

Danube Transnational Programme 2014-2020

# Evaluation of the Danube Transnational Programme

Updated evaluation report

Contract No. PM/SZERZ/82/2021 | Commitment No. Z0010061

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# Abbreviations

AF	Application Form
AM	Applicants Manual
ASP	Associated Strategic Partner
CA	Certifying Authority
CPR	Common Provisions Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013
DTP	Danube Transnational Programme
EC	European Commission
ENI	European Neighbourhood Instrument
ERDF	European Regional Development Fund
EUSDR	EU Strategy for Danube Region
FLC	First Level Control
IPA	Instrument for Pre-accession
JS	Joint Secretariat
LA	Lead Applicant
LP	Lead Partner
MA	Managing Authority
MC	Monitoring Committee
MRS	Macro-Regional Strategy
NC	National Coordinator
NCP	National Contact Point
NGO	Non-governmental organisation
PA	Priority Axis of DTP / Priority Area of EUSDR
PAC	Priority Area Coordinator (EUSDR)
PP	Project Partner
PPR	Project Progress Report
SMF	Seed Money Facility
SO	Specific Objective
TA	Technical Assistance

# Glossary

## Applicants Manual

The Applicants Manual is part of the Application Pack intended to provide applicants detailed and specific information about the programme, project requirements, eligibility rules, application and assessment processes, project implementation principles and to guide them through the drafting of the project proposals.

## Beneficiary

A beneficiary is an entity receiving EU funds for the implementation of a project.

## Capitalisation

Capitalisation is the valorisation of knowledge and results generated by previous projects in a certain thematic field meant to ensure a stronger impact on the policy making process at local, regional, national and European level.

## Co-financing

In general terms it refers to the situation when there are two financing sources for the same project or activity. In the EU programmes environment, usually there are two or more sources of financing. In case of Danube Transnational Programme, financing is provided from a) ERDF and state contribution and/or own sources (can be public or private) of the project participant and/or other contribution (e.g., regional/local/other sources) or b) IPA/ ENI and state contribution and/or own sources (can be public or private) of the project participant and/or other contribution (e.g., regional/local/other sources).

## Coordination

Coordination is the synchronization and integration of activities, responsibilities, and command and control structures to ensure that resources are used most efficiently in pursuit of the specified objectives.

## Durability

Durability of projects outputs and results refers to the long-lasting effect of the project achievements beyond project implementation timeframe.

## European Regional Development Fund (ERDF)

The ERDF is one of the five Structural Funds, and it is intended to help to reduce imbalances between regions of the Community. The Fund grants financial assistance for development projects in the EU regions. In terms of financial resources, the ERDF is by far the largest of the EU's Structural Funds.

## European Neighbourhood Instrument (ENI)

ENI is the financial arm of the European Neighbourhood Policy, the EU's foreign policy towards its neighbours to the East and to the South.

## First Level Control (centralised/ decentralised)

The First Level Control is the system set up by each Partner State in order to carry out verifications at national level with regard to the use of ERDF/ IPA/ ENI funds against established procedures in terms of delivery of products and services according to the approved Application Form, verification of the reality of claimed expenditure, ensuring compliance with the terms of the Commission decision on the programme, compliance with the national and Community rules on eligibility of expenditure, public procurement, state aid, protection of the environment and equal opportunities. FLC may be centralised, i.e., a central body is appointed by the respective country to carry out the control activities, or decentralised, i.e. the controlled project partner appoints its controller (however, in this case, limitations on the selection of the controller may be imposed by the Partner State).

## Instrument for Pre-accession Assistance (IPA)

The Instrument for Pre-accession Assistance (IPA) is the means by which the EU supports reforms in the “enlargement countries” with financial and technical help. The IPA funds build up the capacities of the countries throughout the accession process, resulting in progressive, positive development in the region.

## Lead partner (LP)

The Lead Partner is the project partner having full financial responsibility for the entire project and being responsible for the overall coordination of the project, including proper reporting of progress to the Joint Secretariat as also stipulated in the Subsidy Contract.

## Pilot action

A pilot action is to be understood as a practical implementation of newly developed solutions (e.g., services, tools, methods or approaches, even an investment). A pilot action has an experimental nature which aims at testing, evaluating and/or demonstrating the feasibility and effectiveness of a scheme. Therefore, it covers either the testing of innovative solutions or demonstrating the application of existing solutions to a certain territory/ sector. A pilot action is limited in its scope (area, duration, scale etc.) and must be unprecedented in a comparable environment.

## Programme Priorities

The Programme Priorities are the thematic areas around which the programme is structured.

## Progress Report

The Progress Report is the report to be submitted by the Lead Partner to the JS at the end of each reporting period outlining performed activities within the period as well as associated eligible expenditure. It documents the progress of the project and serves as reimbursement request.

## Subsidy contract or grant agreement

The Subsidy Contract is the contract signed between the MA/JS and the Lead Partner of each project stipulating the provisions to be observed by both parties during the implementation of the project.

## Strategy

A strategy is a plan of action designed to achieve a long-term and overall aim. In the context of transnational cooperation, a strategy should have as starting point a definition of common problems or challenges of the participating countries/ regions. The strategy should set up clear mid- and long-term objectives and priorities reflecting also the common vision of the programme geographical area in the specific field. The involvement of the relevant stakeholders is crucial, since the strategy should be a reflection of their needs and ensure its sustainability and future implementation. Strategies should aim at policy integration in the programme area in the selected fields of action and act as policy drivers below EU level but above national level. An action plan should provide a breakdown of the specific actions aimed at reaching the strategic goals and objectives. For a strategy to succeed, it should include the sequence of steps to be taken and activities that must be performed. Furthermore, it should include a timeline and a timeframe, as well as financial resources and responsible actors.

## Target group

The target group consists of those individuals and/or organisations towards which the project aims are directed, and which will therefore be directly or indirectly affected by the project activities and results. Even if target groups may not necessarily receive funds and be directly involved in the project implementation, they may exploit project outcomes for their own benefit.

## Tool

A tool is a means for achieving a specific task. Tools should be jointly developed at transnational level and prove an innovative character. Tools can be tangible (physical or technical objects) and intangible (methods, concepts or services). They consist amongst others of analytical tools, management tools, technical tools, software tools, monitoring tools, decision support tools etc. To be effective, a tool must be tailored to end users' needs and the respective framework conditions and has to be comprehensive and durable.

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# Executive summary

## Background

The Danube Transnational Programme 2014-2020 is supporting transnational cooperation projects between partners that promote economic, environmental and social development by elaborating joint solutions, concrete outputs and results enabling further implementation, further initiatives and investments.

Geographically, the Danube Transnational Programme area overlaps with the territory addressed by the EU Strategy for the Danube Region (EUSDR) comprising the Danube river basin and 14 countries: Austria, Bulgaria, Croatia, Czechia, Hungary, Germany – Baden-Wuerttemberg and Bavaria, Romania, Slovakia, Slovenia, Bosnia and Herzegovina, Moldova, Montenegro, Serbia and Ukraine (partly).

The programme is focusing on four thematic priorities: 1) innovative and socially responsible Danube Region; 2) environment and culture responsible Danube Region; 3) better connected Danube Region; and 4) well governed Danube Region.

Target groups of the Programme are regional and local authorities, development agencies, universities and research institutes, chambers of commerce, innovation centres and other relevant actors in the field of innovation, economic development, environment, transport, energy and institutional capacity as well as the governance structure of the EUSDR.

## Objectives of the evaluation

**This report presents the findings and conclusions of the overall evaluation of the DTP in the programming period between 2014 and 2020.** The main objective of the evaluation is to assess extent to which the intended changes have been achieved and the contribution of the DTP to these changes.

**Evaluation questions are centred around two evaluation objectives:**

- **Evaluation objective I:** assess the extent to which the project is impacting the Programme' specific objectives under priorities 1-3 and SO 4.1 (increased the cooperation of key actors/key institutions in the programme area).
- **Evaluation objective II:** assess how the programme has managed to support the implementation of the EUSDR under specific objective (SO 4.2), which allocates Programme funds to support the governance and implementation of EUSDR.

The evaluation also provides recommendations based on the conclusions, with a view to provide inputs for programming the 2021-2027 DTP.

## The scope of the evaluation

**The Programme has been implemented through four main channels.** This evaluation covers those projects which have finished their implementation by the end of 2022:

- 1) **Regular calls for proposals.** Three regular calls for proposals were launched during the project implementation. The three calls in total provided support for 1543 beneficiaries in 114 projects.

- 2) **Priority Area Coordinators (PAC) financing.** Three rounds of PAC projects were implemented in the timeframe of the programme providing support for 54 beneficiaries.
- 3) **Seed Money Call.** The one Seed Money call provided support in 19 projects for 57 beneficiaries. All Seed Money projects finalised their implementation by September 2019.
- 4) **DSP call.** This evaluation covers a single project with an overall funding allocation of EUR 3.1 million for 5 beneficiaries.

## Methodological approach

**This evaluation relies on theory-based approach.** Taking into consideration the complex nature of the programme, it defines a logical framework on how the programme interventions worked and exerted impact and tests this framework based on evidence:

- 1) Interviews with members of the programme management (MA, JS, MC, NCPs) and beneficiaries of the programme (DSP, PACs);
- 2) A survey distributed to project leaders and partners;
- 3) Project case studies including interviews with stakeholders, which provide a practical overview of project implementation in all of the programme's specific objectives.

**The report builds on the findings and data collection activities of the previous evaluation, while additional data collection activities were conducted. For this evaluation, altogether 305 survey responses (124 in the 1<sup>st</sup> and 181 in the 2<sup>nd</sup> phase), altogether 38 interviews<sup>1</sup>, 16 case studies (12 in the 1<sup>st</sup>. and 4 in the 2<sup>nd</sup> phase) and more than 50 documents** make up the evidence base for testing the programme theories and provide the analytic foundations for the conclusions and recommendations included in this report.

*For additional information on the methodological approach, please refer to section 2. The programme theories are presented in section 3.*

## Summary of evaluation conclusions

**Evaluation objective I.: Assess how the projects approved in Programme priorities 1-3 and 4.1 have increased the cooperation of key actors/key institutions in the programme area in order to improve the framework conditions in specific policy fields.**

**The vast majority of the projects in scope of the current evaluation succeeded to reach their targets** both in terms of outputs and target groups. Altogether 42 projects faced difficulties in reaching all desired stakeholder groups from the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> calls. Those projects that did not reach their targets faced unexpected challenges (such as difficulties in measurement of certain target groups reached) that had to be overcome before project implementation could get back on track, or their target values proved to be too ambitious to reach during project implementation. It is worth to be mentioned that while these projects faced difficulties in reaching one- or multiple types of stakeholders, the vast majority of the same projects managed to reach more of different types of stakeholders than anticipated at the application phase. Results were measured by an indicator on the

<sup>1</sup> 27 in the 1<sup>st</sup>, and 11 in the 2<sup>nd</sup> phase: 2 with the DSP, 7 with MC members, 7 with NCPs, 13 with PACs, 2 with the MA, and 7 with the members of the JS.

increase of cooperation in the programme area, however, the unwillingness of beneficiaries to provide data make the calculated indicator values unsuitable for assessing results and impacts.

**The evidence shows that the DTP contributed to increase cooperation in the programme area between the project participants and this increase is likely to be sustainable.** Altogether 63% of beneficiaries responding to our survey indicated that the connections formed are still active. Though it is not widespread, close to 9% of these connections were institutionalised. Even though the majority of partnerships have continued cooperation on an informal and more ad-hoc basis, there is a common intent to define further projects and continue cooperation. Examples such as the D-Care Labs project prove that this is a real possibility.

**Increased cooperation was facilitated by filling in knowledge gaps, establishing a common understanding on transnational issues between stakeholders in the programme area and creating new networks** – or strengthening already existing ones. In some cases, the project outputs managed to influence decision-making or legislation, especially in the field of water management, though we only managed to identify a small number of concrete examples (e.g., the JOINTISZA, DAREFFORT and Tid(y)up projects). Building capacities was an especially important result of cooperation in non-EU countries.

**The evidence indicates that pilot actions and tools have been more successful compared to strategies when it comes to increasing the intensity of cooperation in the programme area.** The content of strategies can be technical, and they are not always suitable for implementation which is echoed by the survey evidence indicating that partners often failed to define an action plan that clearly defines a common problem and the steps necessary to solve the issue. The other challenge is that stakeholders often face issues with securing financing and political support for implementation. On the other hand, pilot actions are more visible and those can demonstrate the projects' success easier.

**While evidence indicates differences in the durability of outputs and results across SOs, with the exception of SO2.4, these differences are not pronounced.** The DTP had issues with absorption when it comes to SOs 1.1, 2.4 and 3.2. In the case of SO 2.4 (environmental risk management) and to a more limited extent in the case of SO 1.1 (improve framework conditions for innovation) and SO3.2 (energy security and energy efficiency) the evidence shows that issues with project generation are very likely to have translated into smaller contribution of the programme to increased cooperation compared to the projects selected under other SOs. In line with previous expectation, projects financed under SO 2.1 (transnational water management) had a larger and more permanent impact on cooperation compared to the other SOs. The explanation was that transnational issues in this policy area are more evident which has already led to a higher intensity of cooperation compared to the policy areas targeted by the other SOs and the projects fit well to policy priorities and other initiatives.

**Management capacity and the involvement of partners from a wide variety of sectors are prerequisites of success.** Projects which involved diverse stakeholders from academia, the private sector, the non-profit sector and the public sector were likely to have a longer lasting and more sustainable impact on cooperation. Evidence also suggests that partners who already have some experience in Interreg processes managed their projects more effectively, while those who were new to the process needed more time to deal with the administration. Regardless of the types of outputs or specific objectives, political support seems to be another crucial prerequisite for ensuring the durability of project results, which is proven by the relatively higher success of those partnerships where

decision making bodies from the government were involved either as project partners or in other functions.

## **Evaluation objective II. (related to SO 4.2): The impact of the programme contribution to the governance and implementation of EUSDR**

**The DTP provides financial resources contributing to increasing management and governance capacities of the Strategy.** Evaluating the impact of this support though is difficult due to the fact that the funding financed management activities and there is no clear counterfactual scenario to compare the impacts to. It is likely that the PACs and the DSP would have had difficulties to funding for their activities without the DTP. While there was a clear need for support, the opinions of stakeholders diverge on the impact exerted on the efficiency of the implementation of the EUSDR and the communication of the Strategy. In general, this might be attributable to the fact that the transnational governance of the EUSDR is inherently complex and requires close, resource-intensive coordination rather than to factors specific to the DTP. In the case of PAC support though, applying a project logic to the activities of PACs has presented clear challenges resulting in administrative burden and less than ideal agility at the side of PACs.

**PACs have heavily relied on the DTP to finance their activities.** The funding was mainly used for organising meetings, covering costs of travel and accommodation, keeping in touch with stakeholders, organise governance meetings and thus the added value of participating in the DTP is that they can connect with colleagues across countries in the frame of conferences or workshops. PAC support is especially of high importance for non-EU countries, on the one hand because those can strengthen their networks within their PAs, members can travel to steering group and other meetings, and on the other hand because it is more challenging for them to secure national funding for the activities PACs are usually responsible for. In the cases of some PACs, the DTP covered operating costs including staff costs. In some PAs staff changes affect the coordination capacities of PACs negatively and the DTP is one tool that contributes to mitigating the negative effects of staff fluctuations in these PAs.

**Financing the DSP contributed to making the work of PACs more efficient by helping them in organising PAC meetings, NC-PAC meetings, capacity building workshops, cross – MRS workshops and thematic workshops dedicated to the PACs.** The DSP serves as a connection between stakeholders. It contributed to involving more actors into the networks of PACs, providing current information from the national coordinators' meeting and also on the processes and developments at the strategy level. Information exchange was also assisted by supporting PACs with setting up their websites. DTP support also contributed to the communication of the EUSDR through the DSP support (Communication Strategy, EUSDR websites, social media presence), increasing the visibility of the Strategy.

**The Seed Money Facility was a novel and innovative approach to facilitate the development of projects relevant for the EUSDR** and to secure additional financing contributing to achieving the objectives of the Strategy indirectly. At the same time, challenges with communication between the MA and PACs, issues with identifying needs, target groups and the low quality of some project outputs promises fewer results than expected. The applications were of uneven quality, and they did not produce tangible outcomes. This does not mean though that this type of support is not warranted, only that the implementation framework needs to be better tailored to the problems and needs.

*Evaluation findings are presented in section 4 of the report. The validated programme theories and the answers to the evaluation questions are presented in section 5.*

## Recommendations and underlying rationale

**RC1:** Put a stronger emphasis on the quality of strategies.

Strategies have a smaller impact on increasing cooperation in the programme area compared to tools and pilot actions. Some of the strategies formulated are technical documents presenting analytic results and high-level recommendations and it is difficult to see their potential to lead to concrete actions in the programme area.

**RC2:** Using additional relevant common indicators to measure programme outputs and results could be considered. Make it mandatory for beneficiaries to provide data in their grant agreements.

The result indicators of the 2014-2020 DTP have limited usefulness when it comes to assessing programme impacts partly due to challenges with data collection.

**RC3:** Formal assessment of the types of legislative / decision making bodies planned to be involved in the delivery, and the underlying rationale OR mandatory involvement of such organisation(s).

Involving decision making bodies with administrative responsibility for the relevant policy areas in the project delivery or in an advisory function increases the durability of the results.

**RC4:** Stretch the length of implementation of PAC projects as far as possible and make financial implementation rules more flexible within the constraints of the relevant regulations.

A project logic is difficult to apply to the activities of PACs and rigid implementation rules increase the administrative costs of project implementation.

