business and services. An important initial umbrella project, co-financed by the Baltic Sea Region programme 2007-2013 and testing the strategic policy frames, called StarDust run in the period 2010-2013 was led by the Swedish Governmental Agency for Innovation Systems "Vinnova" and has mobilised 35 partners from the public and semi-public sector of 10 countries which were supported by 43 associated partners from national, regional and local levels in the participating countries. The core of the umbrella project were five transnational innovation partnerships each with different strategic ideas for partnership, pursued different activities and methods of developing collaboration (as has targeted different types of results), but which brought together academic, business and public worlds to find better solutions for the macro-region. The project was also a testing ground for a flexible approach to financing and managing trans-national cooperation that has been envisaged to facilitate the addition of new partners to already approved and running projects when and where project networks would identify them as relevant for the projects.

Moreover, within the framework of the BSR Stars programme the BSR Innovation Express initiative was developed and the joint call of six funding partner countries was launched in 2013 to foster the internationalisation of SMEs through cluster organisations. The call is funded by national and regional funding agencies with “top-up financing” provided by the Nordic Council of Ministers. This funding instrument aims to develop or enhance transnational cooperation activities of cluster organisations, business networks and their SME members. In 2013 the call attracted 47 applications from cluster organisations and business networks and resulted in 28 new international collaboration projects, involving more than 900 SMEs from the Baltic Sea Region. This initiative is continuous and the new call was launched in 2014. Other flagship projects of BSR strategy priority area for research and innovation such as Science Link, Health Region, Submariner also managed to develop numerous thematic projects using different governance structures and models of transnational cooperation.

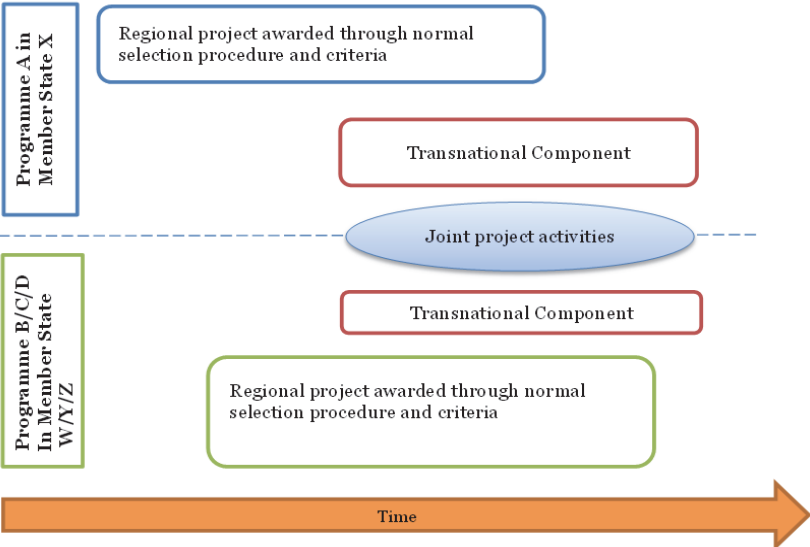
The approach in transnational cooperation in the Baltic is largely built on the success of the long-standing cooperation practices among the Nordic countries which has traditionally acknowledged the selection of the projects through well-established regional/national selection procedures and by transparent, regularly used criteria also offering the project partners facilitated extensions when required.

The Swedish Agency for Economic and Regional Growth (Tillväxtverket) has recently proposed a new initiative which foresees a flexible model of transnational cooperation activities where running projects may be extended with transnational cooperation components and so called “joint project activities” are designed to guarantee continuous financial support to the relevant projects from different countries/regions without synchronisation of calls between different programmes (see Figure 1). The model proposes synchronised rules, criteria and procedures in application of project selection processes foreseen to be applied by different regional / national authorities and aims at facilitated coordination between different stakeholders in various MS.



**Figure 1. Transnational component of R&I cooperation projects in the EU Strategy for Baltic Sea Region (EUSBSR).**

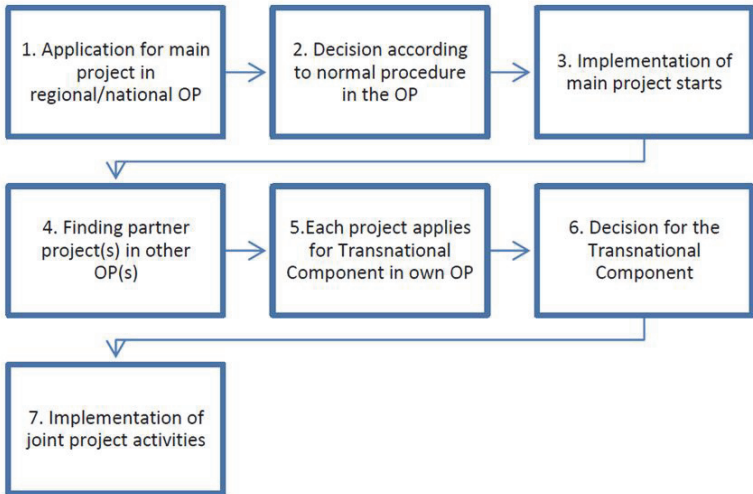
(Source: [Macro Regional Strategies in the ESI Operational Programmes 2014-2020 - proposal for a Transnational Cooperation Component to support the implementation of the EU Strategy for the Baltic Sea Region – EUSBSR, Concept Paper of the Swedish Agency for Economic and Regional Growth, 1/2014](#))



Flexible advanced approach to the governance of transnational R&I cooperation has been introduced into the Swedish Operational Programmes (OPs) for the financial period 2014-2020 (see Figure 2). The application procedure foresees open and flexible cooperation schemes that facilitate R&I cooperation between transnational partners and addition of new partners to already approved and running projects. Own financing by all the partners in such cases is preferable but not compulsory. It is currently being tested within 6 pilot projects. The model has been widely promoted to the Baltic MSs with aim to be uniformly applied within their OPs for national/regional ESI funds in order to further encourage the EUSBSR cooperation.

**Figure 2. The application procedure for extending the projects financed and run through the national/regional Operational Programmes in Sweden in the financial period 2014-2020.**

(Source: [Macro Regional Strategies in the ESI Operational Programmes 2014-2020 - proposal for a Transnational Cooperation Component to support the implementation of the EU Strategy for the Baltic Sea Region – EUSBSR, Concept Paper of the Swedish Agency for Economic and Regional Growth, 1/2014](#))



The full potential of the proposed flexible and advanced governance of transnational R&I cooperation has actually not yet been tested in the Baltic cooperation practice as the national and regional OPs for the period 2014-2020 are still under approval. Nevertheless, an application of such open cooperation schemes addressing different issues and allowing addition of partners at variable times/stages in support of the development of fit-for-purpose regulations, policies and management practices in response to the economic, societal and/or environmental challenges faced by a certain macro-region might bring important benefits if applied in the Danube macro-region.

These practical examples of the enhanced governance of transnational R&I cooperation demonstrate that through coordinated action between the BSR countries it was possible to initiate joint pilot projects, organise common matchmaking events, launch common calls and even harmonise variable national decision-making procedures governing the transnational R&I cooperation. Different cooperation models allow achieving more flexibility, variable geography of partner countries and adjustment to the needs of partner countries involved.

Further useful practices of transnational collaboration may be found in other regions of Europe on the basis of international commission working groups, e.g. cooperation of the Atlantic Arc regions facilitated by the [Atlantic Arc Commission](#), or enhanced transnational cooperation activities that are lately often revolving around the Smart Specialisation concept. An interesting case of such close collaboration in specific R&I related activities is creation of a smart specialisation platform for advanced manufacturing that culminated progressive cooperation among many European regions in the field of advanced manufacturing within the initiative of the [Vanguard Initiative](#).

Important conceptual backing assuring outward looking national/regional governance mechanisms in the cohesion policy 2014-2020, thus creating solid foundations for the support of transnational and trans-regional R&I cooperation, is introduced by the [Smart Specialisation process](#) that is closely related to the research and innovation ex-ante conditionality stipulated in the [ESIF Common Provision Regulation](#). The approach is founded on a compulsory outward looking SWOT analysis of regional/national assets and related connectivity assessment, where the outward dimension of the RIS3 strategies offers an important opportunity for the Danube regional/national MAs to (re-)assess the planned activities, existing knowledge, trade and skills flows, and position the research and innovation related activities as well as the businesses in the context of trans-regional/ transnational and international value chains. The outward dimension is an essential part of smart specialisation and its prioritisation process. Its first step is to check the connectivity of R&I and economic activities by mapping the situation in the identified areas of excellence through wider value chains. Positioning the region/country in its macro-regional environment should be the initial task that helps identifying the necessary cooperation to fill the gaps in the identified value chains. Furthermore, a strong political commitment to cross-border positioning and cooperation is absolutely essential for successful horizontal governance of the national/regional challenges vis-à-vis similarities, complementarities and synergies in the macro-regional context.

Many of the principles shown above as good practises may be used to enhance Danube macro-regional cooperation. Yet, most of the drafts of the ESIF related national/regional documents for the financial period 2014-2020 (Partnership Agreements, Smart Specialisation Strategies and Operational Programmes) of the regions/MS from the Danube macro-region were rather weak in cross-sectorial outward analysis and cross-border coordination of challenges. The documents regularly lack identifying the advantages of transnational and macro-regional synergies. Often, the documents revealed a limited outward analysis and lacking connectivity. Similarly, the institutional governance structures that would be responsible for managing of transnational cooperation endeavours and coordination of various sources of funding were either not mentioned or not very revealing. It remains to be seen how the principles of flexibility of trans-national R&I cooperation with open cooperation schemes facilitating addition of new partners from other regions/countries to the selected or ongoing national projects reported above would be nested into the mainstream research and innovation policies and their support in the Danube countries/regions.

So far even the preferential Danube flagship macro-regional cooperation projects encountered numerous administrative barriers which have abundantly complicated the management and running of these projects. In any case a strong political endorsement to the connectivity and transnational / macro-regional cooperation at all levels is crucial for successful running of the multinational R&I projects.

Another challenge is how the European Commission (and specifically JRC) best can help addressing and enhance such R&I cooperation endeavours in practice. The European Commission has, in close cooperation with other European institutions supporting cooperation, recently introduced some important instruments to support project holders during the preparation phase of the Danube transnational projects. Among others, it is especially important mentioning the following instruments where the EC now provides notable support:

- [Technical Assistance Facility of the Danube Strategy](#) (supporting project holders with consultants in the preparation phase).
- [START – Danube Region Project Fund](#) (supporting project holders with small grants for project preparation and small projects).
- [Budapest Danube Contact Point](#) (supporting project holders with financing expertise of the EIB).

A huge step towards facilitated transnational R&I cooperation would be the alignment of strategic R&I roadmaps in which the smart specialisation could have a prominent role. Many of the priority areas and activities identified within the EUSDR strategy have some related activities in the planned national/regional R&I activities. Therefore, better and closer alignment among the regional/national R&I priorities to be supported through the ESIF financing in the Danube countries/regions and the priority areas at the EUSDR level would greatly facilitate the transnational cooperation. A good practice would be that the national/regional OPs of the Danube countries submitted to the European Commission in the frame of the ESIF would become more open to cooperation across borders and would progressively include among the selection criteria for projects certain specific aspects in support of the implementation of macro-regional strategies, such as the EUSDR. The ideal practical aspect of such enhanced coordination between different level priorities would be that the transnational R&I cooperation projects, well nested in the EUSDR priority areas, would achieve additional scores in the evaluation process thus resulting in favourable treatment by the MAs when awarding the combined national/regional/ESIF funding.

Such trans-national collaborative projects in the Danube macro-region could then be further facilitated by the relevant stakeholders such as regional agencies, innovation agencies or consultancy companies working as boundary spanners and providing the specific knowledge on financial engineering and possible combined funding opportunities from the regional/national and European funding. The [Danube Transnational Programme 2014-2020](#), a new [European Territorial Cooperation \(ETC\) programme](#), in cooperation with other funding sources, is going to play a significant role in supporting the establishing of innovative and socially responsible Danube region. Specific programming committee meetings are being organised for its implementation in the Danube countries since early 2013. The Danube Transnational Programme has been recently available for online stakeholder consultation where the general public and a broader circle of thematic experts were invited to contribute to the draft cooperation programme. The contributions provided are going to be considered in the programme update and consultations with MSs organised before the final draft programme would be submitted to the EC services.

The upcoming activities of this specific ETC transnational programme may shed more light on the complex situation regarding combined funding in the Danube macro-region, which is additionally complicated by the important presence of the EU accession countries and non-EU neighbourhood countries, where different funding mechanisms and instruments apply. In this respect the relevant European legislation in use in each group of countries should allow for harmonization of rules and procedures in place for different EU funds managed by DG REGIO directed to the EU member states on one hand, and DG ELARG directed to the non-EU neighbourhood countries on the other hand, and provide some concrete guidance on the funding combination aiming at assuring the effective

macro-regional R&I cooperation of the MS and non-EU countries. The governance mechanisms supporting transnational R&I projects in the Danube macro-region should be modified accordingly.

### 3. Financing tools supporting transnational projects

The EUSDR aims to align efforts of key players with a special focus on policies and funding. The role of the European Commission is to provide a strategic guidance and facilitate the cooperation process through the assistance in provision of the framework conditions for stable governance mechanisms, but the actual responsibility of implementation of the transnational cooperation projects lies at the level of governing authorities, be it national, regional or any other level involved.

Apart from providing some instruments to support project holders during the preparation phase of the transnational Danube projects mentioned in the section 2, the Commission's role in supporting the Danube macro-regional strategy is of utmost importance at the level of providing EU added value, strategic guidance and facilitation of the actions supporting the transnational cooperation. In fact, in this respect the Commission (DG REGIO) has created a stable governance mechanism through NCPs and PACs in each of the Danube MS to further support the transnational cooperation programmes that will also be able to support the strategies at technical level, through Thematic Objective 11.

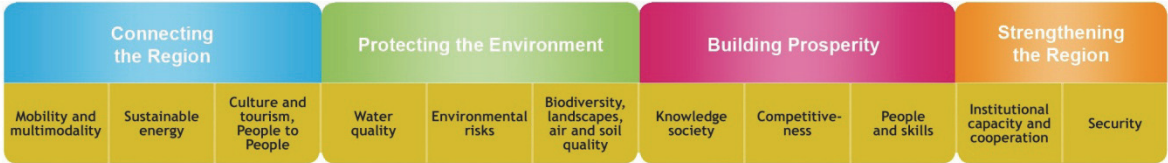
Actions that are in line with the overall framework must be transformed into concrete projects involving the mobilisation and alignment of various sources of funding, be it European Structural and Investment Funds (ESIF), [Instrument for Pre-Accession Assistance](#) (IPA), [European Neighbourhood and Partnership Instrument](#) (ENPI) funds, or national, regional, local sources and also paying attention to the combination of grants with revolving funds offered by financial or intermediary institutions or other sources of funding. Macro-regional approach should provide a perspective for aligning EU programs on major and shared goals. The lack of dedicated funding pushes stakeholders to find sources of funding which has facilitated several measures within international or regional initiatives.