**RC5:** Targets set need to be realistically assessed at the selection stage.

Projects under the majority of SOs outperformed reaching the organisations they planned to reach in their application forms by several magnitudes, which raises the question how realistically these targets were set in the first place.

**RC6:** Wider communication of the projects and project results of DTP on a programme-level by the managing authorities and PACs.

This would increase the visibility of the projects, and their reach to the potentially interested parties. This could positively contribute not only to the uptake of the relevant outputs but also improve the perception of the programme.

**RC7:** Target tailored communication activities at potential applicants with less experience with INTERREG, develop detailed guidance materials tailored to their needs.

The concept of transnational cooperation and the context of transnational cooperation programmes are difficult to understand for interested organisations without previous experience in participating in transnational programmes.

**RC8:** Involve more intensively the political sphere in the dissemination of project results in formalised manner through PACs and EUSDR Steering Groups to increase the take up and durability of project results.

PACs act as an intermediary between the DTP and the political spheres at national level.

**RC9:** A searchable database and in general, the wider communication of outputs by the programme could increase the visibility of the programme and contribute to the wider take up of outputs.

It is difficult to identify relevant project outputs for the general public which limits their take-up of outputs outside of the partnerships.

# 1. Evaluation purpose

## 1.1 Evaluation objectives

According to Art. 54 of the Regulation (EU) 1303/2013, all programmes shall carry out evaluations meant to *“improve the quality of the design and implementation of programmes, as well as to assess the effectiveness, efficiency and impact”*. This evaluation is the second impact evaluation of the Programme following the first evaluation which was carried out in 2021.

The impact evaluation covers the 10 specific objectives of the DTP. The specific objectives of the programme are evaluated in terms of defining how successful they were in achieving the proposed results. This evaluation outlines the changes to which the programme has contributed and assesses the contributions of the programme to the achievement of the result indicator targets.

The evaluation has two objectives.

**Evaluation objective I: assess the extent to which the projects are impacting the Specific Objectives of the Programme under priorities 1-3 and SO 4.1 (increased the cooperation of key actors/key institutions in the programme area in order to improve the framework conditions in specific policy fields).**

The objective of the evaluation is to assess how the projects approved in Programme priorities 1-3 and 4.1 have increased the cooperation of key actors/key institutions in the programme area in order to improve the framework conditions in specific policy fields. By the end of 2022 all projects including the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> call were finalised.

The SOs covered by the evaluation under objective I. are:

- SO 1.1: Improve framework conditions for innovation
- SO 1.2: Increase competences for business and social innovation
- SO 2.1: Strengthen transnational water management and flood risk prevention
- SO 2.2: Foster sustainable use of natural and cultural heritage and resources
- SO 2.3: Foster the restoration and management of ecological corridors
- SO 2.4: Improve preparedness for environmental risk management
- SO 3.1: Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas
- SO 3.2: Improve energy security and energy efficiency
- SO 4.1: Improve institutional capacities to tackle major societal challenges

The DTP is focused on *“policy learning”* and *“implementation-oriented”* approaches. Therefore, the typology of outputs, which is based on the experiences of the South East Europe Programme differentiates between the following three types of main project outputs:

- Strategy (including action plan) development (and/or implementation);
- Transnational tools development (and/or implementation);
- Pilot activities.

## Evaluation objective II: assess how the programme has managed to support the implementation of the EUSDR.

The Programme has a specific objective (SO 4.2) that allocates Programme funds to support the governance and implementation of EUSDR. In practice, this specific objective serves to allocate EU funds to support the implementation of the EU Strategy for the Danube Region by 1) funding activities of PACs; 2) funding the seed money projects; and by 3) funding the Danube Strategy Point. This specific objective is very different from the other Programme specific objectives; therefore, we used a tailored approach to evaluate its impact.

The objective of the evaluation is to analyse how the financial support by the Programme to PACs have affected their management capacities to effectively implement EUSDR goals, targets and key actions (based on the result indicator of the programme). Furthermore, different other aspects are evaluated based on the proposed evaluation questions.

The impact evaluation focuses on the immediate effect of the programme and not on the roll-out of project results leading to a change at territorial level, since the latter can only be analysed at a much later stage.

### 1.2 Scope of the evaluation

The Programme was implemented through four main channels:

- 1) Regular calls for proposals.** The evaluation covers the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> call projects. Altogether 114 projects were implemented (54 under the 1<sup>st</sup> call, 22 under the 2<sup>nd</sup> call and 38 under the 3<sup>rd</sup> call) by 1543 beneficiaries, including both private- and public sector actors.
- 2) Priority Area Coordinators (PAC) financing.** Three rounds of calls for PAC funds were initiated during the implementation of the DTP. This report covers all PAC projects within these 3 calls. Within the three PAC calls 25 projects were implemented with 54 beneficiaries. All PAC projects were concluded by the end of 2022.
- 3) Seed Money Call.** A seed money call was launched by the programme in October 2017. The seed money facility is aimed at supporting strategic projects development in the thematic fields of the EUSDR (small scale financial assistance for EUSDR project ideas). 19 SMF projects were approved with an overall ERDF allocation of EUR 724,127 and an overall IPA allocation of EUR 70,992. All Seed Money projects finalised their implementation by September 2019 and are covered by this evaluation.
- 4) DSP call.** According to the Cooperation Programme, support to the strategies includes also strengthening the capacity of PACs in implementing and communicating the EUSDR through the Danube Strategy Point (DSP). The DSP call was launched in May 2018 with two project proposals submitted. This evaluation covers the single proposal reaching the threshold for an overall ERDF allocation of EUR 3,133,751, which was approved for financing by the MC in July 2018.

## 2. Evaluation methodology

### 2.1 Overall methodology

In order to judge the contribution of the interventions to the effects observed, the impact evaluation follows the theory-based approach<sup>2</sup>, which is based on establishing the theory behind an intervention and assessing whether it has been implemented according to that theory. The theory impact evaluation deals with “why it works”, “did things work as expected to produce the desired change”.<sup>3</sup>

The evaluation aims to go beyond assessing *what has happened*, by analysing *why and how something has happened*. This explorative approach enables for assessing changes attributable to the programme on one hand and identifying contextual factors that affect the programme impact on the other. To that end, in view of the high level of complexity of the DTP, a nuanced and targeted approach is needed incorporating various methods of impact evaluation.

Against this background, the ex-post evaluation of the Programme is designed based on the following basic requirements:

1. **Documenting the desired and planned intervention logic as a baseline:** mapping out the programme theory in order to explain how the intervention is expected to lead to the intended outcomes.
2. **Considering exogenous influences on the observed effects:** in order to discern the impact of the Programme from the impact of external (exogenous) factors, such factors must be identified and built into the theoretical model. These can significantly influence the core indicators and the entire impact chain of DTP interventions. The evaluation design needs to capture these exogenous factors, take them into account explicitly, and empirically examine them as an integral part of the evaluation.
3. **Identifying programme-specific effects through the triangulation of different methods:** in view of the complexity of the planned evaluations and the diversity of the different effects of the individual activities of the Programme measures, triangulation, that is, the combination of different methods is necessary. Thoughtful, systematic triangulation is critical to an effective evaluation as it helps generate a richer, more rounded, and nuanced analysis. In particular, triangulation contributes to:

<sup>2</sup> The DTP is similar to other programs at its general level, as the initiative plans to do something in order to accomplish various outcomes. Nonetheless, it is different compared to other programs, in a sense that the DTP has multiple strands (economic, social, political), which operate at many levels (community, institutional, personal network, individual), are co-constructed in a collaborative process by diverse stakeholders and evolve over the course of the initiative.

The reasons for choosing the theory-based evaluation against the counterfactual impact evaluation is that, in the case of the latter, it would imply setting up credible (randomised) comparison group of non-beneficiaries at programme level that show an identical dimension and are not benefiting from the intervention, which is not feasible and suitable in the context of the DTP. This is not a counterfactual assessment aiming to “measure” programme impacts.

<sup>3</sup> INTERACT Q&A Evaluation 2014-2020.



- Deepening understanding of an issue or phenomenon by combining multiple perspectives, theories and data sources;
- Validating/corroborating findings by cross-checking data collected through different methods and from different sources.

## 2.2 Description of the Theory Based Approach

Theory-based evaluation has two core components. The first is conceptual, the second one is empirical. Conceptually, theory-based evaluations articulate a policy or programme theory. Empirically, theory-based evaluations seek to test this theory. Several approaches have been developed within Theory-Based Evaluation over the years, which are common in a sense that key attention is paid to theories of policy makers, programme managers and other stakeholders that are logically linked together.

In this framework, theories can express an intervention logic of the policy. The actual outcome will depend both on policy effectiveness and on other factors affecting outcomes, including context. An essential element of policy effectiveness are the mechanisms that make the intervention work.

The theory of change is centred around three levels of impacts:

- **Direct effects:** the effect of the aid on the stakeholders and economic variables that were targeted by the scheme;
- **Indirect effects:** the effect of the aid on stakeholders and economic variables that were not targeted by the scheme;
- **Non-intended effects:** the effects that were not expected but are significant, nonetheless.

To comply both with the evaluation's theoretical and practical requirements (addressing causality, while keeping the analysis implementable and understandable), causality is expressed by arrows in three different forms:

- **Cause:** "A" is one of the main, fundamental causes of "B". This can either be a step in the results chain or an assumption / external factor. This is 'must have' condition, i.e. "A" is a necessary cause of "B". "A" is not automatically sufficient though, multiple main causes may be required to let "B" happen. Importantly, no concern is given to marginal causes of "B" – focus is put only on fundamental causing factors.
- **Pre-condition:** "A" is a pre-condition of "B", but not one of the main causes of that. Formally, "A" is also necessary for "B" to happen (again, not automatically sufficient). Intuitively, pre-conditions can be best captured by the interpretation that lacking them prevents "B" from happening, but their causal relationship is weak, at least in everyday terms.
- **Supporting factor:** "A" is contributing to "B" but is neither a cause nor a pre-condition of that. This is a 'nice to have' condition, i.e. "A" is neither necessary nor sufficient cause of "B", however, it serves as a catalyst to let "B" happen. Lacking a contributing factor does not prevent "B", however, its presence enhances the speed, quality, intensity etc. in which "B" takes place.

Theories of change models are developed for the three types of main programme outputs (Strategy including action plan development and/or implementation; transnational tools development and/or implementation and pilot activities) and also for evaluating the

mechanism in Specific Objective 4.2 and used as a general framework to formulate answers to the evaluation questions, build the beneficiary survey, case study interview questionnaire and assess the outcomes of the case studies.

## 2.3 Evaluation process

The evaluation was carried out in two phases. An ex-post evaluation requires the collection of information and data and the analysis of results. If the project is not yet closed, the relevant data and information may simply not be available, making it difficult to conduct a complete evaluation. To be able to carry out a meaningful analysis of results and (potential) impacts, the first phase of the evaluation completed in 2021 covered the projects completed by the end of 2020. These were the projects implemented under the 1<sup>st</sup> call for proposals, the 1<sup>st</sup> PAC call, the Seed Money Facility call and the DSP call.

This updated evaluation report covers all of the implemented projects under the calls of the DTP in the programming period between 2014-2020, including the 2<sup>nd</sup> call, the 3<sup>rd</sup> call, the 2<sup>nd</sup> and 3<sup>rd</sup> PAC calls and the DSP call. Compared to the previous phase of the evaluation, all projects were closed and analysed which allowed to reassure the previous findings, and to potentially generate additional insights based on the new findings and evidence that had been identified. The additional evidence (11 interviews, 181 survey responses and 4 additional case studies) collected did not change the conclusions of the report comparing to the first phase of the evaluation.

## 2.4 Evaluation activities

### 2.4.1 Desk research and literature review

This activity consisted of reviewing key documents related to the programme and the systematic retrieving of key information.

The analysis covered:

- Main EC documents relevant for the evaluation of the DTP are the followings
  - REGULATION (EU) No 1299/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 (ETC Regulation)
  - REGULATION (EU) No 1301/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013
  - REGULATION (EU) No 1303/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 (CPR)
  - EC Guidance Document on Monitoring and Evaluation – Concepts and recommendations
- Main DTP documents
  - Cooperation Programme
  - Ex ante evaluation report
  - DTP Programme Manuals (Applicants Manuals and Implementation Manuals) for normal projects

- PAC Programme Manual (Applicants Manual and Implementation Manual) for PACs
- DSP Programme Manual (Applicants Manual and Implementation Manual) for DSP
- Seed Money Facility Manual
- DTP Control Guidelines
- DTP Communication Strategy
- Annual Implementation Reports
- Action plan of EUSDR
- Internal documents, reports, databases
- DTP Evaluation Plan;
- Baseline study and update of the baseline values of the programme result indicators
- 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> call projects;
- Priority Area Coordinators projects;
- Seed Money Facility Projects;
- Danube Strategy Point project;
- Operational Evaluation Report and recommendations;
- Project Progress Reports

Based on the listed documents and the data available from the programme monitoring system, the ToC models were elaborated, and basic conclusions were made about the projects' effectiveness. The ToC models were developed for the first evaluation iteration and were not modified for this updated report as they were suitable in the context of the 3<sup>rd</sup> call as well.

## 2.4.2 Validation interviews

Altogether 38 interviews<sup>4</sup> were conducted with various stakeholders: two with the DSP, seven with MC members, seven with NCPs, 13 with PACs, two with the Head of MA, and seven with the members of the JS.

The interviews took ca. 90 minutes to conduct, and all followed the same structure. Based on the information retrieved from the programme management bodies valuable insights could be gathered regarding the implementation mechanism of the programme and the evaluation questions. This series of interviews also provided the platform to compare the findings from the first evaluation iteration and assess the changes that might have taken place since the closure of the 1<sup>st</sup> call projects.

<sup>4</sup> 27 during the first phase of the evaluation, and 11 interviews for the updated evaluation.

### 2.4.3 Beneficiary survey

As part of this evaluation, an online survey was prepared for two purposes:

- 1) validate the theories of change with structured data on the perceptions of beneficiaries;
- 2) collect structured data on the perceptions of beneficiaries as an input to answering evaluation questions only loosely connected to the programme theories.

The survey in the first phase (covering the 1<sup>st</sup> call, SMF call, DSP call, 1<sup>st</sup> PAC call) of the evaluation was carried out in 2021 and filled out by 110 1st call project beneficiaries with closed projects, by three beneficiaries of Seed Money Facility, by three representatives of the DSP, and by seven PACs.

The survey in the second phase (covering the 2<sup>nd</sup> call, the 3<sup>rd</sup> call, the 2<sup>nd</sup> and 3<sup>rd</sup> PAC call and the DSP call) was filled out by 181 respondents: by 52 2<sup>nd</sup> call beneficiaries, by 119 3<sup>rd</sup> call beneficiaries, by three representatives of the DSP, and by seven beneficiaries of the 2<sup>nd</sup> or 3<sup>rd</sup> PACs calls.

The findings derived from the surveys presented in this report are based on the pooled responses of the first and second survey iterations. The pooled responses are nearly representative for both the countries and the SOs of the whole programme.

### 2.4.4 Elaboration of case studies

Case studies are primary information sources, used with the aim of gathering first hand experiences from beneficiaries and gather a deeper and more detailed insight of the implementation processes. Furthermore, the case studies also describe the context and the delivery mechanism(s) of the programme and serve as examples for future projects.

In this activity, in order to answer the questions defined by Evaluation objective I., additionally to the 12 case studies conducted in the first phase, four cases (projects) covering SO 1.1, SO 1.2 and SO 2.2 (focusing on the topics of innovation and culture) were selected for in-depth analysis and turned into case studies for the second evaluation iteration to demonstrate the mechanisms and approaches taken during the project implementation.

## 2.5 Assessment of strengths and weaknesses of the evaluation report

The table below presents an assessment of the strengths and weaknesses of the evaluation report.

**Table 1: Assessment of strengths and weaknesses of the evaluation report**

Strengths	Weaknesses
<p><b>Approach and methodology:</b></p> <ul style="list-style-type: none"><li>• Evaluation questions covering a wide array of topics, in alignment with the envisaged programme results (increase in cooperation).</li><li>• The four theories of change are suitable to capture differences in the three types of outputs generated by the programme, and differences between the logic of interventions under SOs 1.1-4.1 and those under SO4.2.</li><li>• Survey responses have a large role in testing the theories and the survey questionnaire is closely aligned with the logical building blocks of</li></ul>	<p><b>Inherent limitations attributable to the nature of the DTP:</b></p> <ul style="list-style-type: none"><li>• Impacts cannot be quantified at programme level.</li><li>• Difficult to make a judgement on long term results, which may only take shape in upcoming years.</li><li>• The size of the contribution of the programme is difficult to judge.</li><li>• The evaluation is inherently based largely on the assessment of perceptions due to the intervention logic and objectives of the</li></ul>

Strengths	Weaknesses
<p>the theories. This makes the testing framework explicit.</p> <p><b>Evidence:</b></p> <ul style="list-style-type: none"> <li>Evidence base includes inputs from all key programme stakeholders (MA, JS, DSP, MC, NCPs, PACs, beneficiaries).</li> <li>Larger number of survey responses (181, of which 171 refer to the 2<sup>nd</sup> and 3<sup>rd</sup> call projects) and higher response rate (cca. 21%) to the beneficiary survey in comparison to other similar evaluations.</li> <li>Responses to the beneficiary survey cover well the SOs and the countries in the programme area.</li> </ul> <p><b>Report content:</b></p> <ul style="list-style-type: none"> <li>Findings are structured by data sources which makes their evidence base transparent. <ul style="list-style-type: none"> <li>Recommendations are relevant for the programming of the 2021-2027 DTP.</li> </ul> </li> </ul>	<p>programme.</p> <ul style="list-style-type: none"> <li>Lack of reliable data on result indicators (partly mitigated by the beneficiary survey).</li> <li>The reporting period for the 3<sup>rd</sup> call project will be concluded in the end of April 2023.</li> </ul> <p><b>Approach and methodology:</b></p> <ul style="list-style-type: none"> <li>Survey responses have a large role in testing the theories and the survey questionnaire is closely aligned with the logical building blocks of the theories. This makes finding alternative theories challenging.</li> </ul> <p><b>Evidence:</b></p> <ul style="list-style-type: none"> <li>Potential “self-reporting” bias in the survey responses provided by beneficiaries.</li> </ul>

Source: KPMG/VVA (2023).