**- Programming period 2007-2013:**

In the programming period 2007-2013 the amounts allocated along the EUSDR priority areas signalled the significance of collaborative actions alongside with other financial means.

The EUSDR operates along 4 pillars and 11 priority areas coordinated by diverse stakeholders with the involvement of a network of key players of the Danube area.<sup>1</sup> The priority area coordinators have trans-national, inter-sector and inter-institutional tasks as demonstrated in Figure 3.

**Figure 3. EUSDR: One Strategy – 11 priorities.**  
(Source: <http://www.danube-region.eu/pages/priorities>)



The first pillar is **Connecting the Danube Region** that focuses on transport, energy and cultural / tourism issues with the total 2007-2013 allocations of 25 billion EUR for transport, approximately

<sup>1</sup> the complete descriptions of priorities with their envisaged goals within the European Union Strategy for Danube Region may be obtained on the EUSDR website: <http://www.danube-region.eu/pages/priorities>

3.0 billion EUR to energy related activities, 6.7 billion EUR to urban and rural regeneration, tourism and culture related activities in the 8 Danube MS from the Structural Funds (SF) only <sup>2</sup> (see Table 1).

**Table 1. Structural Funds allocations 2007-2013 for the "Connecting the Danube region" pillar of the EUSDR.**

(Source: own editing, DG REGIO database)

	Transport	Energy	Tourism	Culture	Urban and rural regeneration
AT	48,830,116	44,387,456	40,677,943	32,920,353	30,901,152
BG	1,946,704,948	243,502,714	102,469,935	117,333,551	151,917,617
CZ	7,594,646,719	1,201,946,043	746,917,054	543,796,381	862,744,947
DE	47,448,762	50,513,039	37,549,240	55,899,497	77,502,052
HU	5,558,177,829	368,580,132	465,004,424	451,384,583	680,351,906
RO	5,406,264,338	604,746,106	371,505,828	212,454,507	898,878,838
SI	991,531,859	163,721,197	87,787,012	87,364,853	64,636,402
SK	3,468,283,410	175,767,736	134,731,936	245,735,631	241,610,120
<b>Total</b>	<b>25,061,887,982</b>	<b>2,853,164,422</b>	<b>1,986,643,372</b>	<b>1,746,889,355</b>	<b>3,008,543,034</b>

The second EUSDR pillar **Protection of the Environment** focuses on water, environmental risk management, biodiversity, landscapes, quality of air and soil with the total of 19.6 billion EUR of SF allocations for the eight Danube macro-region MS during the programming period 2007-2013 as shown in detail in Table 2.

**Table 2. Structural Funds allocations 2007-2013 for the "Protection of the environment" pillar of the EUSDR.**

(Source: own editing, DG REGIO database)

Environmental protection and risk prevention	
AT	53,379,744
BG	1,563,323,497
CZ	4,331,432,004
DE	144,793,368
HU	6,042,553,366
RO	4,771,279,626
SI	778,650,225
SK	1,889,073,374
<b>Total</b>	<b>19,574,485,203</b>

The third pillar **Building prosperity in the Danube region** supported developments in the fields of innovation, information society, competitiveness of enterprises, education, labour market and marginalised societies with the total earmarked allocation of around 19.6 billion EUR. A large part of this amount summing up to around 13.3 billion EUR was allocated to research, innovation and entrepreneurship in the Danube Region which represent about 21% of the respective investments of 63.6 billion EUR in the EU27. This means that approximately 21% of the respective EU budget has been invested in the Danube macro-region. Similarly, out of 15.3 billion EUR allocated to information society in the EU27, 3.8 billion EUR was dedicated for projects within the EUSDR, which accounts for 25% of the respective total EU27 budget. Furthermore, 14.7 billion EUR were dedicated for projects devoted to development of human capital and inclusion which represented 20% of the EU27 spending in that field in the period 2007-2013 (see Table 3).

<sup>2</sup> Reference includes European Regional Development Fund (ERDF) including cross-border cooperation, Cohesion Fund and European Social Fund for the Member States. For Germany funds allocated to Baden-Württemberg and Bayern have been taken into account. Please note also that Croatia is missing from Tables 1-4 as it was not a receiver of the ERDF, CF and ESF funds during the financial perspective 2007-2013.

**Table 3. Structural Funds allocations 2007-2013 for the "Building prosperity in the Danube region" pillar of the EUSDR.**

(Source: own editing, DG REGIO database)

	Research and technological development, innovation and entrepreneurship	Information society	Human capital and inclusion
AT	573,395,552	38,326,555	531,475,342
BG	645,934,714	98,725,495	937,613,987
CZ	4,048,632,677	1,027,989,336	3,330,929,522
DE	371,237,457	28,633,456	1,324,756,683
HU	3,529,037,450	776,910,534	3,123,684,158
RO	1,906,848,645	479,977,229	2,999,603,021
SI	954,598,676	159,482,448	499,972,648
SK	1,240,540,577	1,174,600,454	1,339,132,044
<b>Total</b>	<b>13,270,225,749</b>	<b>3,784,645,506</b>	<b>14,087,167,406</b>

The fourth pillar **Strengthening the Danube Region** addresses issues of institutional building and security that constituted 3.4 billion EUR of SF allocations in the Danube MS as shown on Table 4.

**Table 4. Structural Funds allocations 2007-2013 for the "Strengthening the Danube Region" pillar of the EUSDR.**

(Source: own editing, DG REGIO database)

	Preparation, implementation, monitoring and inspection (EUR)	Evaluation and studies; information and communication (EUR)
AT	31,335,010	17,692,890
BG	186,898,689	60,071,720
CZ	562,418,577	350,852,136
DE	55,415,731	22,038,571
HU	835,454,925	146,881,616
RO	506,527,215	202,853,101
SI	67,145,776	22,601,825
SK	268,365,455	133,971,275
<b>Total</b>	<b>2,513,561,379</b>	<b>956,963,133</b>

In addition, funds throughout the European territorial cooperation programmes were offered to further encourage regions and cities from various Danube MS to realise joint projects. In the programming period 2007-2013 close to 5.6 billion EUR funding was available from the cross-border co-operation programmes, 1.8 billion EUR from the trans-national co-operation programmes and 445 million EUR from the inter-regional cooperation programmes, which accounts for 2.5% of the total cohesion policy funding for the given period. Besides the Structural Funds (including ERDF, ESF and CF), European territorial cooperation programmes and other EU funds contributing to the regional development (EAGF, EAFRD and EFF) during the financial period 2007-2013 period, many additional sources from other EU programmes/initiatives have additionally contributed to financing of the EUSDR pillars. The most important were the Trans European Transport and Energy Networks (TEN-T and TEN-E), the 7<sup>th</sup> Framework Programme, national, cross-border and multi-beneficiary country programmes, the EU Competitiveness and Innovation Programme (CIP), LIFE programme, financial support by the European Investment Bank (EIB), European Bank for Reconstruction and Development (EBRD), Council of Europe Development Bank (CEB) and World Bank, and some specific instruments/activities foreseen for financial assistance of strategic investments in infrastructure, energy efficiency or private sector development in the EU candidate countries, such as Instrument for Pre-Accession Assistance (IPA) and Western Balkans Investment Framework (WBIF), and similar instruments available for the EU neighbourhood countries in the Danube, such as the Neighbourhood Investment Facility offering funding for environment and social issues.

Several new instruments for the development of project proposals and for the facilitation of coordination between different sources have been developed with aim to support closer R&I



cooperation between Danube countries regardless of their status (EU MS, candidate or neighbourhood country). One of them is the [Danube Investment Framework](#) created at the First Danube Financing Dialogue in March 2012 within the Priority Area 10 of the EU Strategy for the Danube Region for institutional capacity and cooperation.<sup>3</sup> The priority area coordinators have organised brokerage events aiming at matching project ideas with funding opportunities and at finding additional sources of funding from financial institutions and funding programmes. Some additional national/regional initiatives have been set-up completely bottom-up, as in the case of Baden-Württemberg's mobilisation of its own resources to implement transnational R&I projects, or top-down as the EC Joint Research Centre's scientific support initiative aiming at contribution to the EUSDR in the form of the thematic flagship clusters for water, air, land, soils, bioenergy and the transversal clusters of data and horizontal activity on supporting the smart specialisation activities in the Danube countries. Each of the clusters supports several of the EUSDR scientific priorities and address challenges related to these priorities from the cross-cutting perspective. Furthermore, other national, regional and local instruments were financing projects and international financing institutions have provided significant sources via lending and co-financing. Some of these instruments and institutions will continue their work during the financial perspective 2014-2020.

#### **- Programming period 2014-2020:**

As quite a few changes have arisen in the financing sources planned for the period 2014-2020 vis-à-vis the existing funding opportunities, Table 5 shows the most important financing sources available for the Danube countries in the new financial perspective, organised by groups of the Danube countries eligible to use certain financial instruments/mechanisms.

---

<sup>3</sup> For more information see: <http://www.danube-capacitycooperation.eu/pages/targets-of-priority-area-10>



**Table 5. Possible financing sources of the four EUSDR pillars in the period 2014-2020.**

(Source: own editing)

<b>Financing sources for the Danube countries</b>	<b>Connecting the Danube Region</b>	<b>Protection of the Environment</b>	<b>Building prosperity in the Danube Region</b>	<b>Strengthening the Danube region</b>
<b>EU Member States</b>				
<a href="#">European Structural and Investment Funds (ESIF)</a>	✓	✓	✓	✓
<a href="#">European Agriculture Fund for Rural Development (EAFRD)</a>	✓	✓	✓	
<a href="#">European Maritime and Fisheries Fund (EMFF)</a>	✓	✓	✓	
<a href="#">Trans European Transport and Energy Networks (TEN-T and TEN-E)</a>	✓			
<a href="#">Joint Assistance to Support Projects in European Regions (JASPERS)</a>		✓		
<a href="#">EU Programme for the Competitiveness of Enterprises and SMEs (COSME)</a>	✓		✓	
<a href="#">LIFE programme</a>		✓		
<a href="#">Cross-border Cooperation (CBC) and Multi-beneficiary country programmes</a>	✓	✓	✓	✓
<a href="#">Erasmus+</a>	✓		✓	✓
<b>EU Member States, EU Accession Countries and Neighbourhood Countries</b>				
<a href="#">Horizon 2020</a>	✓	✓	✓	(✓) Security part
<a href="#">European Investment Bank (EIB)</a>	✓	✓	✓	✓
<a href="#">European Bank for Reconstruction and Development (EBRD)</a>	✓	✓	✓	✓
<a href="#">Council of Europe Development Bank (CEB)</a>	✓	✓	✓	✓
<a href="#">World Bank</a>	✓	✓		✓
<b>EU Accession Countries</b>				
<a href="#">Instrument for Pre-Accession Assistance-II (IPA-II)</a>	✓	✓	✓	✓
<a href="#">Western Balkans Investment Framework (WBIF)</a>	✓	✓	✓	✓
<a href="#">Regional Environmental Network for Accession (RENA)</a>		✓		
<a href="#">EU Civil Protection Financial Instrument (CPFI)</a>		✓		
<b>EU Neighbourhood Countries</b>				
<a href="#">European Neighbourhood Instrument (ENI)</a>	✓	✓	✓	✓
<a href="#">Neighbourhood Investment Facility</a>	✓	✓	✓	✓
<a href="#">EuropeAid – Country cooperation</a>	✓	✓	✓	✓

New tools, such as Integrated Territorial Investments or Joint Action Plans, together with the revision of the regulation on European Grouping of Territorial Cooperation (EGTC), are being designed to facilitate cooperation among different programmes. Furthermore, EGTC is a relatively new legal instrument designed to promote cross-border, transnational and interregional cooperation and enable public bodies to set up cooperation groupings with legal personality. Given the huge number of financing sources, finding synergies between funds are crucial to ensure coordination, synergies and complementarities.

#### **4. Synergies between EU funding sources for research and innovation**

One of the key issues when dealing with R&I activities is the existence of multiple funding sources at the EU, macro-regional and national/regional level. Creating synergies and promoting the combination of the different funding sources is at the core of both the regional policy and the R&I policy.

Supporting synergies in the use of the two major EU funding sources for research and innovation - The ESIF and Horizon 2020 - may deliver additional gains in terms of innovation results, close the innovation gap in Europe and promote economic growth. The overall political rationale of identifying synergies between ESIF and H2020 (and other R&I programmes) is to face better an increasing competition and maximize impact and efficiency of public funding. In times of public budgets adjustments there is an even more clear need for more targeted investments with higher potential to generate jobs and growth and to align strategies and roadmaps.

The Framework Programmes for research and technology development (FP) have provided a vital contribution to the development of European competitiveness, growth and knowledge generation. However, there has been considerable variation across MS and regions in terms of FP participation and innovation performance.

On one hand, Horizon 2020 will continue to provide funding on the basis of excellence, regardless of geographical location. However, Horizon 2020 will also introduce novel measures for “spreading excellence and widening participation” by targeting low R&I performing MS – most of them eligible for innovation funding under the new Cohesion Policy for the programming period 2014-2020. On the other hand, the new financial regulations for ESIF aim at a more effective use of funds to build regional/national excellence and capacities. The main differences and complementarities between both funding sources are summarized in Table 6.

**Table 6. Differences and complementarities between ESIF and Horizon 2020.**

(Source: own editing based on presentation of Katja Reppel, DG REGIO)

<b>Horizon 2020 (but also COSME, ERASMUS+, CREATIVE EUROPE)</b>	<b>ESIF</b>
<b>DIFFERENCES</b>	
Non-territorial, mainly transnational approach based on excellence; Horizon 2020 does not take into account geographic specificities in allocating funding.	Place-based approach supporting economic and social cohesion.
Focus on individual R&I Projects tackling the whole cycle of innovation, taking into account strategic approaches at EU level, e.g. through European Innovation Partnerships and the Strategic Energy Technology plan (although some programmes are aimed at co-funding for research coordination like ERA-NETs, etc.)	Largely focused on improving the R&I capacities and R&I eco-systems with the objective of regional growth and place-based economic transformation towards higher added value and more knowledge-intensive activities (Smart Specialisation Strategies).
Centrally managed (EC) and awarded directly to final beneficiaries or managed by a multi-country entity;	Shared management with national and regional public intermediaries (managing authorities, implementing agencies and intermediate bodies) which define the implementation details and allocate the funding to final beneficiaries
Competitive calls for proposals addressed to international groupings (including beyond the EU) without geographic pre-allocation (European Research Council and Marie-Curie as well as Erasmus+ actions for learning mobility also address individuals)	Policy-related prioritisation based on cohesion considerations and RIS3 priorities to individual firms/bodies and consortia within the territory covered by the operational programme (and only within the EU). Use of competitive attribution through calls and aid schemes based on project selection criteria is also increasingly used (depending on MS).
<b>COMPLEMENTARITIES</b>	
Horizon 2020 will focus on industrial leadership and tackling major societal challenges, maximising the competitiveness impact of research and innovation and raising and spreading levels of excellence.	Besides improving the innovation eco-systems, Cohesion policy will partly increase the capacity of regions and Member States to participate in Horizon 2020 ("Staircase to Excellence") and partly fund R&D&I activities in a MS/region that can build on FP7 and Horizon2020 projects.
Horizon 2020 includes actions to close the research and innovation divide: ERA Chairs, networks, teaming and twinning, research infrastructure development, etc.	ESIF/RIS3 can support to limited extent cooperation with actors outside the operational programme territory.
Horizon2020 has the objective of spreading excellence and widening participation compared to FP7.	