## 3. Intervention description

### 3.1 Theory of change models for “traditional” project calls

#### 3.1.1 General attributes of the intervention

According to the Programme, projects could generate three different types of outputs in order to reach programme objectives, which is an increase of cooperation of actors in the programme area:

- strategy;
- pilot action;
- tool.

Following this logic, we developed a ToC model for each type of output. Since the implementation context for generating either of the outputs is very similar to each other, the assumptions on external factors are identical in each case.

Assumptions on external factors are listed below:

1. Local stakeholders are aware of the programme and support its goals – a pre-requisite for the DTP to be effective.
2. NCPs and other programme institutions responsible for information distribution can reach relevant stakeholders and can effectively communicate information necessary for participating in the programme – again a pre-requisite of effectiveness.
3. Programme management authorities are capable and stable enough to execute the programme in an effective and efficient way in accordance with programme directives.

4. Potential applicants have the necessary resources (human and institutional) to apply for funds and manage programme implementation.
5. Common problems are shared among participating countries, they are able to prioritise and find mutual solutions.
6. The right mix of stakeholders are involved in the projects.
7. There are no political or legal barriers in implementing the output of the project in either of the cooperating countries or in other regions.
8. The Programme is complementary with other national and EU-level programmes.
9. The project intervention is large enough to influence the behaviour of cooperating actors.

One other factor, which is characteristic to all ToC models, is building institutional capacities, which represents a cross-cutting element of the DTP. It is measured by a fourth, horizontal output indicator “*documented learning interactions*”, which is mandatory for all projects. Hence, it is embedded in all three ToC models.

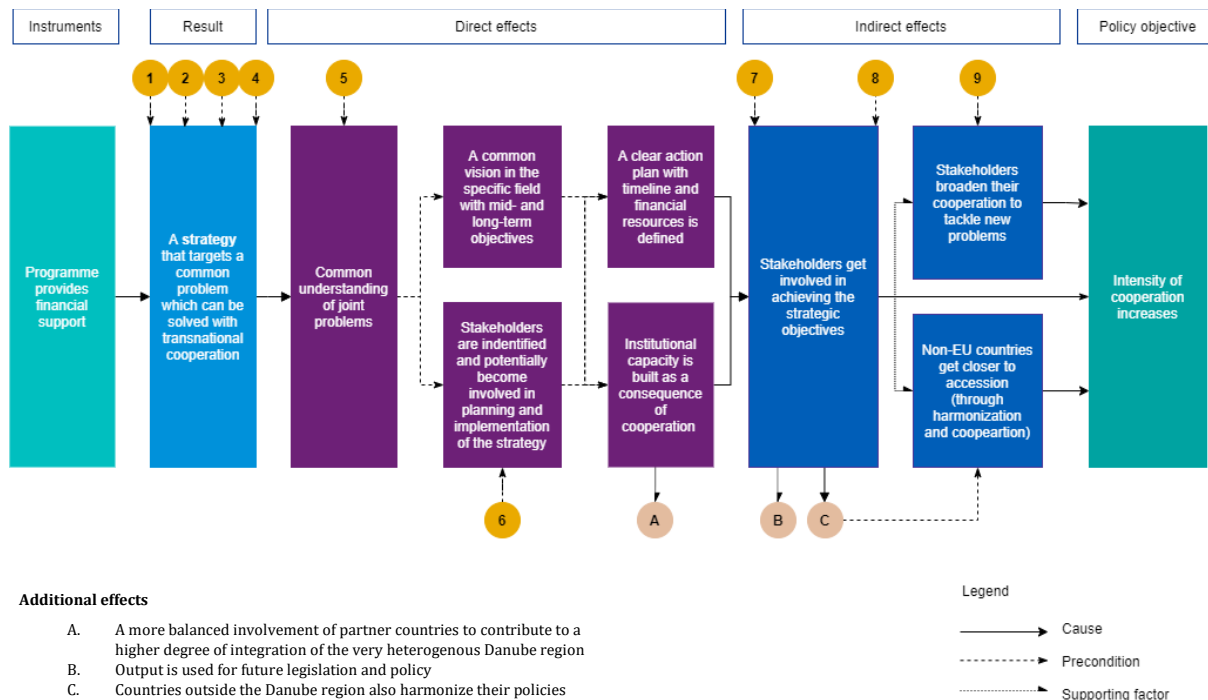
Each ToC model follows the same structure:

- All ToCs pursue to provide a stylised model of the path towards achieving the intended goal of the DTP. To that end, the models cover intermediary steps of attaining this goal, the causality of those steps, and key assumptions underlying them.
- Each model starts with the specific output the model is based on, and then follows the steps through which the intervention exerts its effects (direct, indirect and unintended effects, outcomes).
- The intervention’s unintended effects are represented with upper case letters.
- There are external factors which can influence the intervention logic. These are represented with numbers.
- We determined three different types of mechanisms (cause, pre-condition, supporting factor) to describe the logical connections among the factors in the models. These are represented with different types of arrows.

### **3.1.2 Theory of Change model - strategies**

The general logic of how creating a strategy contributes to reaching the overall objective of the programme is presented in the figure below.

**Figure 1: Theory of change - strategies**



Source: KPMG / VVA (2023).

The first building block of identified change is the financial support the programme provides to beneficiaries, in this case the support of creating a strategy, which targets a common problem that can be solved with transnational cooperation. In order for participating in the programme the following assumptions must be satisfied:

1. Local stakeholders are aware of the programme and support its goals.
2. NCPs and other programme institutions responsible for information distribution can reach relevant stakeholders and can effectively communicate information necessary for participating in the programme.
3. Programme management authorities are capable and stable enough to execute the programme in an effective and efficient way in accordance with programme directives.
4. Potential applicants have the necessary resources (human and institutional) to apply for funds and manage programme implementation.

During the strategy development process, participants gain a common understanding of joint problems in the region, with the assumption that common problems are truly shared, and project partners are able to prioritise and find mutual solutions. After agreeing on which problem they want to target with the strategy, partners can engage in developing a common vision in their specific fields with mid- and long-term objectives. At the same time, they should identify stakeholders and involve them in the planning phase. Of course, the assumption on finding the right mix of stakeholders must be satisfied. As a result of these processes, a clear action plan with timeline and required financial resources is defined, and institutional capacity is built. As an additional effect of these activities, a more balanced involvement of partner countries can be realised, which enables a higher degree of integration of the very heterogeneous Danube region.

As a consequence of developing a strategy, stakeholders get more involved in achieving their strategic objectives, which can lead to a future cooperation outside of the sphere of the DTP. If non-EU countries were involved in the process, through institutional capacity building, harmonisation, and cooperation they can get closer to accession.

Altogether if these steps are realised, the programme is able to reach its goal, and increase the cooperation in the region.

These effects can only happen, if the following assumptions are met at the finishing steps of the project:

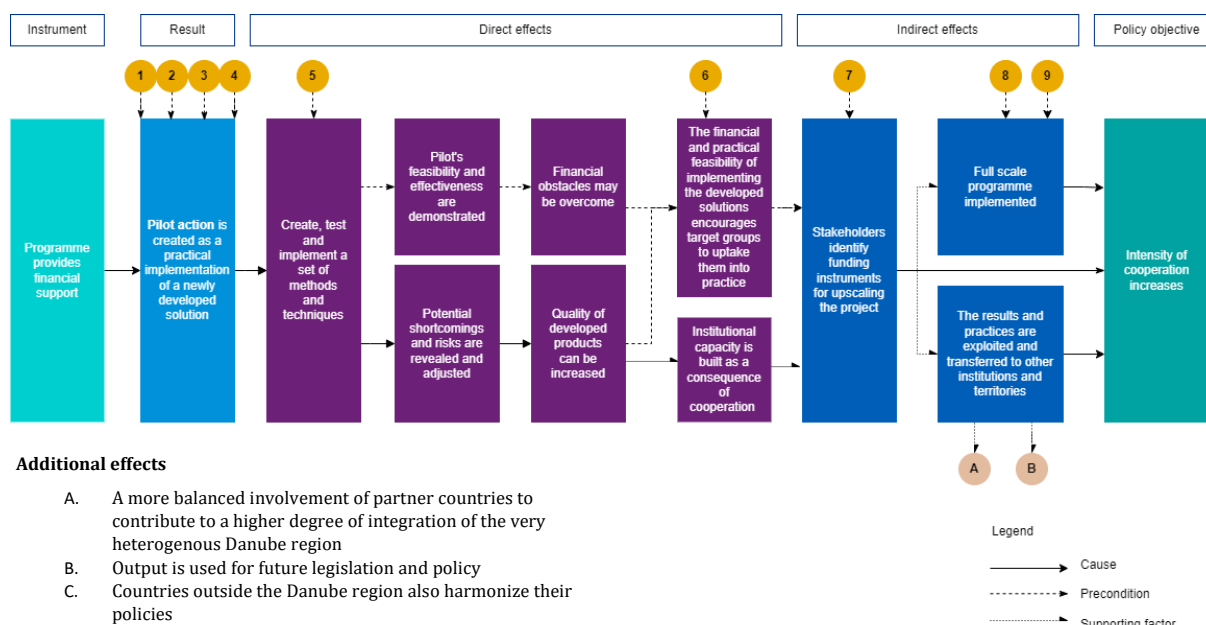
7. There are no political or legal barriers in implementing the output of the project in either of the cooperating countries or in other regions.
8. Programme is complementary with other national and EU-level programmes.
9. The project intervention is large enough to influence the behaviour of cooperating actors.

If the strategy or framework is suitable for further use outside of its planned context, it can have ripple effect and serve as an input in other policy making and legislation processes, which – if successful – can be an example for countries outside the Danube region as well.

### 3.1.3 Theory of Change model – pilot actions

The general logic of how creating a pilot action contributes to reaching the overall objective of the programme is presented in the figure below.

Figure 2: Theory of change – pilot actions



Source: KPMG / VVA (2023).

After participants got the financial support necessary for the development of a pilot action, they can start creating, testing, and implementing a set of methods and techniques in the context of the pilot. Naturally, the external factors on programme participation and programme implementation should be met in this case, as well already at the beginning of implementation. Namely:

1. Local stakeholders are aware of the programme and support its goals.



2. NCPs and other programme institutions responsible for information distribution can reach relevant stakeholders and can effectively communicate information necessary for participating in the programme.
3. Programme management authorities are capable and stable enough to execute the programme in an effective and efficient way in accordance with programme directives.
4. Potential applicants have the necessary resources (human and institutional) to apply for funds and manage programme implementation.
5. Common problems are shared among participating countries, they are able to prioritise and find mutual solutions.

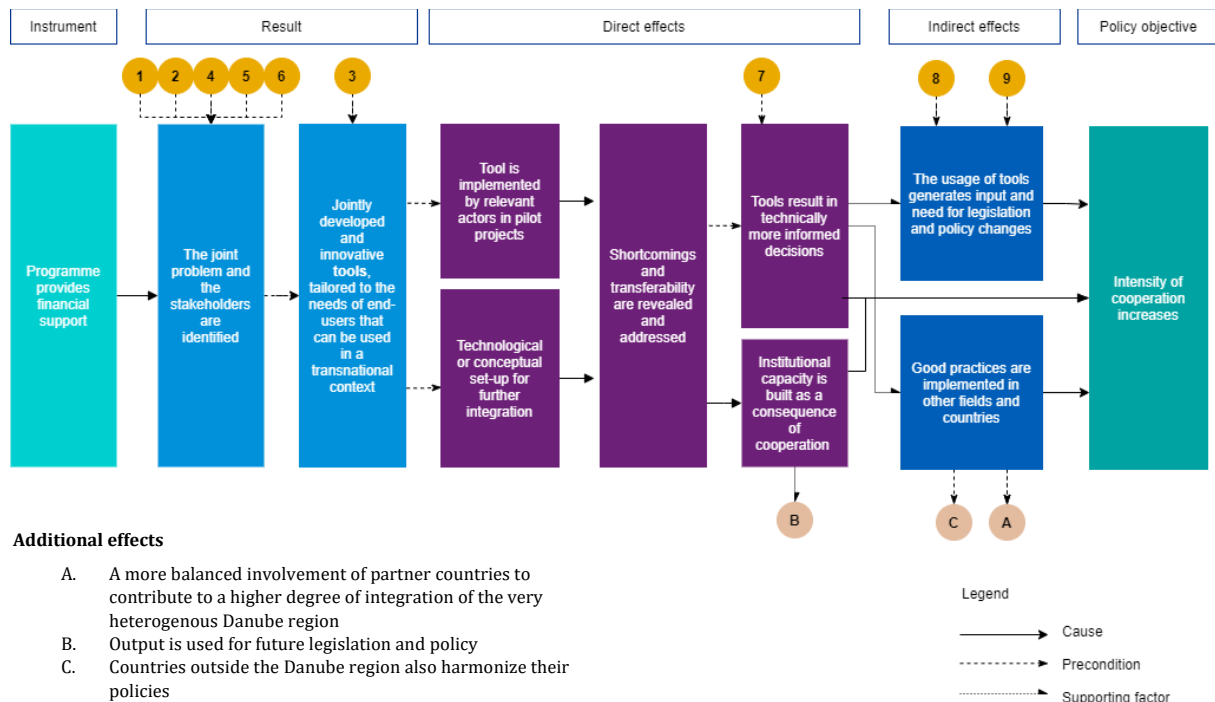
Through pilot testing, the feasibility and effectiveness of an approach/strategy/initiative/programme can be demonstrated, potential shortcomings and risks can be identified and adjusted. As a consequence, the quality of developed products can be increased, and project partners can find solutions for overcoming financial obstacles as well.

These processes contribute to an increase in the motivation of target groups to uptake the pilot action into practice, if they manage to involve the right mix of stakeholders and if the capacity is available for implementing outputs at the side of the beneficiaries. The development of institutional capacities and the solution provided for financial and practical issues can lead towards the full-scale implementation of the project, and even to the transfer of tested practices and results to other institutions and territories – but only if no political or legal barriers exist and stakeholders are able to find financial instruments for upscaling their outputs. As an additional effect, countries outside the region also harmonise their policies, and a higher degree of integration can be reached in the region. For these objectives to be reached, the programme must be complementary with other national and EU-level programmes, and the intervention has to be large enough to influence the behaviour of cooperating actors.

### **3.1.4 Theory of Change model - tools**

The general logic of how creating a tool contributes to reaching the overall objective of the programme is presented in the figure below.

**Figure 3: Theory of change – tools**



Source: KPMG / VVA (2023).

After the programme provides financial support to project partners, they can start identifying a joint problem, and the right mix of stakeholders to involve into the process of finding a tool-based solution for the common issue. As in the cases of other outputs, the necessary conditions for participating and implementing the programme have to be met here, as well:

1. Local stakeholders are aware of the programme and support its goals.
2. NCPs and other programme institutions responsible for information distribution can reach relevant stakeholders and can effectively communicate information necessary for participating in the programme.
3. Programme management authorities are capable and stable enough to execute the programme in an effective and efficient way in accordance with programme directives.
4. Potential applicants have the necessary resources (human and institutional) to apply for funds and manage programme implementation.
5. Common problems are shared among participating countries, they are able to prioritise and find mutual solutions.

As a result of the cooperation, a jointly developed and innovative tool is created, which is tailored to the needs of end-users and can be used in a transnational context. This sets the conditions for the tool to be set up with the necessary technological and conceptual factors, and/or for the implementation of the tool through a pilot project, if the capacity is available at the side of the beneficiaries. The practical lessons gained through these activities pave the way for addressing the shortcomings and the potential transferability of the output. Therefore, institutional capacity is built, and the tool can contribute to technically more informed decisions, if no legal, political or financial barriers exist for the output to be implemented outside the context of the project. As an additional effect of the

cooperation, the tool might be suitable for further use as an input in legislation or policy-making processes, if the programme is complementary with other national and EU-level programmes, and the project intervention is large enough to influence the behaviour of cooperating actors.