In order to achieve synergies, it is crucial to define a strategic approach with a medium to long term perspective starting with the definition of RIS3 at regional and/or national level. The definition of RIS3 in the different MS could be a valuable instrument to help the policy makers identifying common priorities and selecting the best instruments to implement the common strategies and joint projects. It is important to be aware that Horizon 2020 is 'top league' aiming at excellent research and frontier technologies and the funding will only be granted to a limited number of scientifically the best projects. On the other hand ERDF aims rather at the research activities coupled with the innovation potential and market applicability in terms of new innovative products, production/management processes, services etc. Therefore, it is crucial to combine research with industry and businesses so that research, development, testing, patenting and commercialisation of new products and services becomes quicker, more efficient and for the benefit of both society and private actors.

Countries and regions should be aware of their own weakness and strengths and focus on the limited set of priorities to reach excellence avoiding an attitude of trying to be good in everything. The

entrepreneurial discovery process of the RIS3 could help in this process and could also be a rich source of information to match innovation actors from different countries.

Another key element in the promotion of synergies, also rose by the participants of the Workshop (see the mind-mapping in the Annex), is the need for clear rules and principles to combine the different instruments. Accordingly, [Guidance for the policy makers and implementing bodies on synergies between ESIF, Horizon2020 and other research, innovation and competitiveness-related EU programmes](#) has been prepared based on broad stakeholder consultation and made available for the public recently.

The main principles and ideas behind the concept of synergies are as follows:

- Synergies mean joint or coordinated efforts and it is more than simply combining ESIF and Horizon 2020 financing within the same project.
- It implies the combinations of funds which means in practice that there is no substitution of national/regional or private co-funding to EU projects or programmes under direct Commission management. Furthermore, synergies do not allow double funding or financing twice the same cost.

Accordingly, synergies could be achieved by bringing together Horizon 2020 and ESIF money in the same project, in successive projects (building on each other), or through parallel projects that complement each other.

The regulatory framework will include some novelties crucial to enable synergies and with an enormous potential to integrate cooperation actions, particularly macro-regional strategies in the national programmes.

The main novelties foreseen are related to the following Articles of the Common Provisions' Regulation (CPR):

- Art. 70(2): This Article stipulates the possibility of accept that an operation is implemented outside the programme area but within the Union. Among other conditions, the total amount allocated to the activity performed outside the programme area should not exceed 15 % of the support from the ERDF, Cohesion Fund and EMFF at the level of the priority, or 5 % of the support of EAFRD.
- Art. 96(6)a: Programmes have to set out the mechanisms to ensure coordination between EU funding sources for R&I and other national instruments.
- Art. 96(3)d: This Article sets-up a stronger obligation to work with innovation actors in other regions and MS.

The potential synergies between R&I public funding should be addressed based on a robust analysis of the institutional framework of each region/MS as well as an assessment of the main strengths and weaknesses in terms of R&I capacity. To better address cross-border cooperation and joint actions it will be crucial to identify common priorities (included in the RIS3 of the different MS and regions) in the macro-region. A sound capacity mapping will help to prepare R&I actors to make an efficient use of ESIF resources to better compete in Horizon 2020 calls.

In addition to the upstream actions described, downstream actions to study the exploitation and diffusion of results from previous joint projects in the macro-region are also essential. The current flagship projects running in the Danube region, such as the DREAM or DANUBIUS Projects, could represent very good pilot examples to analyse the impact of their cooperation. To what extent the end beneficiaries are making use of the results of the projects or how private sector could take up these results should be considered as part of the final actions of the projects. As regards the candidate and neighbourhood countries, further synergies will have to be sought to integrate the

funding available from the mechanisms such as the Western Balkans Investment Framework (WBIF) offering grants and loans for the EU candidate countries and potential candidates in the field of socio-economic development or the Neighbourhood Investment Facility that operates for Moldova and Ukraine, with the funding possibilities mentioned above.

## 5. When EUSDR could be considered successful?

When it is possible to declare that the EUSDR is successful is still an open issue. On one hand, reporting and evaluation is done by the EC in cooperation with the Priority Area coordinators and stakeholders. On the other hand, coordinators identify milestones and targets for actions based on which the EC may issue reports on advancement and progress.

An ever stronger and integrated Danube Region filled with vivid and meaningful collaboration of coordinated actions among partners is the reality of the EUSDR cooperation. The EUSDR strategy accounts for over 400 projects worth of 49 billion EUR of which 150 are within the implementation phase.<sup>4</sup>

The question is how to facilitate more projects, how many more projects are there to be initiated and later implemented and how the EC may contribute in the most optimal way to the realisation of these projects and to the Danube trans-national cooperation. What can be considered success and which are the milestones for facilitation of sustainable financing of successful trans-national projects and their implementation?

All these questions cannot be answered on simple terms. Time is crucial for success: continuity and frequent representation of interest, consultation lead to higher level of trust among stakeholders. Just as investors' confidence index signals changes and patterns of behaviour, so the Danube stakeholder confidence index must be built up which requires time.

## 6. Conclusions and Recommendations

This section summarises some conclusions offering the ways forward and suggesting some policy implications that would mitigate the financial requirements of flagship trans-national projects, simplify building concrete mechanisms to respond to complex funding needs, and facilitate the integration of Danube-wide projects into ESIF, [Instrument for Pre-Accession Assistance \(IPA\)](#) and [European Neighbourhood Instrument \(ENI\)](#) operational programmes with its regional and cross-border cooperation programmes.

Recommendations have been grouped into four categories:

### a) Project governance mechanisms

This category reflects discussions/suggestions related to the creation and management of “facilitatory” governance mechanisms such as: (i) practice-based tools (e.g. flexible additions to existing projects, boundary spanners, mutual learning); and (ii) legislation-based tools (e.g. harmonisation of administrative rules governing financing tools in different countries or territorial levels).

In more detail:

- A model facilitating transnational cooperation by introducing flexible additions to already approved and running projects within the national/regional OPs and with facilitated cooperation allowing trans-national components and Joint Project Activities should be considered, as proposed for the EUSBSR cooperation. Trans-national Danube collaborative projects could be further facilitated by the relevant stakeholders such as regional or innovation agencies and consultancy companies working as boundary spanners and

---

<sup>4</sup> European Commission (2013)

specifying on providing the knowledge on financial engineering and information on possible combined funding opportunities from the regional/national and European funding. Cluster organisations can play an important role by bringing different types of actors together, establishing better links between business, academia, research organisations and public authorities. Thus strengthening cluster development and their transnational activities will create environment enhancing transnational linkages.

- When developing transnational cooperation projects the pre-project phase is critical for the future success. Finding the right partners, defining project goals and activities, learning each partner interests and capabilities, building trust require time and resources. Opportunity to attract flexible funds for project development is on the other hand limited. Therefore coordinated transnational calls with shorter funding periods can help transnational groups to form stronger consortia and initiate concrete activities for EU programmes.
- Specific efforts should be made to support and facilitate the involvement and participation of the Public-Private Partnerships (PPP) in the trans-national projects assuring transparency, clarity of participation rules, benefits and ownership of results.
- Participation of the Danube MS and regions in mutual learning workshops will help sharing the good practices and learning from them and develop the right instruments to increase excellence in research and innovation in the Danube macro-region.
- Twinning and teaming schemes are useful for better involvement of the candidate and neighbouring countries in the Danube projects as these processes assist and facilitate acquiring the necessary skills and experiences.
- Harmonization of the rules and funding instruments applied by the relevant EC services in the programme/project funding should be made among the ESIF, IPA and ENI operational programmes - with regard to the R&I programmes/projects enhanced coordination between the Danube related activities of the DG REGIO and DG ELARG would be highly beneficial.
- Harmonisation of the EU member states' R&I related legislation and better alignment of the non-EU countries' legislation with the EU legislation in terms of intellectual property would help increasing the quality of projects as well as the effectiveness of the final results.

## **b) Financing tools**

This category includes the outcome of discussions on financing practice on trans-national projects, and is mainly based on EU-funded tools and their connections with limited availability of budgetary resources at national and regional level. These considerations refer to: (i) the use of genuine trans-national tools (e.g. the EGTC); (ii) synergies between different funding tools supporting different EU policies (e.g. Horizon 2020 vis-à-vis European Structural and Investment Funds); and (iii) to the trans-national dimension of each EU funding tools (e.g. consortia under Horizon 2020 or existing facilities under the ESI Funds Regulations).

In more detail:

- New tools, such as Integrated Territorial Investments or Joint Action Plans, together with the revision of the regulation on European Grouping of Territorial Cooperation (EGTC) designed to facilitate cooperation among different programmes should be encouraged.
- The multiple challenges confronting Europe – economic, environmental and social – show the need for an integrated and territorial place-based approach to deliver an effective response. As a respond for this fact one of the key elements of the reform is using the integrated approach to increase efficiency with establishing new integrating tools such as common strategy or new territorial development tools (Integrated Territorial Investment (ITI) , Community-led Local Development (CLLD) ) or Joint Action Plan (JAP) for more coordination and less overlap.

- The objective of better coordination is also important with other EU instruments like Horizon 2020, the Connecting Europe Facility. An integrated approach is multi-dimensional, may mean going beyond traditional administrative boundaries, and may require greater willingness from different levels of government to co-operate and co-ordinate actions in order to achieve shared goals.
- Communication and cooperation between Horizon 2020 national contact points and managing authorities of the ESIF shall be strengthened.
- Guidelines on aggregating several funding sources from either national or EU sources would be very helpful. In this regard the Guidelines being prepared by the Commission's Inter-service Group for Innovation Funding on combined H2020/ESIF funding will be very instructive. It would be useful if these guidelines would also give some examples of good practices. Some simplification of project management procedures aiming at decreasing of management costs would also be beneficial. Another important element of the cohesion policy reform is reinforcing cooperation across borders and making the setting up of more cross-border projects easier, also ensuring macro-regional strategies like the Danube and the Baltic Sea are supported by national and regional programmes.
- Increased flexibility in the rules and procedures of the running projects managed through the national/regional OPs with ongoing calls for proposals and continuous evaluation of projects would be very useful and would enrich the existing consortiums with the new institutions/partners from other Danube regions/countries. As the economic and governmental actors are consulting continually which shall be the direction to follow an important question is how to use the limited resources available in the most efficient and sustainable way, not only the budget-negotiations, but also the sectorial legislation, this should already be reflected in action concerning public procurement.

### **c) The role of smart specialisation**

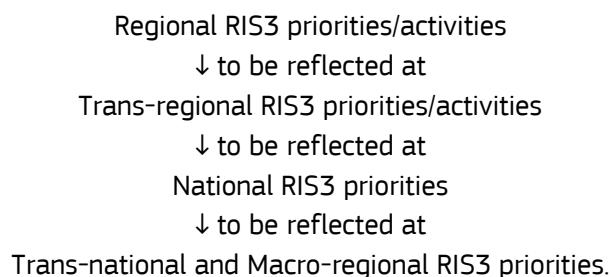
This category highlights the new angle and perspective brought by smart specialisation into R&I policy-making and its role in the framework of regional/territorial development strategies. This means that the enhancement of trans-national co-operation does not necessarily need to be boosted top-down (via legislative changes and adaptation of the rules) or stimulated bottom-up (via transfer of practice), but can be influenced at an intermediate, more sophisticated level, which relates to strategy formulation and implementation, be it at the regional/national level (i.e. where the territorial dimension prevails) or at the R&I/STI level (i.e. where the thematic dimension prevails).

In more detail:

- Smart Specialisation and the RIS3 process were identified as very useful methods for identification of the real opportunities of transnational project financing in the Danube regions/countries as the integration of the processes such as the SWOT analysis and outward dimension of the innovation related activities are very helpful in (re-)organising the activities in the region/country as well as at transnational level.
- As it is very difficult to identify synergies and navigate among various priorities at different levels (region/country/macro-region) in the Danube macro-region, a possible way forward for the transnational project financing is starting from the cooperation areas with a typical trans-national research/innovation nature (environment, climate change and biodiversity, logistics and transport incl. navigation, energy, etc.) which have been already established as the strategic cooperation priority areas within the EUSDR.



- In cases when the EUSDR priority areas are not systematically represented in the regional/national RIS3 documents of the Danube regions/countries, a scaling-solution approach is proposed:



- The S3P tool "Eye@RIS3" was found of great value for cross-border cooperation purposes as it offers information on the planned RIS3 priorities and related activities. It should be used for raising the awareness among the Danube countries'/regions' policy makers and researchers in order to use that information for establishing cooperation links and identify further scientific and innovation areas of common interest.
- The JRC support to the Danube macro-region and EUSDR activities is essential and especially important in the bottom-up and cross-cutting activities such as the ones performed by the Smart Specialisation Platform (S3P). Also, the JRC Danube Nexuses' activities should further facilitate and support the transnational projects in the Danube macro-region. An important role of the JRC in increasing political leverage was also identified.

#### **d) Alignment of strategic roadmaps**

This category refers to the discussions carried out on the potential of developing sort of a "European system of R&I-related strategies" under the umbrella of the Europe 2020 goals and the appropriate territorial and thematic declinations. Alignment of priorities across strategies would therefore act as a crucial facilitator to the design of more streamlined governance and funding tools across EU countries and regions.

In more detail:

- In order to effectively respond to particular needs from certain area, a designing of some common (niche-) strategies at meso-regional level involving several Danube regions/countries would be very useful as such strategies could facilitate flexibility of programmes/projects that would better fit local needs.
- The EUSDR priority areas and activities should become better aligned with the regional/national RIS3 priorities of the Danube countries in order to be well reflected in the project evaluation process and favourable treatment by the MAs when deciding the awarding of the combined national/regional and ESIF funding.
- Clustering among the non-EU Danube countries should strengthen their positions and assure stronger participation in the Danube macro-regional R&I activities. The associations such as the Danube rectors' conference are important to represent interests of the non-EU countries and to assure better integration of these countries in the Danube R&I activities.
- Opportunities of enhanced coordination between various macro-regional strategies should be better explored, especially in countries forming part of the different macro-regional areas.