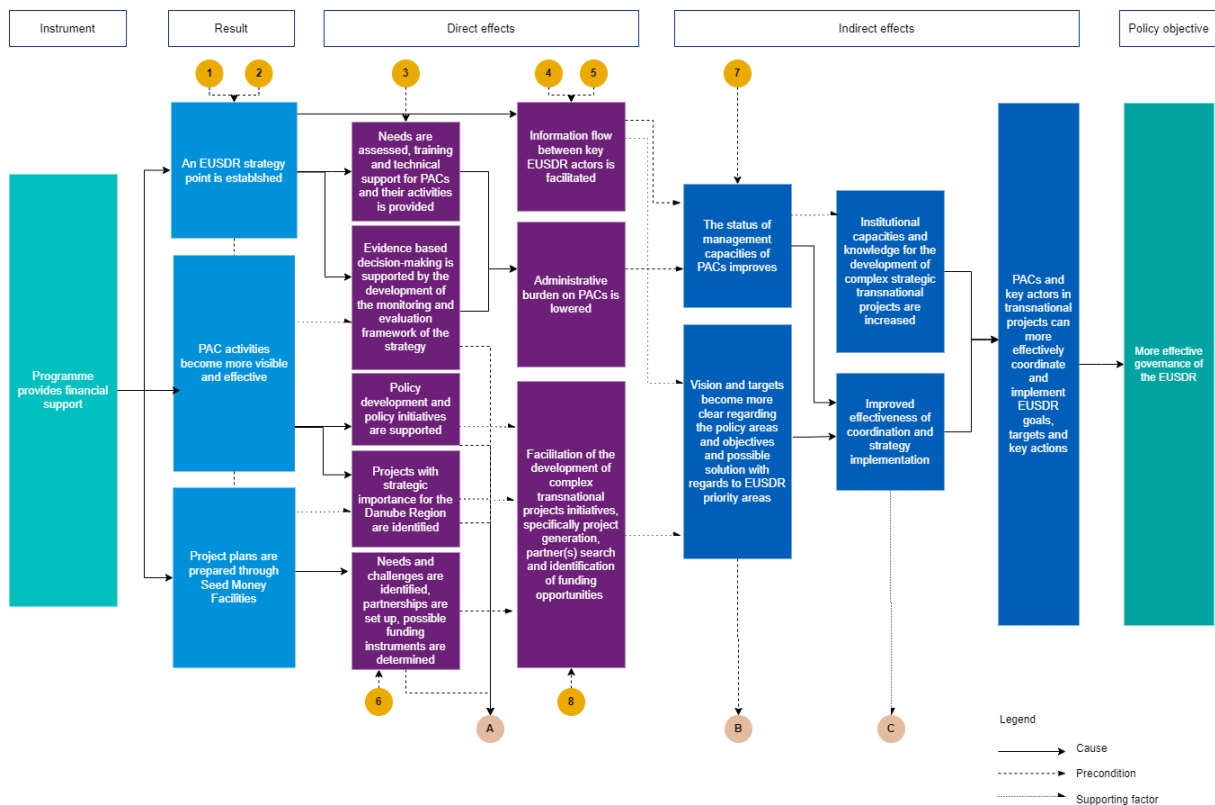
## 3.2 Theory of change model for a more effective governance of the EUSDR

As SO4.2 aims to support the implementation of the EUSDR, the type of support provided under this SO is very different from the other SOs. To reflect this in the evaluation, we developed a different concept on the functioning of the interventions, which through financing the PACs, the DSP and SMFs leads to a more effective governance of the EUSDR. The external factors of the model are listed below:

1. Programme management authorities are capable and stable enough to execute the programme in an effective and efficient way in accordance with programme directives.
2. Potential applicants have the necessary resources (human and institutional) to apply for funds and manage project implementation.
3. Common problems are shared among PACs, the DSP is able to prioritise and find the right training to overcome them.
4. The right mix of stakeholders are involved.
5. Appropriate communication channels are established and can be used by all stakeholders.
6. The capacity is available for producing high level professional outputs.
7. PACs use their liberated capacities for reaching strategic goals.
8. There are no political or legal barriers in implementing the output of the project in either of the cooperating countries or in other regions.

The ToC presented summarises how each financing scheme contributes to make the implementation of the Strategy more effective, and also describes the connections among the structures which are financed under this SO, as presented below. We take note that the scope of activities of the structures discussed below are wider than in the theory of change model. These activities are also analysed in the report, while the theory of change mostly concentrates on the relations between these structures.

**Figure 4: Theory of change – interventions financed under SO4.2 aiming to facilitate the implementation of the EUSDR**



Source: KPMG/VVA (2023).

If programme management authorities are capable and stable enough to execute the programme in an effective and efficient way in accordance with the programme directives, and potential applicants have the necessary resources to apply for funds and manage the project implementation, through the financing:

- a. An EUSDR strategy point is established;
- b. PAC activities become more effective;
- c. Project plans can be prepared through SMFs.

The direct consequences of establishing the DSP are, that it is able to assess and then address the needs of PACs on one hand and start providing the necessary trainings for them on the other, which in time contributes to lowering the administrative burden on PACs. This can happen only, if common problems are shared among PACs, and the DSP is able to find the right training to overcome them. Lowering the administrative burden on PACs is further supported by one of the DSP’s main activities, namely the development of the monitoring and evaluation framework of the Strategy, to which PACs can provide important inputs by their activities.

The support provided to PACs is helping them to work on policy initiatives (the outputs of which can be used for future programmes/next programming period) and find projects with strategic importance for the region. Important to note that SMFs funded projects were only implemented during first phase of DTP, yet their contribution to establish the institutional background and approach for EUSDR was significant. Supported SMF activities also contributed to this objective, together with the fact, that correctly implemented SMF projects were contributing to determine the needs and challenges of the region and led to

form partnerships, which addressed them, when the capacity was available for them to produce high level professional outputs.

The information flow among EUSDR actors (NCs, EUSDR presidency, EC, among others) facilitated by the DSP together with the lowered administrative burden on PACs improve the status of management capacities of the whole Strategy, but especially of PACs – if PACs use their liberated capacities for reaching strategic goals. Parallely, through policy development activities and through identifying the projects with strategic importance for the region, the vision and targets become clearer regarding the policy areas, policy objectives and the possible solutions on issues shared among countries in the Danube area. This can cause modifications in the implementation of the Strategy as well.

Through the more effective management and a clearer vision on the region institutional capacities and knowledge for the development of complex strategic transnational projects are increased, which together with the improved effectiveness of coordination and strategy implementation make it possible for PACs and other key actors in transnational projects to coordinate and implement the EUSDR more effectively.

## 4. Evaluation findings

The following section presents the main findings of the data collection activities conducted during the evaluation process, namely from desk research, from the interviews, from the survey and from case studies. This section gives an overview of the findings in each activity. Following the method of triangulation, the findings of these sections constitute the basis for validating the ToC models and are used to draw conclusions in each topic highlighted by the evaluation questions in the next section.

### 4.1 Desk research

The table below presents an overview of the number of projects in scope of the evaluation by SOs and the financial resources allocated to their implementation.

**Table 2: The number of projects in scope of the evaluation by SOs and the financial resources allocated to their implementation (EUR million)**

Specific objective	Number of evaluated projects		Allocated financial resources (EUR million)	
	Count	Percentage	Amount	Percentage
SO 1.1: Improve framework conditions for innovation	17	15%	31.5	13%
SO 1.2: Increase competences for business and social innovation	18	16%	34.2	14%
SO 2.1: Strengthen transnational water management and flood risk prevention	9	8%	21.5	9%
SO 2.2: Foster sustainable use of natural and cultural heritage and resources	22	19%	49.3	20%
SO 2.3: Foster the restoration and management of ecological corridors	9	8%	20.2	8%
SO 2.4: Improve preparedness for environmental risk management	2	2%	3.4	1%
SO 3.1: Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas	17	15%	38	16%
SO 3.2: Improve energy security and energy efficiency	6	5%	13.8	6%
SO 4.1: Improve institutional capacities to tackle major societal challenges	14	12%	31.5	13%
<b>Total</b>	<b>114</b>	<b>100%</b>	<b>243.4</b>	<b>100%</b>

Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

As demonstrated in Table 2, a total of 114 regular call projects were implemented. Out of those 19% contributed to SO 2.2, followed by SO 1.2 (16%) and SO 1.1 and SO 3.1 (15%). The distribution of financial resources does not show significant deviation from the distribution of the number of projects under the SOs.

#### **4.1.1 Project outputs and their contribution to programme objectives**

The projects of the DTP, including the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> calls, generated 4 types of outcomes during the implementation:

- 1) 335 strategies;
- 2) 780 tools;
- 3) 426 pilot actions and
- 4) 1157 documented learning interactions.

We take note that a single project can produce multiple types of outputs – in fact many of projects have produced each of the three types of outputs (besides the fourth one, which is mandatory).

Under SO 1.1, SO 1.2 and SO 2.2 projects generated additional outputs: they reported the number of enterprises which cooperated with research institutions related to SO 1.1, SO 1.2 and SO 2.2 (altogether 983 in 9 projects) and the number of enterprises who received non-financial support in the scope of SO 1.1 and SO 1.2 (1749 in 7 projects). While during the 1<sup>st</sup> call seven projects reported the number of enterprises they had cooperated with, only one project in the 2<sup>nd</sup> and one in the 3<sup>rd</sup> call reported this output as results. Four of the seven projects that provided non-financial support for enterprises were implemented during the 1<sup>st</sup> call, while one in the 2<sup>nd</sup> and two in the 3<sup>rd</sup> call.

These result indicators, or more precisely the enterprises involved in the projects, supported the development of strategies, tools and/or pilot actions either as project partners, as Associated Strategic Partners (ASPs) or as actors targeted by the implementers of the projects, or were the beneficiaries of project outputs.

The table below provides an overview of the achievement of the output targets by specific objectives and outputs.

**Table 3: The number of project outputs by types of output and SOs as a percentage of target values (%)**

Specific objective	Strategy	Tool	Pilot action	Documented learning interaction
SO 1.1: Improve framework conditions for innovation	124%	133%	115%	138%
SO 1.2: Increase competences for business and social innovation	57%	77%	64%	90%
SO 2.1: Strengthen transnational water management and flood risk prevention	75%	89%	93%	107%
SO 2.2: Foster sustainable use of natural and cultural heritage and resources	65%	81%	47%	91%
SO 2.3: Foster the restoration and management of ecological corridors	65%	88%	76%	82%
SO 2.4: Improve preparedness for environmental risk management	60%	43%	29%	60%
SO 3.1: Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas	87%	101%	112%	84%
SO 3.2: Improve energy security and energy efficiency	76%	62%	159%	41%
SO 4.1: Improve institutional capacities to tackle major societal challenges	61%	80%	43%	71%
<b>Total</b>	<b>74%</b>	<b>87%</b>	<b>76%</b>	<b>96%</b>

Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

Based on the available data on the program's electronic monitoring system (eMS) at the time of the completion of this evaluation, it appears that most of the outputs have not yet reached the target values set for 2023. However, upon examining the indicators, it became clear that the programme is very likely to reach its targets in terms of outputs, but the reported numbers were not updated in the reporting system. Management authorities and project partners confirmed that all projects had reached their envisaged number of outputs, and in many cases, the programme had even exceeded its targets. The discrepancies were due to delayed and incomplete reporting of indicators in the eMS system by project leads.

The table below provides an overview of the distribution of outputs between specific objectives.

**Table 4: The distribution of project outputs within specific objectives (%)**

Specific objective	Strategy	Tool	Pilot action	Total
SO 1.1: Improve framework conditions for innovation	19%	38%	43%	100%
SO 1.2: Increase competences for business and social innovation	21%	54%	25%	100%
SO 2.1: Strengthen transnational water management and flood risk prevention	4%	68%	28%	100%
SO 2.2: Foster sustainable use of natural and cultural heritage and resources	15%	69%	16%	100%
SO 2.3: Foster the restoration and management of ecological corridors	10%	49%	41%	100%
SO 2.4: Improve preparedness for environmental risk management	37,5%	37,5%	25%	100%
SO 3.1: Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas	22%	51%	27%	100%
SO 3.2: Improve energy security and energy efficiency	54%	26%	20%	100%
SO 4.1: Improve institutional capacities to tackle major societal challenges	40%	38%	23%	100%

Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

Most of the outputs were generated in SOs where the number of projects and the amount of support were the highest (SO 1.1, SO 2.2 and SO 3.1). Generating strategies was mainly characteristic of SO 3.2. The tools were a dominant form of outputs in almost every objective, except for SO 1.1, 3.2 and 4.1. Pilot actions were major outputs under SO 1.1 and SO 2.3

## 4.1.2 Target Groups

According to the Applicants Manual for the period 2014-2020 (Version 1.1, pp.8.) target groups *“consist of those individuals and/or organisations towards which the project aims are directed, and which will therefore be directly or indirectly affected by the project activities and results. Even if target groups may not necessarily receive funds and be directly involved in the project implementation, they may exploit project outcomes for their own benefit.”*

The targeted stakeholders extended during the implementation of the DTP. While the 1<sup>st</sup> call projects focused on fewer stakeholders in their project proposals generally speaking, the targeted and successfully reached stakeholders broadened in the later phases.

There are significant differences between the targeted and reached stakeholders in the projects. As summarised in the Table 5, in most cases the projects not only reached the targeted number of stakeholders but overachieved the set targets.

There are some differences in the significance of the types of organisations projects under various SOs:

- approaching the **private sector** was of interest in all specific objectives
- **SMEs** were targeted in all SO, except for SO 2.4. However, **enterprises (excluding SMEs)** were targeted in SO 2.4 covering the private sector in all SOs
- **NGOs** were targeted in all SOs, especially in SO 2.2 and SO 4.1
- **business support organisations** were approached in SO 1.1, SO 1.2, SO 2.2, SO 3.1, SO 3.2 and SO 4.1
- **national public authorities** were approached in all SOs, except SO 1.3
- **regional public authorities** were targeted by projects in all SOs except for SO 2.4
- **local public authorities** were approached in all SOs, and were reached in SO 2.2 in the highest number
- the **education and research** sector were reached in all Specific Objectives except for SO 2.4, with the highest number of reached stakeholders in SO 1.1 and SO 1.2.
- **Education and training centres** were targeted in SO 1.2 especially, while the **higher education and research** was the main target in SO 1.1.
- **Infrastructure and public service providers** were targeted in all SOs, especially in SO 1.2 and SO 3.1, while sectoral agencies were the main targets in SO 2.2.
- **International organisations under international laws** were approached in all Specific Objectives except for SO 1.1 and SO 3.2, while these were targeted in SO 3.1 in the highest number.
- Reaching the **general public** was aim of all Specific Objectives. Their significant was the highest in SO 2.3, SO 2.2 and SO 3.1.
- **Other** stakeholders were reached in all SOs except for 2.4. This category included professionals, leaders of NGOs, representatives of Sectoral Agencies in the specific field of the projects. In PA1 it included students, equity financing institutions, university representatives, and investors, in PA2 local organisations and interest parties in the fields of environment (e.g., farmers, local forest owners) and culture, in PA3 representatives of sectoral agencies, and in SO 4.1 local minorities.



The table below provides an overview of the number of stakeholders reached by target groups and specific objectives.

**Table 5: Number of stakeholders reached by target groups and specific objectives expressed as a percentage of target values (%)**

Target group	Specific objective								
	1.1	1.2	2.1	2.2	2.3	2.4	3.1	3.2	4.1
General Public	3954%	341%	95%	205%	7512%	548%	1002%	808%	268%
Local Public Authority	256%	141%	261%	20510%	274%	113%	255%	294%	124%
Regional Public Authority	391%	446%	165%	447%	995%	-	297%	262%	138% <sup>o</sup>
National Public Authority	376%	215%	261%	215%	408%	222%	476%	261%	292% <sup>o</sup>
Education/Training Centre and School	-	620%	243%	260%	306%	-	-	-	67%
Higher Education and Research	565%	479%	608%	182%	530%	-	245%	369%	133%
Interest Groups including NGOs	492%	231%	384%	336%	516%	127%	715%	365%	281%
International Organisation under international law	-	104%	289%	102%	1920%	90%	266%	-	247%
Business Support Organisation	568%	540%	-	100%	-	-	634%	640%	223%
Sectoral Agency	313%	110%	207%	153%	143%	133%	730%	230%	213%
SME	217%	693%	130%	215%	30%	-	73%	223%	87%
Enterprise, excluding SME	196%	190%	-	629%	190%	34%	656%	302%	97%
Infrastructure and (public) Service Provider	240%	247%	185%	90%	247%	84%	670%	194%	283%
Other	552%	305%	312%	269%	81%	-	574%	-	212%

Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

The following targets were not reached as planned according to the project documentations:

- General public in SO 2.1
- Infrastructure and (public) service providers in SO 2.2
- SMEs and other enterprises in SO 2.3
- International organisations, enterprises excluding SMEs and infrastructure and (public) service providers in SO 2.4
- SMEs in SO 3.1
- Education/Training centre and school, enterprises excluding SMEs and other in SO 4.1

All targets were reached and outperformed in SO 1.1, SO 1.2 and SO 3.1.

Some underperformances in the data may not reflect reality, as some projects reported challenges in monitoring target groups, including a lack of knowledge about related rules during the application phase (primarily, they wanted to avoid double-counting, but the related rules were not known for them during the application phase). In some cases, target values were overly ambitious, and although projects did not reach their targets, they still

successfully reached out to many stakeholders. Overall, the majority of projects reached more stakeholders than planned in their application forms, demonstrating the success of project partners in embedding their work.

### 4.1.3 Involvement of the private sector

The private sector can be involved in the projects in several ways, such as:

- **lead or project partners:** examples include among others are
  - non-profit project partners with an expertise and network of their specific area,
  - profit oriented companies as project partners or associated partners with technological expertise,
  - chambers of commerce with an ability to reach out to vast numbers of enterprises,
  - research centres and NGOs with experience in policy issues,
  - and large companies as project partners or associated partners who participate in pilot actions<sup>5</sup>;
- **participants of pilots or learning events,** reached through one of the project partners;
- **organizations associated to partners,** thus being observers and beneficiaries of the project;
- **service providers** who take part in project generation or implementation through tenders.