As a final recommendation complementing the whole range of considerations above illustrated, and considering the peculiar articulation of the Danube region, it is suggested to foster the improvement of the administrative capacities of the non-EU countries to address the challenges of trans-

national cooperation within the Danube macro-region. In this regard, the capacity building facility within the priority area 11 of the EUSDR should be better exploited.

By way of conclusion, it is important to take note that the above recommendations should be taken into account in a flexible manner, considering the actual situation of the specific issue (thematic or territorial) to be tackled.

Still, it is underlined that the recommendations do link to very different levels of public policy response and therefore cannot be handled in a homogeneous way. Some recommendations need a legislative response, and might take more time to be effectively tackled. Some other recommendations refer specifically to the public policy decision-making process and actors, and need a combined action of both technical and political partners in a given territory. Some more recommendations are focused specifically on the practicalities and in principle might be tackled more quickly.

It is suggested to actively move across the whole range of recommendations simultaneously and not wait for example for legislative changes to be implemented before tackling practical issues. On the contrary, if practical solutions can offer an effective way through towards an enhanced trans-national dimension of R&I projects, there is no excuse to delay action.

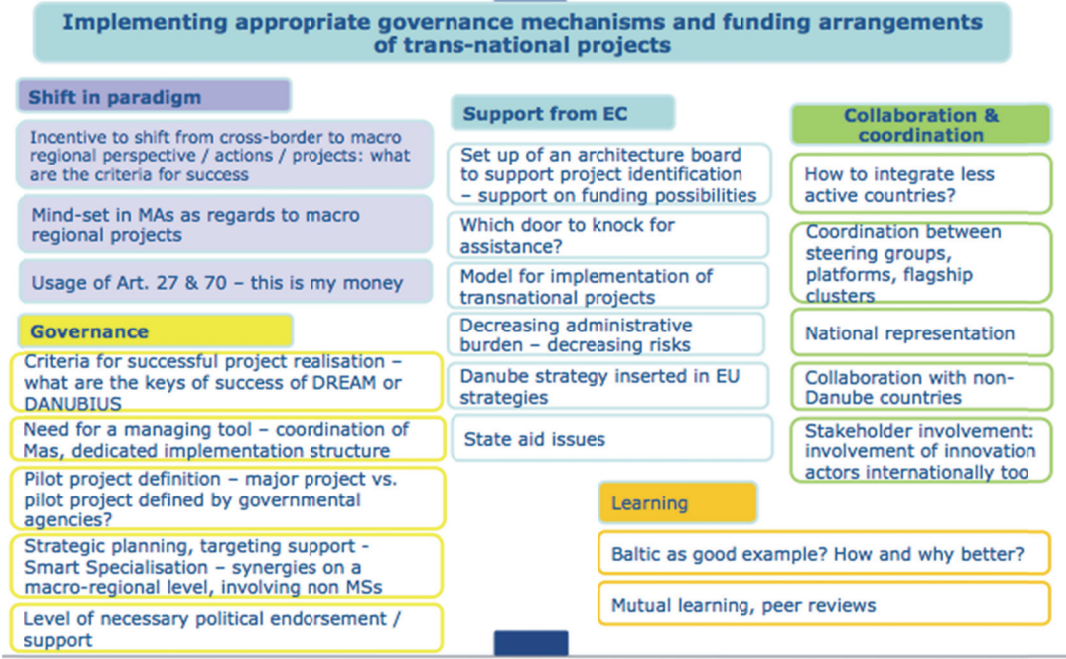
## 7. References

- ZEW, IAW and WIIW (2014), Socio - Economic Assessment of the Danube Region: State of the Region, Challenges and Strategy Development, 341 pp, March 2014.
- European Commission (2010), European Union Strategy for the Danube Region [COM(2010) 715] and Action Plan [SEC(2010)1489] , 8 December 2011.
- European Commission (2013), Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the added value of macro-regional strategies, COM(2013) 468 final, 27 June 2013.
- Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006

**Annex. Results of the discussion of the Workshop**

In the course of the workshop and based on the discussion of the participants, a mind map was created. This method was used to create a shared overview of issues and opportunities relevant to our subject. The ideas were gathered and clustered around the main topics of discussion as shown by Figure 4.

**Figure 4. Result of the mind mapping sessions.** (Source: IPTS own editing)



Afterwards, a "Pro-Action Café" session was performed as an innovative yet simple methodology for hosting conversations on the concrete questions and issues identified during the previous sessions. It was executed in the form of six round table conversations (see Figure below) between participants on the concrete issues identified during the previous sessions evoking the collective intelligence in pursuit of the common aims.

The topics selected from the mind mapping results are shown on Figure 5:

**Figure 5. Table topics for Pro-Action Cafe session.** (Source: JRC-IPTS)

- Table 1: Governance mechanisms of transnational collaboration projects**
- Table 2: Smart Specialisation on a transnational dimension**
- Table 3: Role of Joint Research Centre in supporting the Danube**
- Table 4: Criteria for successful project realisation**
- Table 5: Practical use of the EC support structures for building trans-national projects**
- Table 6: Involvement of non EU countries in Danube projects**

The results of the open discussion at each café session are described in the following tables:

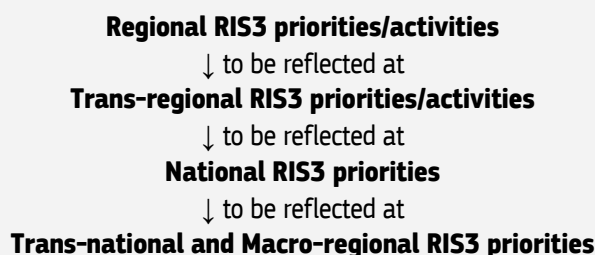
### **Discussion at Table 1: Governance mechanisms of transnational collaboration projects**

The ELI (Extreme Light Infrastructure) project as one of the large-scale research facilities of the European Union has been discussed as an example for the Danube trans-national collaboration. Its consortium and project structure were discussed and examined from the macro-regional cooperation point of view. Through this project the first structure in the world for studying the interaction between light and matter with ultra-high intensity laser will be created with Hungarian cooperation. This research infrastructure enables a high quality research leading to innovation in the Danube macro-region. The governance mechanism of the whole process starting from procurement should acknowledge the innovation in line with the targets of Europe 2020 strategy highlighting the importance of public procurement of innovation.

### **Discussion at Table 2: Smart Specialisation on a transnational dimension**

The common agreement regarding helpfulness of the Smart Specialisation and the RIS3 process was expressed by the discussants. Processes such as the SWOT analysis and outward dimension of the innovation related activities are very helpful in organising the activities within the region/country as well as at a transnational level. A narrow approach of a type "this is my money" however still impedes the real cooperation at a transnational level such as at the Danube macro-region. Possible way to overcome this is an identification of cooperation areas with a typical trans-national research/innovation nature such as environment, climate change and biodiversity, logistics and transport (incl. navigation), energy, etc. These areas have been identified already as common strategic cooperation areas or thematic activities with important trans-national cooperation potential and strategic advantages at the EUSDR level; however these areas of identified common interest are not systematically represented in the regional/national RIS3 documents of the Danube regions/countries.

Therefore, a scaling-solution approach was proposed:



It was stated that the S3P tool "Eye@RIS3" is of great value for cross-border cooperation purposes as it offers information on the planned RIS3 priorities and related activities. It should be used for raising the awareness among the Danube countries'/regions' policy makers and researchers in order to use that information for establishing cooperation links. Therefore a call was made to all the Danube countries/regions to codify their RIS3 priorities promptly and to the JRC to consider how the information on possibly identified joint trans-national RIS3 priorities could be facilitated to the partners from the Danube macro-region.

Based on a regularly updated "Eye@RIS3" information a systematic comparative analysis shall be made of the encoded RIS3 priorities of the Danube countries/regions in order to identify, instigate and facilitate cooperation on possible new areas of common interest.

### **Discussion at Table 3: Role of Joint Research Centre in supporting the Danube**

The support of the JRC and especially cross-cutting activities such as the ones performed and supported by the Smart Specialisation Platform (S3P) were considered vital in facilitating transnational projects in the Danube macro-region.

In practical terms, the following issues were discussed where JRC could support the Danube activities:

- Support to the bottom-up activities in the Danube regions/countries (links to the S3P);
- Its active participation in the Danube activities can increase political leverage as it is an institution independent from all the national/regional influences;
- Enhancing the local knowledge base through assistance in data collection, standardisation and supporting definition of the important project challenges;
- Stimulation an open data sharing culture, common understanding and evidence-based policy planning based and supported by the real data;
- Facilitating the use of the research for the policymaking;
- Facilitating common/shared vision and strengthen the alignment between the partners from the Danube macro-region;
- Mapping the R&I activities ("Eye@RIS3" tool) and facilitating the information on the RIS3 priorities/activities;
- Mapping technology and innovation hubs in the macro-region and facilitating information on technology transfer possibilities; and
- Help creating some Danube-wide structures, that would frame and facilitate the important trans-national R&I activities.

### **Discussion at Table 4: Criteria for successful project realisation**

How to define 'success' was one of the main points discussed. There is not a common view of what is a successful project since the notion of success depends on the different stakeholders' needs. Thus it was proposed to define outputs indicators ex-ante to have a clear and shared view of the Project from the start.

The participants agreed that the most important criterion for successful projects is the need of the project, both at policy and at research level.

Other criteria mentioned were:

- The clearly defined ownership of the project and its results.
- Clear rules at the start in relation to responsibilities and commitments.
- The managerial and leadership skills of the coordinator of the project and other key participants.
- Good planning and monitoring along the whole life of the project.
- Definition projects in line with the strategies defined at regional/national level.

### **Discussion at Table 5: Practical use of the EC support structures for building trans-national projects**

The support of the EC to facilitate the Danube transnational projects was considered vital for the success of the initiatives. In practical terms, the following issues were discussed:

- Increased flexibility in the rules and procedures of the running projects. Allowing a new institution or partner from a country/region to be eligible to join an existing consortium under the circumstances that fit the needs of the country/region that is coming from and respond to the group of users from that country/region. This would require also ongoing calls for proposals and continuous evaluation of projects.
- Common (niche-) strategies at regional level among several countries from the same macro-region, which means flexible programs that fit local needs. This may allow actors to better and faster respond to particular needs from that area.
- Guidelines on how to aggregate several funding sources – Organisations/beneficiaries need guidelines on how to aggregate funding sources from either national or EU sources. Examples of good practices will be more than welcome. This will add value both to the applicants as well as to the management authorities, in particular to structural funds, as there is a huge difference between the implementation of community programs (e.g. FP) and ESIF.
- A simplification of procedures aiming at decreasing of management costs – should facilitate the focus on the development of the project content and increase the trust among the beneficiaries / participating organisations (public agencies). Decreasing of management costs of both parties would respectively facilitate participation to the projects.
- Ownership of results is a key element. Harmonisation of the EU MS' legislation and better alignment of the non-EU countries' legislation in terms of intellectual property would definitely help participating organisations and increase the quality of projects as well as the effectiveness of the end results.
- Involvement of private actors in transnational projects. Specific efforts should be made to support and facilitate Public-Private Partnerships (PPP) and participation of the private companies in the trans-national projects assuring transparency, clarity of participation rules, benefits and ownership of results.

### **Discussion at Table 6: Involvement of the non-EU countries in the Danube projects**

Twinning and teaming schemes were considered to be very useful for better involvement of the candidate and neighbouring countries in the Danube projects as these processes assist and facilitate acquiring the necessary skills and experiences. Furthermore, it has been highlighted that through consistent policies and proper communication between stakeholders, and by clustering among themselves, the non-EU Danube countries should strengthen their positions as a prerequisite for better participation in the Danube macro-regional R&I activities.

The Danube rectors' conference, which became a legal entity, was considered a strong actor with a strong power to represent interests.

One of the principle problems of the non-EU countries regarding the enhanced Danube cooperation is building of the adequate administrative capacities to address the challenges of trans-national cooperation and to adapt the required principles to eventually adopt, implement and enforce the EU legislation. In order to improve the administrative capacities for trans-national cooperation within the Danube macro-region, the capacity building facility within the priority area 11 of the EUSDR should be better exploited by the non-EU countries.

Also, opportunities of enhanced coordination between various macro-regional strategies should be explored, especially in countries forming part of the different macro-regional areas (e.g. Slovenia forms part of the Danube, Alpine and Adriatic-Ionian macro-regional strategies).

Europe Direct is a service to help you find answers to your questions about the European Union  
Freephone number (\*): 00 800 6 7 8 9 10 11

(\*): Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

A great deal of additional information on the European Union is available on the Internet.  
It can be accessed through the Europa server <http://europa.eu/>.

#### **How to obtain EU publications**

Our priced publications are available from EU Bookshop (<http://bookshop.europa.eu>),  
where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents.  
You can obtain their contact details by sending a fax to (352) 29 29-42758.

European Commission

**EUR 26805 EN – Joint Research Centre – Institute for Prospective Technological Studies**

**Title: Developing Danube R&I Projects across Borders – How to Make the Joint Use of EU-Funds a Reality?**

Authors: Ales Gnamus, Fatime Barbara Hegyi, Susana Elena Perez

Luxembourg: Publications Office of the European Union

2014 – 28 pp. – 21.0 x 29.7 cm

EUR – Scientific and Technical Research series – ISSN 1831-9424 (online)

ISBN 978-92-79-39693-9 (PDF)

doi:10.2791/11712

#### **Abstract**

This Policy Brief analyses the opportunities and challenges that need to be addressed and handled with an integrated approach in order to assure a well-supported and effective transnational cooperation in the Danube macro-region. Cooperation among Danube countries has particular importance as regards to coordination of Research and Innovation (R&I) activities since they contribute significantly to competitiveness and economic growth of the macro-region and are at the same time the areas where cooperation and knowledge sharing across borders may crucially contribute to achieving best results. The purpose of this Policy Brief is to identify and examine the key issues that can contribute to the enhanced R&I cooperation in the Danube macro-region. On the other hand the report also briefly summarizes discussions among the experts at the workshop organised by DG REGIO and DG JRC in Brussels in April 2014. The report thus aims to take a stock of the state-of-the art of the current Danube cooperation activities and provide some guidance to the stakeholders on how to best enhance R&I cooperation in the Danube macro-region. The guide attempts to highlight some concrete suggestions on how to better implement governance mechanisms of transnational R&I cooperation, to revise the existing financing tools of cross-border and transnational cooperation in support of the project holders, and points out some synergies between EU funding sources that may be exploited to facilitate transnational R&I cooperation in the Danube macro-region.



## JRC Mission

As the Commission's in-house science service, the Joint Research Centre's mission is to provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle.

Working in close cooperation with policy Directorates-General, the JRC addresses key societal challenges while stimulating innovation through developing new methods, tools sharing standards, and sharing its know-how with the Member States, the scientific community and international partners.

*Serving society  
Stimulating innovation  
Supporting legislation*