The private actors involved in the projects as project partners benefited from the projects in different ways:

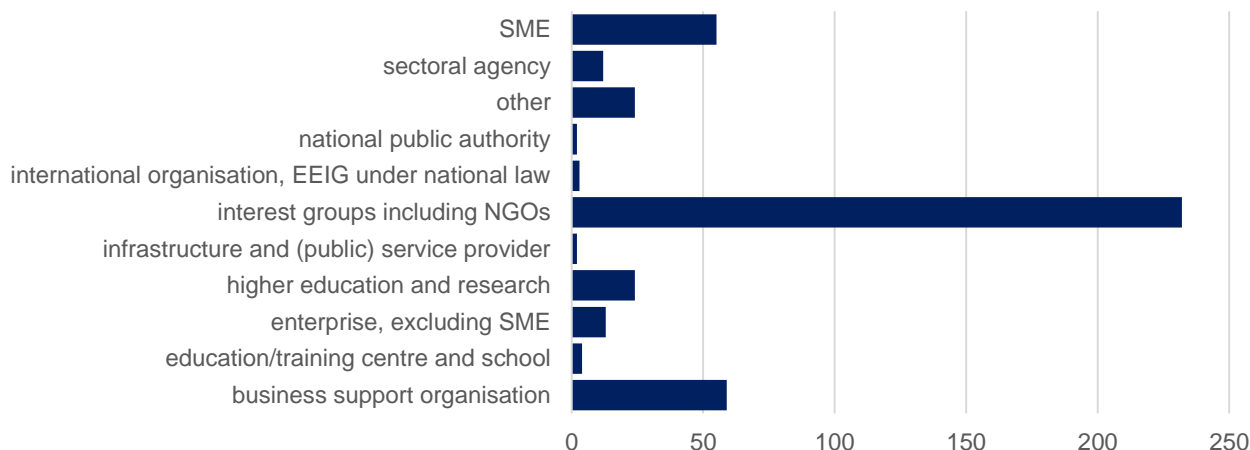
- several partners (mostly NGOs) share the mission of the projects, thus the developments in the specific objectives are benefits in themselves for these partners;
- the ability to further build their network and know-how is a prime opportunity;
- for profit-oriented partners and even for some non-profit ones, the output of the projects and the new partnerships can mean a possibility to expand their services horizontally or geographically;
- from policy and legislation changes, the partners can benefit in several ways, e.g., enhanced capacity through better regulated policy area.

The application forms do not include information on the potential benefits for non-partner private actors, the benefits of the projects should still be palpable for them. The growing strength of the network of the specific areas, mainly through the involvement of NGOs and chambers of commerce, should make the availability and spread of know-how among enterprises easier.

Quantitative analysis of the involvement of the private sector can only be carried out in case of project partners, where relevant data is available. The figure below presents an overview of the number of private partners involved in the projects by types of organisations.

<sup>5</sup> It is worth noting that private enterprises coming from non-EU countries of the programme area were not eligible for funding.

**Figure 5: The number of private partners involved in the projects by types of organisations**



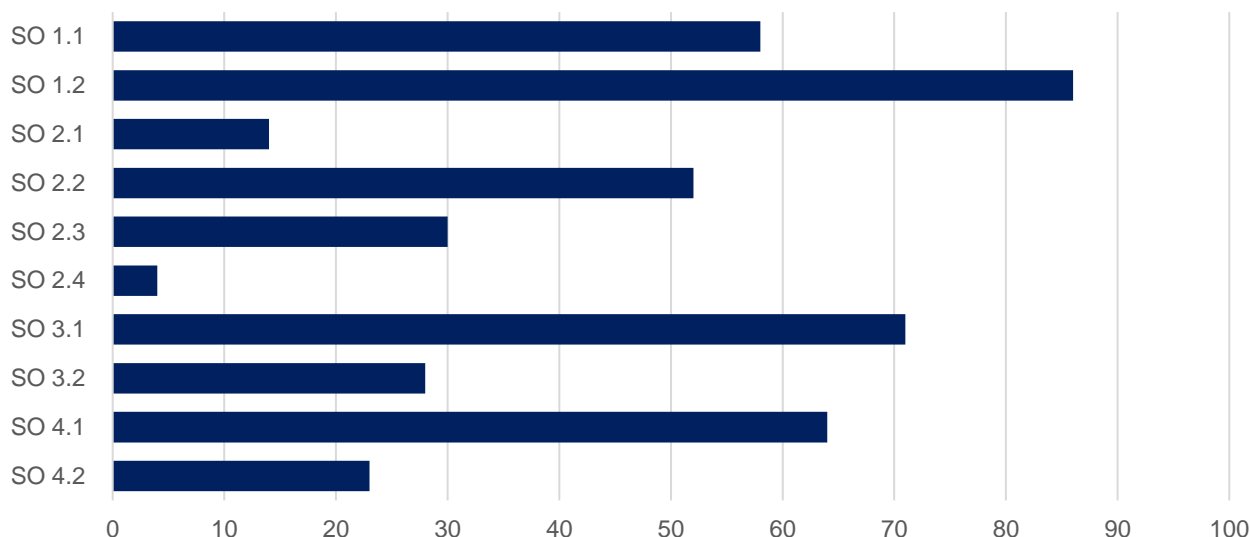
Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

Key takeaways from the analysis of these figures are:

- 430 of 1314 project partners have a private legal status
- an overbearing number of them, 232 are interest groups and NGOs
- business related organisations, such as sectoral agencies count up to 12
- educational institutions (training centres and schools) and higher education and research institutions together are 28
- business support organisations, SMEs and large enterprises together make up another 127 partners.

The figure below presents the number of private partners involved in the delivery of the projects as partners by SOs.

**Figure 6: The number of private partners involved in the projects as partners by SOs**



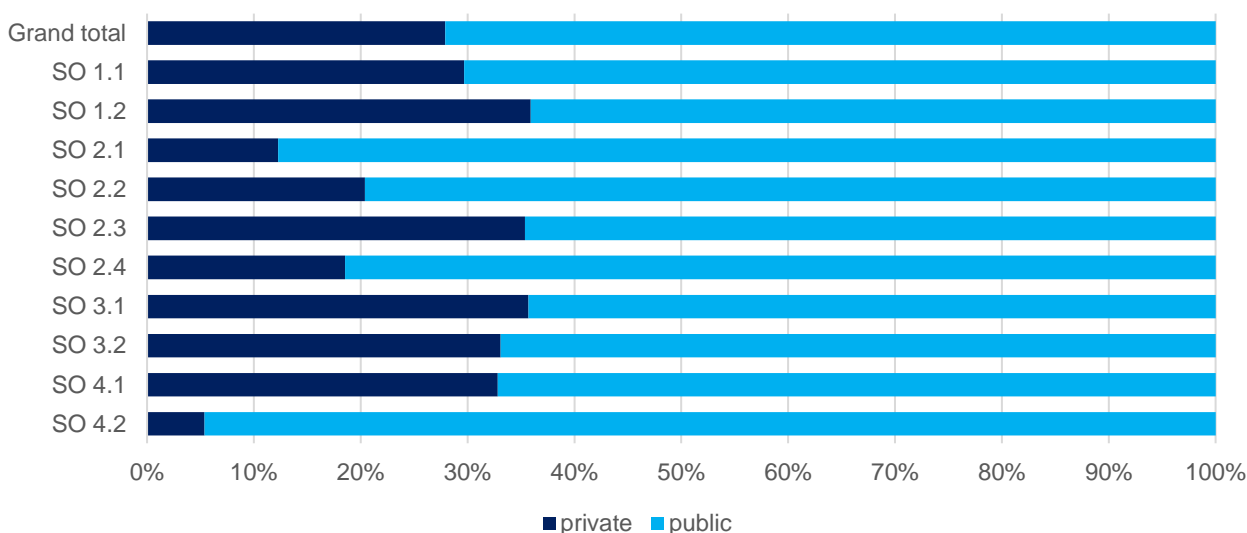
Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

By specific objectives, most private partners were involved in projects related to SO 1.1 (Improve framework conditions for innovation), SO 1.2 (Increase competences for business and social innovation) 3.1 (Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural) and 4.1 (Improve institutional capacities to tackle major societal challenges).

Altogether, the ultimate beneficiaries of EUR 73.2 million from the programme budget were private partners, which takes up 27.9 % of the total funding paid from ERDF and IPA II. The share of resources for private partner partners was the highest under SO 1.2 (Increase competences for business and social innovation), SO 2.2 (Foster sustainable use of natural and cultural heritage and resources), SO 3.1 (Support environmentally-friendly and safe transform systems and balanced accessibility of urban and rural) and 4.1 Improve institutional capacities to tackle major societal challenges.

As shown in the figure below, the share of resources allocated for private sector project partners was slightly above the 27.9% on average.

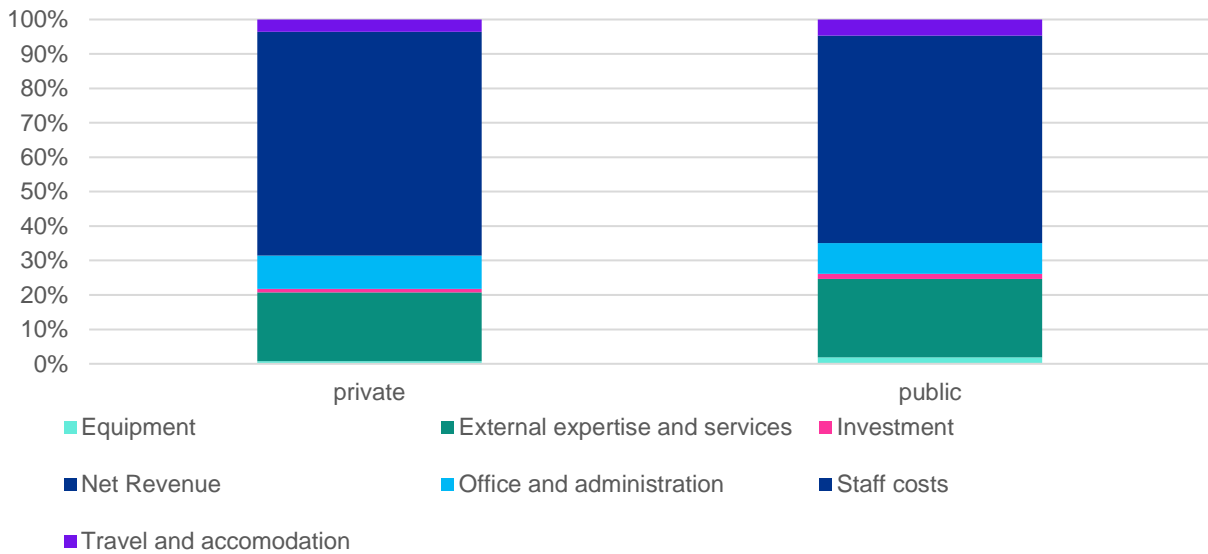
**Figure 7: The share of resources allocated by type of partners by SOs**



Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

62% of the allocated resources were spent on staff costs and 22% on external expertise and services. Similar to the whole programme, the budget lines of investment, equipment and net revenue did not prove to be significant for private partners either.

**Figure 8: The distribution of expenditures by type of project partner (private or public) and types of expenditure (%)**



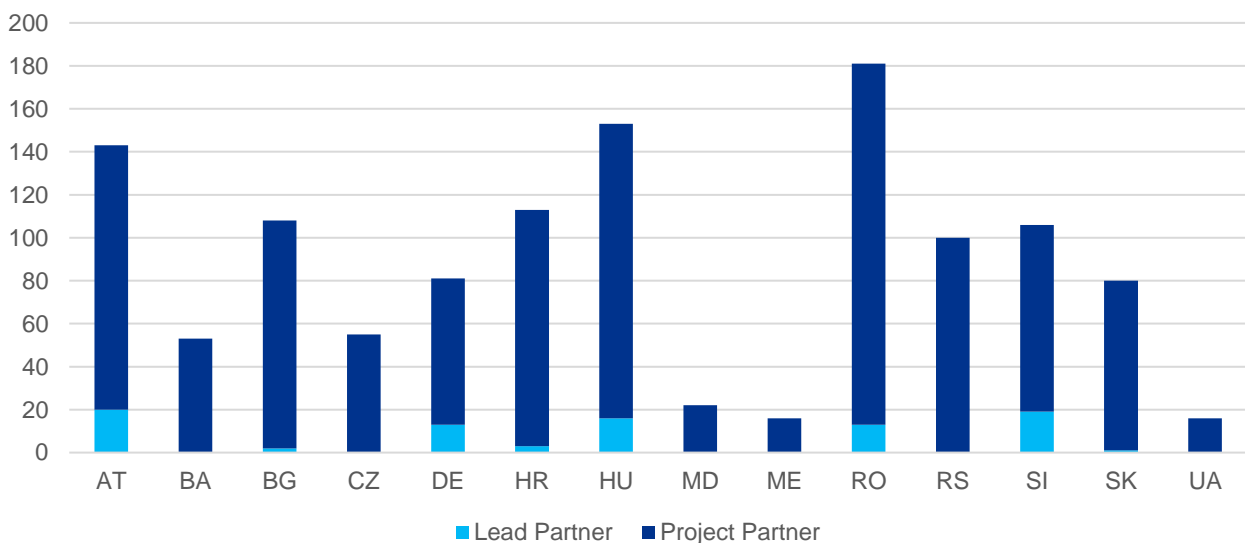
Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

The share of expenditures of the private sector does not show any major differences by budget lines compared to public institutions, except for the fact that no private actor received net revenue (Figure 8).

#### 4.1.4 Integration of non-EU countries

One of the goals of the programme is to support the process of integration of non-EU countries in the Danube region. During the regular call proposals, 207 project partners (18%) of all partners came from non-EU countries, with Serbian partners joining in similar numbers as the most active EU member state countries. None of the project leads for the regular call projects were from non-EU countries (Figure 9).

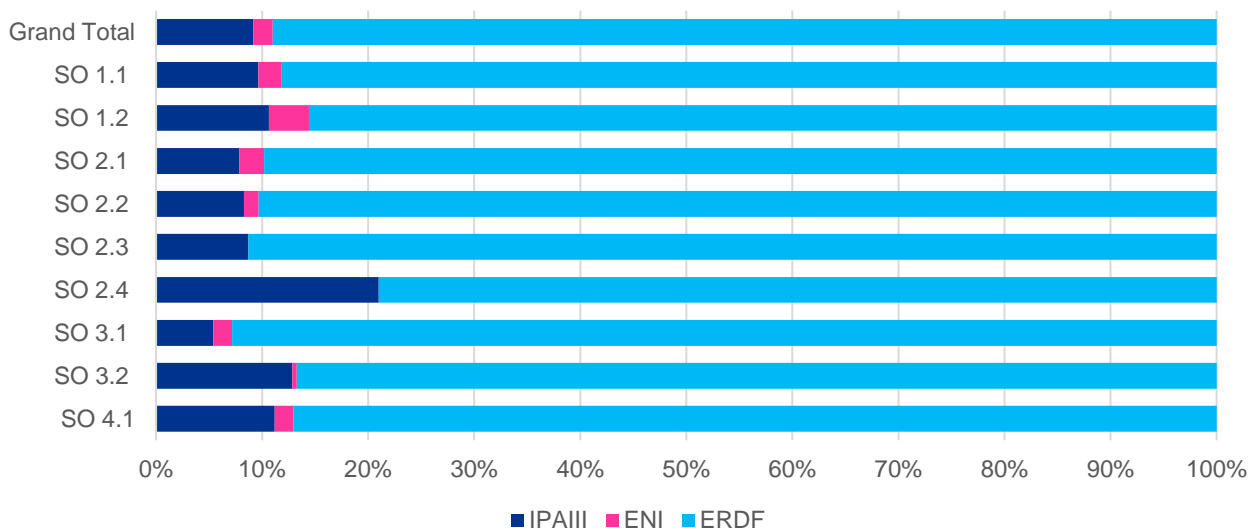
**Figure 9: The number of lead partners and project partners by countries**



Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

During the regular calls a total of EUR 18,920,956.15 (10.8% of the total EU funds) was distributed among partners from non-EU countries (Figure 10). Their share of the budget is somewhat higher in SO 1.2, 2.4, 3.2 and 4.1, while it is the lowest in case of SO 3.1. Although these are no major differences, noteworthy to mention the unusual high percentage of funds for non-EU members in SO 2.4 (Improve preparedness for environmental risk management). The funds for these programmes were distributed among project partners for pre-accession countries.

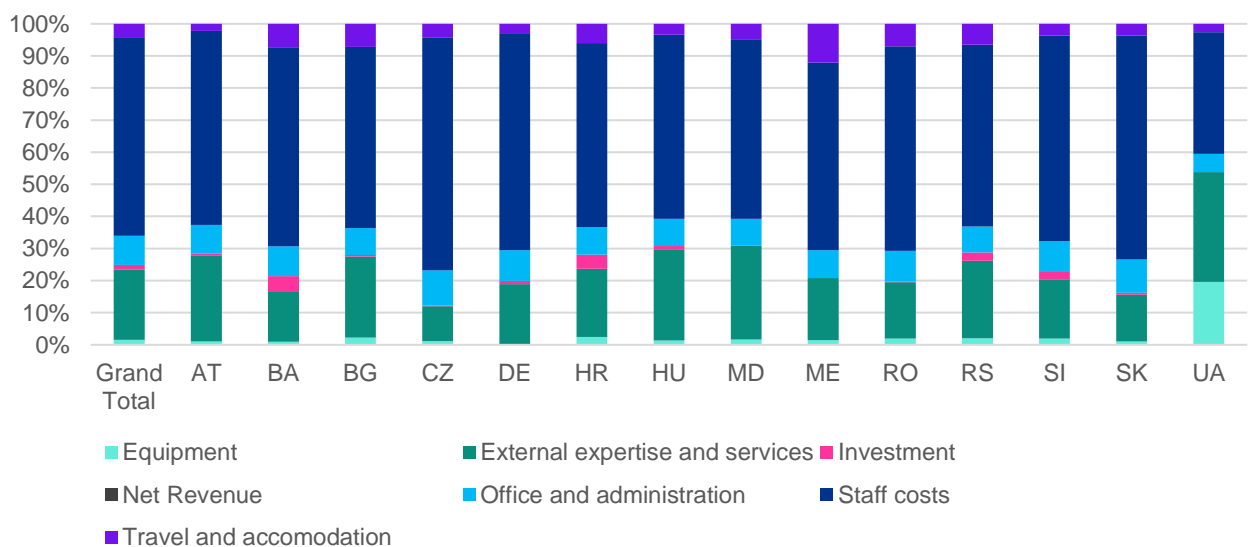
**Figure 10: Share of EU funds by SOs (%)**



Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

As demonstrated on Figure 11, differences in the composition of spending by countries are relatively small, and there is no structural difference between non-EU and EU countries. Important to note, however, that spending on equipment was noticeably higher in Ukraine than any other non-EU or EU country.

**Figure 11: Share of budget lines of expenditures by country (%)**

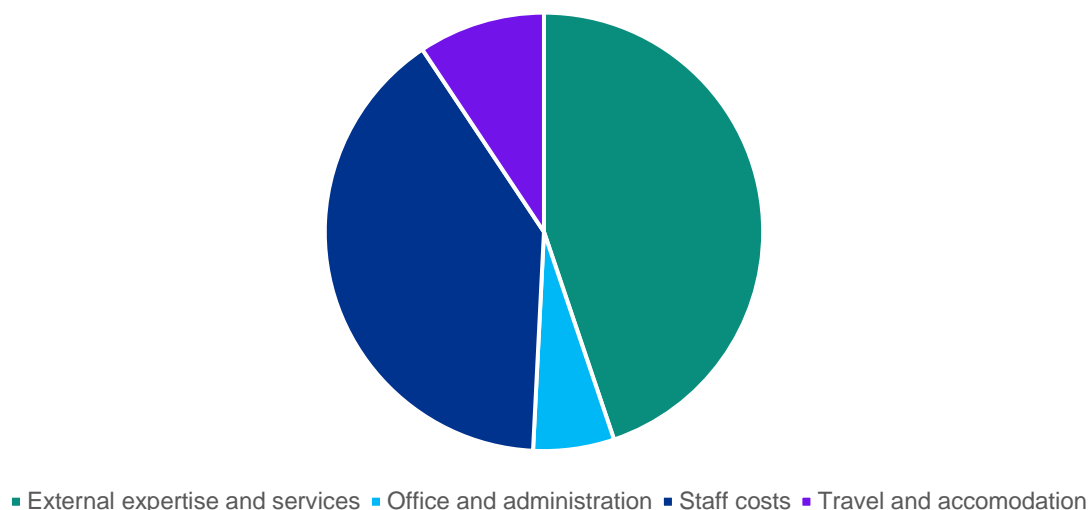


Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

## 4.1.5 Support to the governance and implementation of EUSDR

Specific objective 4.2 financed three types of activities: Priority Area Coordinators, the Danube Strategy Point and Seed Money Facility. Seed Money Facility projects were implemented during the 1<sup>st</sup> phase of the Programme. The 25 PACs received EUR 7.28 million during programme's implementation period between 2014-2020. The distribution of the expenditures showed similarities to the regular call projects with 44.8% spent on external expertise and services and 39.8% to cover staff costs (Figure 12).

**Figure 12: Share of budget lines of the expenditures of PACs (%)**

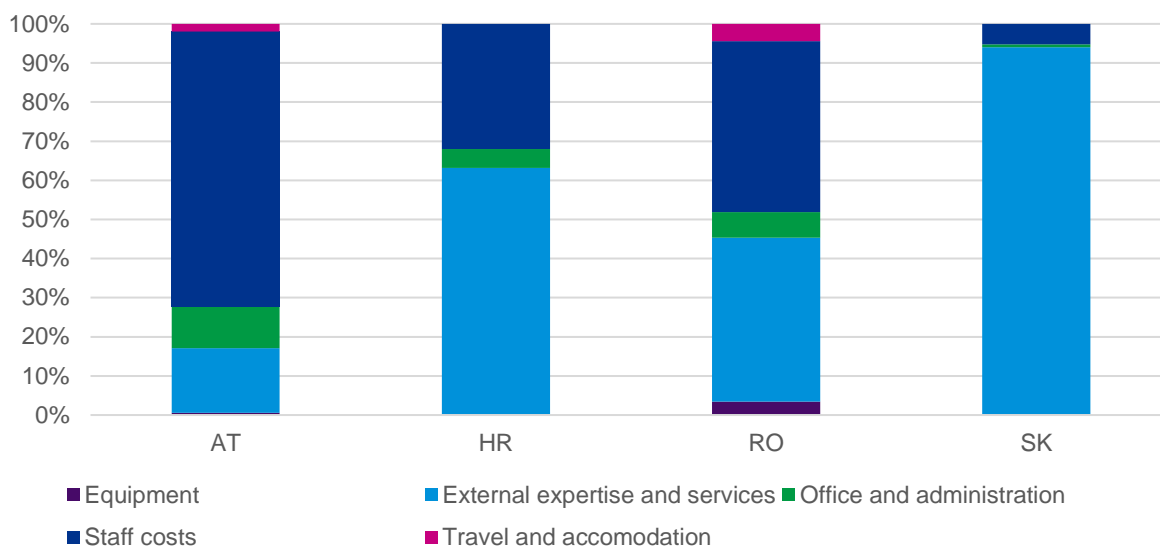


Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

DSP projects supporting the integration of the EUSDR received EUR 3.1 million. On top of Austria and Romania, who were supported from the beginning, eventually Croatia and Slovakia received financial support from DTP in form of DSP projects as well, hence the differences between the received amount during the programme implementation.

The distribution of costs by budget lines is demonstrated on Figure 13. External expertise and services were dominant in Croatia (62%) and significantly dominant in Slovakia (94%) and, while staff costs dominated in Austria (70%). In Romania costs related to external expertise and services (42%) and staff costs (43.7%) were almost similar.

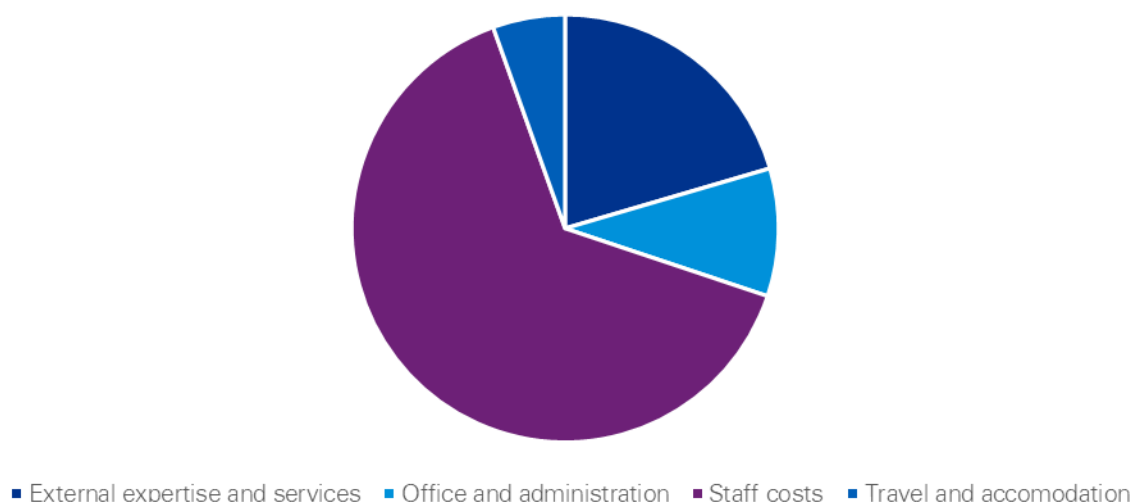
**Figure 13: Share of cost categories within the expenditure of the DSP based on budget line and location (%)**



Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

The 19 supported projects through seed money facilities received a funding of EUR 795,119.36. 64% of their expenditures was used for staff costs, while 20% went to external expertise and services. Seed Money Facility projects were only implemented in the first phase of the programme to support the establishment of the DSP support (Figure 14).

**Figure 14: The share of budget lines in the expenditures of SMFs (%)**

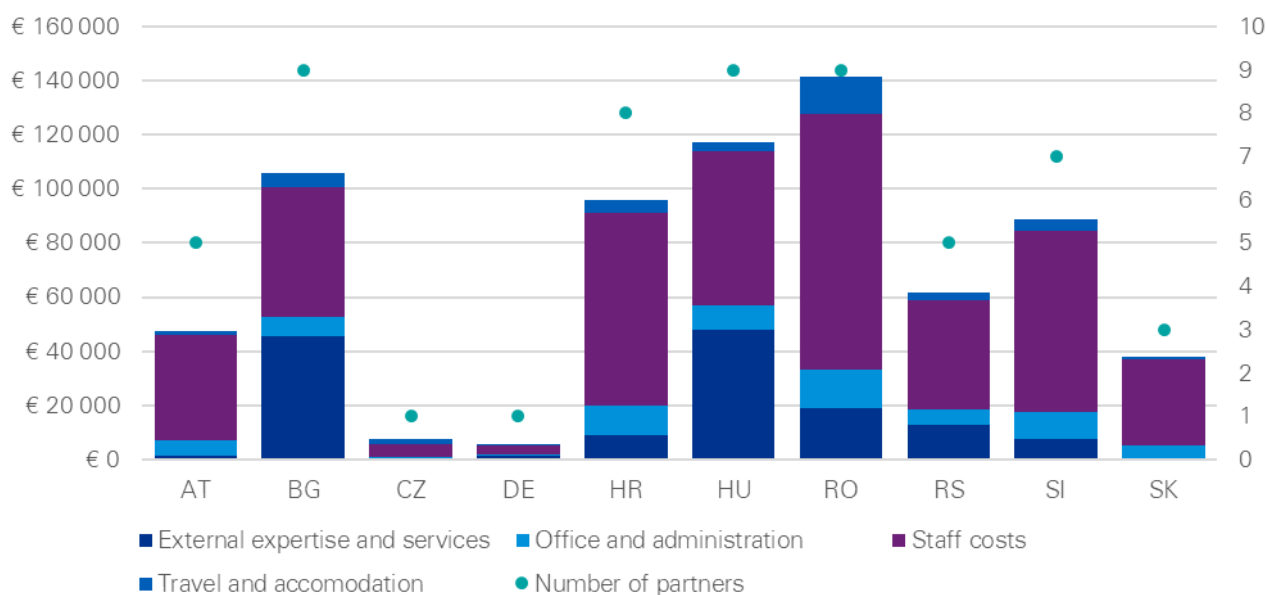


Source: KPMG/VVA (2023). Based on data included in the EMS system as of April 30, 2023.

The activity of partners varied significantly across countries. Romania, Hungary, Bulgaria, Croatia and Slovenia had the greatest success in securing partnerships and thus, financing through seed money facilities, while Czechia and Germany had one partner to join. Regarding non-EU countries, Serbia once again successfully took part in this activity, while there were no partners from other non-EU countries (Figure 15).



**Figure 15: Allocated resources for SMFs and number of partners by country (EUR)**



Source: KPMG/VVA (2021). Based on data included in the EMS system as of April 30, 2023.

## 4.2 Interviews

### 4.2.1 Capacity building

Institutions participating in the projects had the possibility to build their capacities in terms of **new experiences, methods, innovative solutions and by involving experts** in specific areas. Some interviewees mentioned that in the case of projects with a narrow scope (like the ones in water management under SO 2.1), where the professional community is extremely small, partly with the help of these funds, they were able to build communities of experts by involving new people in existing networks. When it comes to financing, the DTP was crucial in keeping these people on board.

Bringing people together to **exchange good practices, involving decision makers from the government, learning to cooperate and find consensual solutions** all contributed to improving the institutional background of the projects. Some interviewees mentioned that project partners were **able to get familiar with preparing, managing and implementing international projects**. Especially in the case of non-EU countries, governmental bodies participating in the DTP now have a better understanding of the processes of EU institutions and transnational cooperation.

As it emerged from the stakeholder interviews, better structured and transparent knowledge exchange management methods are suggested to be established for upcoming projects. Due to the length of the project implementation generally in the framework of DTP, changes in staff and project management teams might be witnessed, and these can hinder the project implementation.

### 4.2.2 Integration of non-EU countries in the Danube region

The general impression of the interviewees is that – despite initial difficulties – the programme did a **good job in attracting neighbouring countries**. Representatives of the programme management are generally optimistic about the support the programme provides to non-EU countries, in spite of their general impression that **impact** was and is **generated in small steps**.

There were some problems with the involvement of partners from non-EU countries in the beginning which with the support of programme management bodies were gradually solved. These problems emerged rather in the cases of Ukraine and Moldova. In the case of Ukraine, the Russo-Ukrainian war hinders the programmes efficiency as well. In Serbia, Montenegro, Bosnia and Herzegovina – in countries which already in pre-accession status therefore those are more knowledgeable in EU supported mechanism – participation in the programme was frictionless.

In the beginning problems emerged in three areas:

1. **Institutional** deficiencies, like the slow establishment of first level control system and missing capacities hindered – or at least delayed – the possibility of participation.
2. In a number of cases the problem was the lack of **funding** and not the lack of interest. For partners in non-EU countries additional support was needed in order to participate in the programme which was not available without the involvement of governments, and which leads to the third area of issues:
3. **Political support** is more important in non-EU countries than in others. Yet, some countries were struggling in explaining to their government representatives why programme participation would be beneficial for their region.
4. SMEs from non-EU countries could also not participate in the projects as partners in the first stage of implementation.

Overcoming these initial problems was alone beneficial for non-EU countries in supporting their capacity building activities and their gradual approach to the EU. Collecting experience with **EU-related regulations, building up** the necessary human, institutional and organisational **capacities** for programme implementation, and **working with EU-officials** prepare these countries to **comply with further requirements of the integration process**.

During project implementation partners from non-EU countries got even more **familiar with EU processes and rules**, collected **experience on how to cope with EU institutions, exchanged knowledge** with EU-representatives, and gained **experience in how to participate in international programmes**. They became members of **new networks**, contributed to the creation of **new ties** in the Danube region and gained **experience in how to find consensual solutions to common problems**. In order to these effects to be long lasting, processes and knowledge gained from the programme needs to be institutionalised in these countries, which might take time and its output is still unsure.

Despite the positive results reached by the programme, some of the interviewees mentioned remaining issues with budget planning and drew attention to the low attendance of non-EU representatives in EUSDR Steering Group meetings. Having public institutions and national authorities involved in the programme remain a priority, as only then are they able to have first-hand experience with its benefits, which eases the process of convincing decision-makers to participate and support transnational programmes.

Participation of neighbouring countries was not only beneficial for them, but also contributed to knowledge exchange activities by sharing their good practices and knowledge with EU members. In the areas targeted by the programme, understanding the common issues related to a specific field (e.g., water management, environment), finding common solutions and creating clear solutions are advantageous for the whole region.

This was noticeable mostly in countries already in the pre-accession stage of the EU integration, especially Serbia, the contribution of which was emphasized by more interviewees.

### 4.2.3 Generating inputs for future legislation, policy, future investments and further initiatives

Results related to legislation were associated with specific projects that were visible to high level decisionmakers who were involved in them as PACs or other stakeholders. However, interviewees without direct experience with the projects that informed legislation, policy, or investments could not assess this mechanism. Nevertheless, they acknowledged that the programme is useful for bringing attention to issues that were previously outside decision-makers' scope.

Among the projects with useful outputs for further initiatives the interviewees mentioned the JOINTISZA project, the results of which were accepted on ministerial levels and were integrated into the flood protection plans of Danube countries. Another example is the DAREFFORT project, which standardised data collection in different countries for flood forecasting models. The outputs of the Danube Sediment project were fed into the Danube River Management Plan and the Danube Flood Risk Management Plan, while DarlingE is an example for how a project can generate economic impacts, since it provides solution for simplifying the process of utilising geothermal energy.

From the examples mentioned it might seem, that the thematic area of the project is decisive for generating inputs for policy, legislation or investments. However, the interviewees were of the opinion that the **involvement of relevant stakeholders** into the project from the very beginning is more important than the thematic area. Reaching a commitment from ministries, government offices and other public institutions not only generates support for the project outputs, but it increases their usability, as well. Keeping this objective in mind from the very beginning influences communication strategies, the networks partners would like to build, and also the timing of the project, since sometimes elections can influence either positively or negatively whether the project output will be used as input in legislation or policy making.

Interviewees mentioned that the **responsibility of the Lead Partner** in seeking channels for the outputs to be used in decision-making processes is higher than the project partners', however a strong consortium, a good cooperation among project partners is as important for success in this area as it is in others. Some also mentioned that the **programme management can actively influence the outcome** of this goal by launching targeted calls. This opinion is further supported by those, who see that some of the project outputs would be suitable in future projects as an input to be further sophisticated or scaled up.

If projects can **build on an existing framework**, which can either take a form of an international organisation operating in a specific area or can be a history of successful cooperation in previous programmes, then succeeding in this objective is easier. A good example, which were mentioned by several interviewees, is the field of water management, where the ICPDR maintains a living network of stakeholders of water management, and where previous projects like NEWADA serve as a solid background for several projects. Such projects already succeeded in establishing connections to decision-makers, so that a living communication between the two spheres is a standard practice.

The type of output the project generates can also influence its ability to serve as input for later uses **pilot actions and tools are easier to comprehend**, especially for the general

public. In the case of strategy, the difficulty is that sometimes stakeholders get stuck in putting the strategy in practice.

For several projects the effects of the outputs are hard to measure, because firstly they serve as inputs in larger, general processes, which means that the policy effect is generated indirectly, and secondly because some effects may be realised later than the submission of project reports.

Another area where improvements could be generated is to bridge the DTP with the EUSDR more efficiently, since in the Danube Strategy the political sphere is more heavily involved, so the DTP's results could be broadcasted to them if a platform for this existed.

#### 4.2.4 Contribution to the implementation of the EUSDR

Interviewees see the **role of the DTP** as fundamental in the implementation of the EUSDR mainly because the **thematic relation** between the Strategy and the Programme is very **well defined**: priority areas are very similar, almost identical, which means that the targets of most of the projects are in line with those of the Strategy's, and on top of that **some projects can even be considered as flagship projects of the EUSDR Priority Areas**. The role of the DTP in implementing the EUSDR is further supported by the fact that it is the only programme fully overlapping from a geographical point of view with EUSDR. Although some other Interreg programmes are available in some countries of the region, neither they reflect on the specific challenges and needs of the Danube Region, nor they include non-EU countries. Leaving out neighbouring countries would endanger solving some of the problems in the region and would mean the loss of the sense of the Danube area. The connection between the DTP and the EUSDR is strongest in projects, in which **stakeholders of the Strategy play a role either in the preparation- or in the implementation phase**.

The programme is fully aligned with the EUSDR objectives: EUSDR NCs were involved in the programming process and PACs and EUSDR stakeholders were directly consulted on the text of the documents during the programming process. At the same time, interview evidence suggests that stronger and more structured coordination has potential to increase the alignment of the EUSDR and the DTP at the implementation stage.

#### 4.2.5 Programme effect

The interviewees agree that **without the programme very little would have happened**. At minimum, the Programme helps building partnerships faster, but a lot of interviewees think that a big percentage of partnerships would not have formed without the Programme's support. This is **especially true in the southern and eastern regions** of the Programme area, **and in the case of environmental issues**, where transnational cooperation is essential.

#### 4.2.6 Involvement of the private sector

**It's essential** for all projects **to have private actors** as well, otherwise the project's scope becomes too specific and too closed. Projects who do get support from the private sector **gain essential knowledge** and a **completely different perspective**, which combined with the viewpoint of the public sphere results in more solid projects. Participation of private actors is also beneficial in the sense, that they can **embed the projects and their partners in their networks**, and they bring an attitude, which **catalyses and pushes the project implementation** to be more effective. In projects with private actors, **results are easier to maintain** after the projects are finished (especially in the case of pilot projects).

Another, however less stressed positive aspect of private sector involvement is that through them and through their networks **information about the potential benefits of EU funds can reach the public** more effectively. Differentiating among private sector actors is desirable for projects, because depending on the thematic area of the project it might be more important to involve the non-profit sector than businesses – or vice versa. For example, in the case of innovation the for-profit sector is more essential, while projects with an environmental focus cannot be implemented effectively without heavily relying on the non-profit sector.

Actors of the private sector, especially of the **non-profit sector are regularly involved as project partners** or as ASPs. In the case of for-profit actors, however, certain problems are present which makes the **involvement of businesses harder**, and which are mostly specific to the funding scheme of the programme. Most of the interviewees agree that the structure of the funding is not compatible with the needs and circumstances of businesses, because:

- they lack resources to go through an Interreg application process;
- they cannot invest the necessary time into preparation when the success is not guaranteed; and
- even if their application is accepted, refunding takes too long, which can cause financial difficulties, especially in the case of smaller organisations.

The 15% co-financing requirement was usually complemented by governments from national funds, yet the support provided varied from country to country. Due to the structure and financing of DTP, **many private partners could not pre-finance the required contribution**, and the governmental support did not cover partly or fully the co-financing needs. Different scale of governmental support in co-financing can lead to divergences in private partners' involvement in the projects either as project partners or project leaders.

Moreover, the **direct involvement of the private sector is desired** specially in topics where their relevance and contribution are considered to be more important, such as in the topics of innovation and technology, yet **their involvement is mostly limited to NGOs**. On the other hand, the private partners' involvement is harder to maintain in the mid- or long term.

The **involvement can happen** nonetheless, through other channels, mainly **through intermediaries**, such as business support organisations or industry agencies. A lot of interviewees reported that **private actors were involved in capacity building activities**, like trainings and seminars, where they provided external services for the project **or shared their expertise** in areas covered by the specific projects. According to interviewees it is also very common that private actors are invited to working group meetings, steering group meeting or workshops for consultation, which is very beneficial in the identification of common challenges.

The private sector can benefit from projects through **networking events**, or from the fact that a lot of **projects** considered their needs and **used their inputs when implementing the projects**. Whenever outputs reached decision-makers or they were used as inputs in legislation or regulation, the private sector was also affected – mostly positively, because the regulatory framework usually became clearer as a result of project interventions. However, in other cases, where project results had smaller reach, the **usefulness of the outputs is questionable**, as in most cases they are not maintained longer than a couple of years after the project has finished its implementation.

## 4.2.7 Intensity of cooperation among the regions involved in the programme

The general opinion is that **intensity of cooperation among the regions increased**, which is especially true in the case of neighbouring countries. However, this increase can be measured more on sectoral level, than on the level of regions. Workload among project partners was rather balanced in all the projects the interviewees have experience with. Whenever the project partners had difficulties with working together, it had an effect on the success of the project.

## 4.2.8 Embeddedness into the regional development processes

On a macro level the DTP is well-embedded in regional development processes, meaning that it can provide an excellent background to regional strategies and to regional cooperation efforts. On the micro level, the picture is more complicated. There is a difference in the motivation to participate among countries, which can be partly attributed to some of the programme characteristics: it supports soft projects with less visible (and thus marketable) outcomes, and it provides only a relatively small budget to beneficiaries. These attributes of the programme are not closely related to the issue of embeddedness, but their effects could be mitigated by strengthening the connection of the DTP to other transnational programmes, or to even national operational programmes.

## 4.2.9 Availability of resources

Interreg projects have a very specific logic, which makes application and implementation difficult for those, who are new to the procedure. In fact, according to many interviewees the lack of human and institutional capacities is one of the main reasons why some did not apply for the calls. Many interviewees reported incidents, where even key actors participated in the preparation of the project, later however did not have the capacities to engage in the implementation.

The lack of necessary capacities affects some countries more than others: it concerns non-EU countries more often, but there are positive examples as well, where due to the immense expertise certain countries can manage to participate in many programmes at the same time. National partner institutions and programme management bodies play a big role in targeting the issue of missing capacities, because in a lot of cases beneficiaries relied on their support whenever they couldn't manage the procedures.

## 4.2.10 Differentiators of successful projects

There was a consensus among interviewees that the most important success factor is a **strong and balanced partnership**, with a good composition of involved institutions, where **roles and responsibilities are well defined** and where there is a **concrete and detailed plan** for implementation already framed in the preparation phase. Partner institutions need to be endowed with the **necessary financial resources** for pre-financing the project's activities, and the team then needs to put a high emphasis on the **solid management of resources**, meaning that they have to find the optimal allocation of both money, people and time for executing each task in the project.

Project partners need to have a **good and clear idea** for their projects, but they need to keep in mind, that when targeting an issue, they have to comply with the principles and objectives of the programme. It can be beneficial if the project is **problem based** and reflects on a **real and relevant issue** in the region, which also facilitates winning the support of different stakeholders for the project.

**Including partners from different backgrounds** into the project (from the public and private sector, and from the professional or academic sector) strengthens the projects' outputs and contribute to their longevity. For projects to be implemented smoothly a **balanced set of skills** should be maintained in the projects. There has to be partners who:

- are professionals in the project's thematic area,
- have solid experience in project management,
- are experienced in building networks, and
- can manage the internal and external communication effectively.

Some mentioned that having **highly committed partners**, who are engaged in the project's thematic area, and are ready to allocate years in realising the project is a soft, however important condition in reaching success. Having partners, who are **experienced in Interreg projects** can help a lot, however it is not a necessary condition in effective implementation, since programme management bodies give a lot of support in administration. Nevertheless, many interviewees reported, that those projects, where the partners know each other for a long time and even have worked together previously are more efficient in project preparation -and implementation.

**Getting and staying in touch with the programme management** bodies could be very useful, especially for those, who are not very familiar with transnational programmes. They can also support the project preparation -and implementation activities both by providing professional expertise in some specific fields and by connecting the beneficiaries to important networks.

**Political support** can be helpful in ensuring the necessary financial needs for programme participation, but some see other forms of support as more important, especially when the project openly seeks to integrate its outputs into decision-making/regulatory processes. In some projects ministries were involved as **observers giving feedback** to project partners.

Many emphasized the role of the **Lead Partner**, who should have a strong personal and genuine interest in getting the projects done and producing results. He is the one, who is responsible for the project to be well-organised, ensures effective communication among project partners, and leads the administrative efforts, all of which are essential in successful implementation.

#### 4.2.11 PAC support

The DTP almost exclusively funded the PACs; hence it influenced their coordination capacities to a great extent. As it was reaffirmed during the interviews, the support the PACs received helped them to further promote the EUSDR among stakeholders, yet more capacities would have been required to ensure the smooth implementation of PAC activities, and to comply with the reporting and administrative requirements towards to the managing authorities of the DTP.

The support provided for Priority Area coordinators was a good impulse for PACs to take actions in areas, which otherwise would not be within reach for them, or would require a lot of time and effort to find funding sources for, since most of the activities PACs used the funds for were not on the priority lists of ministries. The funding was mainly **used for organising meetings, covering costs of travel and accommodation, keeping in touch with stakeholders, organise governance meetings** and thus the added value of participating in the DTP is that they can connect with colleagues across countries in the

frame of conferences or workshops. The PAC support is especially of high importance for non-EU countries on one hand because they can strengthen their networks within their PAs, can travel to steering group and other meetings, and on the other hand because it is more challenging for them to win the political support for the activities PACs usually do.

In the cases of some PACs the DTP covered operating costs including staff costs as well. In some PAs staff changes affect the coordination capacities of PACs negatively and the DTP is one tool that is able to partially mitigate the negative effects of staff fluctuations in these PAs.

Financing the DSP contributed to decreasing the administrative burden on PACs by helping them in organising PAC meetings, NC-PAC meetings and capacity building workshops, cross – MRS workshops and thematic workshops dedicated to the PACs. DSP contributed to involving more actors into the networks of PACs, providing current information from the national coordinators meeting, and also on the processes and developments of the strategy level. The DSP serves as a connection between stakeholders. Information exchange was also supported via helping PACs with their websites.

The DSP has started several activities with the goal of lowering the burdens on PACs. They are changing the reporting and monitoring from 2022, which involves PAC reporting as well. The main goal of the new reporting system is to integrate the existing reporting channels (4-5 points of fragmented contact points) into one single strategic reporting tool. It is expected that this would lower the time and effort for reporting for PACs. It would also contribute to an enhanced information exchange between the PAs as the information would be easier to share and it may initiate further processes of cross-cutting collaboration among PAs and also with other MRSs. However, the new monitoring system will only exert its effects after its implementation in 2022.

Through the support coming from the DSP in organising meetings and workshops, in trainings for new colleagues and in providing expertise with websites the Programme managed to further influence the coordination capacities of PACs. Other trainings were organised as well per request.

On one hand the PAC support affects policy development directly: due to the programme support provided to PACs they have the ability and resources to draft guidelines and policy papers, carrying out studies and thematic workshops on which they can lay out the list of topics where policy changes would be needed. The support affects policy development indirectly as well, since it is used to cover travel costs, accommodation, and catering for participant. This indirectly supports the chain of developing policies by bringing participants together. PACs also successfully represented their respective Priority Axis (PA) and the EUSDR generally at various events, meetings such as V4 or IGLO.

A concrete study which was funded from this support is for improving the long term workplan of PA6 which was used for the revision of the Action Plan. Without the funding the implementation of these studies would have been more difficult or even impossible.

Regarding the performance of PAs generally, there can be big differences among PAs. If one country is not actively involved in the discussions, even if there is support provided from the PACs, their inactivity is influencing the whole implementation along the Danube. In PAs where both partners were actively collaborating and where the financial resources were efficiently managed, performance was more solid. The challenge is that not all countries are equally interested in the topics PACs are dealing with.



In the case of PAC projects political support or pressure from governmental bodies on PACs has a more decisive role. In PAs where the coordination between the political sphere and the PACs is more active, the support the programme provided could find its effective use more easily. Overall, the institutional background or institutional setup in which PACs operate have an effect on their overall performance.

A couple of obstacles were listed which hindered the efficiency of PAC support given by the DTP. A lot of interviewees mentioned, that treating the work of PACs as traditional projects has a lot of disadvantages, which result in PACs being less agile. Classical projects have a start and an end, while the work of PACs is more like technical assistance where the workplan can change regularly. In the case of the DTP however, making changes in your project is a lengthy, burdensome task. Moreover, in the case of PAC activities defining concrete outputs is harder, still it is required by the programme intervention logic.

The extent of bureaucratic work was also mentioned as a disadvantage of the support – some interviewees highlighted the amount of tasks auditing requires, which takes away a lot of human capacities from other tasks. Moreover, reporting every 6 months increased the administrative burden on PACs significantly.

Constant and intense communication with the DSP, and the obligation on PACs to plan their activities are listed among good practices which support the efficiency of funding provided for PACs. Despite, that some mentioned the rigidity of the framework as a disadvantage the fact that the programme has a clear intervention logic helps PACs to have a guideline/agenda on a yearly basis, which supports their planning.

#### **4.2.12 Seed Money Facility support**

The SMF support as an institution is theoretically a suitable tool for preparing projects, still the concrete results of the calls did not meet the expectations. The applications were of very different quality, and mostly not good, and they didn't produce tangible outcomes. The main problem with the SMF was the timing of the call. Several PACs reported that the first call was too quick, too soon, in several parts there wasn't enough interest, and it was too much burden for little money for the applicants, especially when taking into account that the funding was distributed among the project partners.

Another downside was that although the seed money facility was intended to generate applications of complex and strategic projects to be funded by other (especially the mainstream) programmes, the few successful SMF projects with project proposals ended up in the DTP again.

All SMF applications needed a letter of support by the PACs. In some PAs, the SGs decided to issue this letter for all applications, others were more selective. Some PAs followed the SMF projects more closely, others have never heard again from the projects. It certainly depended on whether the project has been developed by stakeholders close(r) to the EUSDR or by partners or not. In some PAs seminars and networking events were organised, but the interest was very low.

#### **4.2.13 DSP support**

The DSP acts as a coordinative hub in the sense that it is in close touch with the EUSDR Presidency and DG REGIO, ESPON and Interact, which enables EUSDR internal coordination of processes as well as external coordination with other MRS, such as

- The continuous strategic and operational support to the Presidency, Trio, NCs and PACs as well as to the EC is a vital coordinative contribution to the Strategy. In this respect, the organisational support by DSP to EC in organising and contributing to various sessions of the 2nd EU Macro-Regional Strategies Week is to be underlined as well as the EUSDR representation through DSP at the EU Week of Regions and Cities 2020. This served the strong positioning of the EUSDR towards the level of the European Commission and towards the network of public institutions within the EU. It also served EUSDR internal communication by preparing the establishment of the IPA/NDICI programming authorities' network and EUSDR external communication with other MRS through exchange on Embedding.
- Embedding EUSDR priorities in EU-, national and regional funding schemes including the establishment of coordination networks of ERDF/CF Managing Authorities and the network of IPA and NDICI Programming Authorities in the Danube Region,
- Providing virtual meeting venues from March 2020 onwards, when on-the-ground-meetings were suddenly not possible anymore – this was a vital contribution to an (as far as possible) uninterrupted implementation of the Strategy and helped to keep stakeholders connected, while at the same time the administrative burden of organising online meetings was taken off EUSDR core stakeholders by DSP.
- The DSP Pillar Officers, responsible for supporting all 12 Priority Areas of the 4 EUSDR Pillars, attended SG meetings and based on the needs expressed by the PACs and SGs, could support further coordinative and capacity building activities, e.g., cross-MRS exchanges in the field of energy and biodiversity (supported also by INTERACT) and capacity building workshop for PA 2 in 2020.
- In terms of DSP's communication activities financed by the programme, the DSP facilitated the design of an EUSDR Communication Strategy (together with a Communication Guide explaining how to implement the Strategy), updated and harmonised the EUSDR websites, built up a growing EUSDR online community on Facebook, LinkedIn, Twitter, YouTube, contributing to the visibility of the Strategy. The Strategy as well as relevant activities of international organisations and cooperation become more visible on the website, as current processes, surveys, reports, events and other activities are posted on the landing page, as well as on social media. This also serves as virtual communicative hub for EUSDR core stakeholders.

The programme has a major influence on monitoring and evaluation capacities of the Strategy through financing the DSP project which facilitates:

- A new monitoring concept to capture the complexity of results that the EUSDR produces. The new monitoring is planned to be implemented from 2022 onwards as one comprehensive online tool). The purpose of collecting the information is to compile a comprehensive reporting that includes information on progress and achievements in each Priority Area. It also fulfils the articulated needs for a more extensive monitoring as defined by EUSDR National Coordinators, provides data for future evaluations, and can further be used by EUSDR stakeholders for strategic decision making, communication activities, information exchange, etc.
- An evaluation concept, which has been divided into two parts. In 2019, an Operational Evaluation was conducted, assessing the effectiveness, communication, and stakeholder involvement of the Strategy. (The final report can

be found on the EUSDR website). Currently, work has started for conducting a Policy/Impact Evaluation, assessing instruments, tools, and activities of the EUSDR in order to measure the impact of the Strategy in the Danube Region. The focus lies on the revised Action Plan, the expected (policy) impact, the embedding process, the EUSDR Communication Strategy and the influence of the COVID-19 pandemic.

- Furthermore, under WP T2, the DSP publishes biennially an EUSDR Implementation Report, which presents in a concise manner the advancements of the Strategy on EUSDR governance level as well as on Priority Area level and gives an outlook on potential future developments.

Some PACs do not understand the clear objective of the DSP, for them its exact function is unclear, which makes it harder for them to turn to the DSP if they would need support. Others see that the DSP's main function is capacity building and providing a continuous flow of information.

Other obstacles are:

- Length of project duration: In the future it would be beneficial to run the DSP project in longer terms than 3 years to enable DSP to establish a longstanding project plan and continuously work on EUSDR governance support and capacity building.
- Administrative procedures for the Presidency to join the project for the purpose of organising the Annual Forum
- Financing cuts are likely to happen, continuation. Danger of slowing down the process.

## 4.3 Project case studies

### 4.3.1 Objectives of the case studies and link with the overall research approach

Case studies were included as research tool to gather primary information; also, they were used in the context of the evaluation process with the aim of supplementing and validating the ToC models. Moreover, case studies provide deep insights of the context and the delivery mechanisms of the programme and serve as examples for future projects.

The overall objective of the case studies is to assess the use of funding for different interventions in the relevant SO, to illustrate the specific context of implementation, to understand the rationale behind the intervention and to evaluate its effectiveness. Moreover, the case studies were built upon the findings from previous activities and aimed at contextualising and better comprehending the complex causal mechanisms, substantiate the findings with in-depth evidence and fine-tune the findings of the previous activities.

The specific objectives of the case studies aimed at:

- Scrutinising the logic behind the intervention;
- Describing the interventions used, the reasons for their use and the underlying ToC;
- Illustrating individual diversions from trends along with potential explanations;
- Identifying the beneficiaries of the financing and analyse their specific role as well as their capacity to implement the outlined activities;

- Evaluating the intervention’s overall impact as well as its effectiveness, efficiency, and sustainability.

### 4.3.2 Selection criteria

During the case study selection, we aimed at including at least one case study per Specific Objective. The selection criteria the following:

- Tangibility of impacts: this criterion covers projects which have finalised their implementation and have been successful in reaching the specific objectives;
- Size of the budget: in most of the cases we selected the projects with the biggest budgets (usually top 3 in their SO of reference) and excluded those projects way below the average project budget in the specific SO;
- Availability of Information: we ensured that the selected projects had enough information available both on the EMS and the project’s webpage;
- Type of Outputs: we considered projects which created all three types of outputs (strategy, pilot action, tools);
- Geographical scope: the aim of this criterion was to ensure the widest geographical representation among the eligible countries participating in the DTP Programme;
- Involvement of non-EU countries: we ensured that in most cases at least one non-EU country was involved as a project partner.

### 4.3.3 Overview of the case studies

**KnowING IPR:** The aim of the project was to improve framework conditions for innovation in the Danube region by developing a transnational KnowING IPR platform, which provides an open access tool for advanced intellectual property rights (IPR) analysis, and guidelines for improved and harmonized IPR policy framework across the Danube region. KnowING IPR buildt upon triple helix model of innovation, reaching to enterprises, especially SMEs, business support organisations, public authorities, higher education and research centers, through its varied consortium members and outreach activities.

**D-CareLabs:** In the Danube Region (DR), fundamental needs of home care beneficiaries are not satisfied by current social service providers. There are extensive requirements to fulfil needs e.g., as proper medical therapies and support for body hygiene (basic needs), provision of adequate home facilities to prevent falls (security needs) and measures to enable social inclusion of needy people into the local community (social needs). Social entrepreneurial trainings, and few recently established social innovation labs aim to facilitate innovation of new services/products in the DR to tackle such societal challenges. Building upon these approaches, the project aims to establish specialized macro-regional D-Care Lab innovation structures to enable social service providers, product developers and social start-ups to design and implement better and innovative home care services and products for elderly persons, people with disabilities and children with special needs.

**Living Danube Limes:** Based on already existing work developed by predecessor projects like Danube Limes Brand and DANUrB this project is a foundation stone for a future Danube Limes Cultural Route, representing Roman heritage along the Danube Limes. Pilot sites and activities were identified and served as role models for the development and implementation of transnational strategies for increased and sustainable tourism and protection of the cultural sites. All living history, training, knowledge-transfer and capacity building events were accompanied by information, dissemination and

publicity measures for the identified stakeholders and especially the citizens in order to foster a common sense of togetherness in the Danube Region and to ensure a sustainable and eco-friendly protection of cultural heritage.

**DANURB+:** DANURB+ aimed to reactivate underused cultural heritage and resources in shrinking settlements of Danube river's peripheral and border regions, to create new possibilities to make its towns and regions attractive again. The project was built on the work of DTP1-249-2.2 DANURB, where the basis of a Cultural Promenade were laid down with a consistent Strategy, a functional Platform based on a wide Cultural Network, helped by thematic Tours. The main objective is the capacity building for local stakeholders in order to enable them to cooperate locally and on an interregional scale for the valorisation of their Danube-related heritage with local actions under a unified brand strong enough to increase local prosperity and international tourist attractiveness.

**DanuBioValNet:** The transition of a fossil-based to a bio-based industry addresses some of the main challenges identified in the Danube region. Eco-innovations will support the regional development by diversifying the local economy and creating new employment opportunities. The development of new bio-based value chains from primary production to consumer markets needs to be implemented by creating network of enterprises from different regions and industries. Therefore, the aim of DanuBioValNet was to develop new methods and tools to connect enterprises transnationally.

**JOINTISZA:** The over exploitation, water regime modification, contamination and growing flood events amplified by climate change negative effects require harmonized, integrated actions from countries in shared river basins. The project focuses on interactions of two key aspects, the river basin management (RBM) and flood protection, including the relevant stakeholders who have pivotal role in the Tisza RBM planning process. The main aim of the project is to further improve the integration of the water management and flood risk prevention planning and actions in the next RBM planning cycle, in line with the relevant EU legislations.

**DANURB:** The Project aimed at strengthening the Danube regional cultural identity and to create a common brand by fostering transnational cultural ties between the settlements along the Danube, and by exploring the unused or hidden cultural and social capital resources for a better economic and cultural return. The main goal of the project was to create a comprehensive spatio-cultural network, a "Danube Cultural Promenade" connecting all communities along the river, unifying these into one tourism destination brand, offering thematic routes and developing possibilities that can increase the number of visitors and can prolong their stay in the region.

**DANUBEparks CONNECTED:** The Danube River is a green lifeline for biodiversity. While the Network of Danube Protected Areas preserves the most valuable sites, habitat fragmentation limits efforts to preserve a cohesive ecosystem. DANUBEparksCONNECTED has initiated the DANUBE HABITAT CORRIDOR campaign to counteract fragmentation. It supports Danube-wide strategies and exemplary pilot actions aiming to restore and maintain connectivity in all habitat elements.

**EDU-LAB:** is one of the first projects aiming at improving institutional capacities to increase the labour market relevance of Higher education with a view to retain more young talents studying and working in the region. EDU-LAB focuses on harmonizing labour market demands and educational structures. The starting point for a new mindset of cooperation is capacity development. EDU-LAB forms a triple helix cooperation model with partners from education, business and politics/administration in a joint learning process including further actors from civil society.

**DriDanube:** Water scarcity and droughts hit the Danube region frequently and have had large impacts on the economy and welfare of the people. Despite damages in last decades, drought is still not considered as an issue of high priority. People are not aware of its impacts. Therefore, DriDanube aims to improve capacity of the region for drought emergency response and enhance preparedness for drought management by introducing recently developed monitoring and risk assessment tools.

**DARLING E:** the project aims at increasing the use of geothermal energy and help the penetration of energy efficient cascade systems and matching them with heat-markets; establishing a market-replicable tool-box consisting of 3 complementary modules for sustainable geothermal reservoir management (benchmark evaluation of current uses, decision tree to help developers, geological risk mitigation scheme); advancing stakeholder cooperation (establishment of a Transnational Stakeholder Forum) to foster geothermal developments and to create a strong geothermal value chain.

**DANUBE STREAM:** The objective of the project is to establish and maintain an efficient and environmentally friendly transportation network (Danube and its navigable tributaries) by further developing effective waterway infrastructure management. In addition to consolidating common standards and tools, the project's results and outputs include user-oriented information services. These enable rapid information transfer on the quality of the waterway's infrastructure.

**NewGenerationskills:** The project aims to create an enabling Youth focused environment, at local level for innovative ideas to grow from ideas to solutions, especially in the field of social innovation. This needs a change of mind-set and improved competences of all relevant actors, i.e.: local youth, companies, education, municipalities and their institutions as facilitators. The project aimed to upgrade existing cooperation mechanisms between quadruple helix actors to create joint local support schemes that will equip local youth with new generation competences and skills. It aimed to beyond the existing support schemes, interweaving innovation and youth entrepreneurship support, with the aim of bridging the gap between education and new generation skills for the labour market. Through organic, community-based learning programs, this novel support scheme targeted the youth who are motivated, but inadequately skilled to generate new ideas and take the first steps towards entrepreneurship.

## 4.3.4 Lessons learnt

### Project preparation

As revealed in the case studies, transnational projects with partners from different countries are complex setups, particularly when it comes to project preparation and establishing networks between actors in different countries. Across the analysed case studies, network establishment was one of the most intense parts of the process. In several cases, the consortium partnerships already existed, but required further redefinition to align with the new project's scope and objectives. An example is the Danube STREAM project, in which the project partners started structuring the project and defining the partnership at the time of the past project NEWADA duo, since already then, another project was considered necessary to boost cooperation between waterway administrations in the Danube Region.

Successful project preparation and consolidation of partnerships were also facilitated by a shared vision on the long-term sustainability and outputs of the project, as exemplified by the DanubeBioValNet project. The project partners shared a common perspective on the

need for climate protection, reducing dependence on fossil resources, and reorienting value chains towards renewable resources.

In several instances, the project preparation process was prolonged but proved to be vital for the success of the project implementation. For instance, in the case of the DANUrB project, it took two years of preparation for universities and research institutes to lay the foundation for the project, develop a comprehensive network, and unite all relevant actors and communities along the Danube River into a single tourism destination. Similarly, the EDU-LAB project began its preparation process a year before the project's initiation, with broad consultations among project partners. Another example is D-Care Labs, where the project preparation took two and a half year to ensure the right composition of stakeholders, and well-defined project goals which led to the successful project implementation. However, in other cases, such as the DriDanube project, the preparation process was relatively simpler, as it focused on upgrading existing activities and building upon previous project results.

One cross-cutting good practice that emerged from the majority of the analysed case studies was the continuous communication between partners and lead partners. This communication was essential in creating a team spirit, which turned out to be a key success factor. Furthermore, many partners adopted a flexible application approach, allowing project partners to redefine project activities based on local needs and circumstances.

It was evident from all cases that the DTP Programme provided the ideal platform for advancing the consortia's concepts and ideas, promoting cooperation among project partners at various levels, and enabling capacity building. Additionally, it was noted that the Management Authorities/Joint Secretariat were highly supportive and helpful in providing assistance throughout the application process, from the initial stages to the final implementation stages.

## **Project implementation**

Undertaking transnational projects with partners from different countries can be a complicated endeavour. Not only must the project be coordinated locally and nationally, but it must also be managed on an international level. Typically, project activities are designed to begin, implement, control, monitor, and conclude the project in a suitable manner. The activities are then distributed among project partners, allowing each partner to use their financial and technical capabilities to achieve the objectives specified in the technical offers. However, partners who have not participated in such projects before may find the procedures unfamiliar, requiring some time to adapt to the requirements of transnational cooperation programs. One successful strategy for managing these complexities emerged from the DanubeBioValNet project, known as the "Brain Trust." This approach recognises that a group of consortium members can accomplish much more than the sum of their individual contributions by employing flexible and innovative cooperation tools. This allows for a more collaborative approach to manage transnational projects, ultimately leading to greater success for all partners involved.

After analysing multiple case studies, it has become clear that most projects began with a strong collaborative spirit, and the allocation of resources proceeded without issue. Most of the analysed projects reported that starting the projects with a workshop – especially the ones held in person – brought the project partners closer and served as a setting ground for the cooperation. During these events, many aspects of the future joint work were

discussed and agreed upon, as well as the exact roles and responsibilities were clarified. A good practice arises from the EDU-LAB project, which kicked off with a conference in Stuttgart in March 2017. During this event, the legal representatives of project partners signed the document entitled "Our commitment to develop chances for young people", symbolizing their long-term commitment to improve professional chances of young people in the Danube region by linking education to employment in a sustainable way. From the case study it has also emerged the enthusiasm around this event as every partner was very willing to propose solutions and initiative to achieve project objectives.

Moreover, in the analysed case studies no activities have been performed by partners singularly and all packages have been based on joint cooperation. A good practice comes from the DanubeBioValNet project, in the context of which, at the kicking off of the project, an analysis of the status quo in the partner regions has been carried out, to allow a better understanding of the state-of-the-art of the value chains and cluster development in bio-based industry in the Danube region.

In addition, a cross-cutting analysis revealed that the projects had a notably positive impact on capacity building and partner cooperation. This was especially true for the DANUrB project, which facilitated learning between less developed and more developed regions within the same Cultural Network. By fostering the flow of development and knowledge along the Danube, these regions were able to accelerate their cultural and economic growth. Similarly, the EDU-LAB project highlighted the benefits of knowledge transfer and the sharing of good practices. This was particularly valuable for countries, especially less developed ones, as it helped address the mismatch between higher education supply and labour market demand. Project partners from D-Care Labs reported similar experiences when it comes to knowledge exchange and capacity building. Partners from non-EU member states reported that their involvement in the transnational project supported them to improve their understanding of the structure of EU funded programmes, and also generated additional, non-intended learning experiences based on the solutions coming from other member countries.

It has emerged that during the implementation, projects' barriers were mainly of an administrative nature, as it was easy to overcome the technical difficulties, given that most of the consortia had been cooperating for a long time. An example comes from the DANUrB project, as it has been stated that the interpretation of the whole Danube as a real spatial unit became a challenge. For Middle Danube, daily physical interactions at the border crossings proved to be very difficult, mainly due to the administrative procedures, while for Lower Danube, these became virtually impossible because of the deficiencies in both longitudinal and transverse traffic infrastructures.

## **Project's impacts and afterlife**

When selecting case studies to analyse, one key criterion was the tangible impact of the projects. This meant that all selected projects had completed their implementation and had potential to strengthen cooperation in the Danube region.

One impact that emerged frequently during the analysis of case studies was the effect on the open-space region, which brought together a diverse range of public and private entities on a long-term basis, even beyond the lifetime of the projects. The DanubeBioValNet project is a prime example of this, as its consortium was able to deliver more than one project. It is suggested that this successful approach should be institutionalized to promote the implementation of Green Deal aspects throughout the Danube region. In the Danube STREAM project, the direct impact occurred in the field of navigability conditions. The project introduced the concept of achieving equilibrium



between good navigation status and good ecological balance, which will influence future navigation policies. It is necessary to consider the environmental imbalances caused by infrastructure projects when making these policies.

Another positive spill over is that in several cases, projects outputs and the related research methodologies are directly transferable to decentralised regions that face the same problems. This is the case of the DANUrB project: the collaboration methods between universities, private institutions, NGOs, local enterprises, business organisations and municipalities transferable, as such entities are the stakeholders in most regions with similar problems of cultural heritage valorisation.

In most of the cases, it has emerged that the strengthening of the cooperation and the exchange of good practices have been pivotal in securing projects' afterlife. A clear example is the JOINTISZA, in which at the beginning the project partners did not have a sound understanding of each other, but trust raised step by step reaching outstanding levels, so that all the partners thought of a follow-up project, prior to the end of the ongoing project. In addition, in the context of the DanubeBioValNet project, the consortium has already started a new follow up project called GoDanubio, to further help the regions along the Danube to implement the so-called multi-level government scheme for the bioeconomy.

### **4.3.5 Analysis of cases in SO 4.2**

#### **Danube Strategy Point**

##### **Project preparation**

Based on the case study of the Danube Strategy Point, the (re-)establishment of the DSP were planned out previously based on the challenges and future possibilities facing EUSDR. The areas in which the DSP needed to operate were pre-defined as well as the action and the expected results, which meant that the preparation of the project mostly consisted of understanding and fulfilling the planned activities of the DSP. Overall, the project partners had a good experience with the application process. All deadlines were respected, the documents were elaborated by the MA/ JS, and more aspects were clarified during the preparation phase, giving the project partners enough time to be ready by the start date of the project. Beside smooth communication between the applicant and the management bodies of EUSDR, the other element that led to a successful project preparation was the individual experience of the project partners, since both the City of Vienna and the Romanian Ministry of Regional Development and Public Administration had long-term experiences in project preparation and implementation, as well as EUSDR itself.

##### **Project implementation**

The project's implementation mostly went according to plan, but it was prolonged for one more year. They were able to carry out every activity that they were set out to do, starting from the improvement and coordination of internal and external communication and creating the EUSDR Communication Strategy, publishing the Operational Evaluation of EUSDR, establishing a new monitoring system, among many other tasks and achievements. They worked closely with the managing bodies of EUSDR, and contributed to the success of DTP indirectly, by supporting PACs and NCs.

## **Project's impacts and afterlife**

The DSP has a long-lasting effect on the success of the EUSDR, since it is the organizational backbone of the Strategy, and it is essential in the accumulation of knowledge about the Strategy and its programmes, as well as in disseminating information. The project is not yet closed, but there are already promising signs, for example in the case of embeddedness, that signal that the work of the DSP has some spill over effects such as stakeholders working together after the project and contributes to the emergence and strengthening of networks.

## **Priority Area Coordinators**

### **Project preparation**

The application for the project came naturally to many of the project partners in the case of PAC9 (People and Skills) because some of them have been working on the challenges of Priority 9 of EUSDR in the previous years. All partners were involved in the project preparation phase, and the partners all agreed to have a coordinator for each activity at every project partner in order to have sufficient information at everyone's disposal. Their main challenge in project preparation was the translation of their strategic approach to concrete activities and the translation of their collaborative way of working to responsible project partners, but they were able to overcome these challenges by extensive communication of the involved persons.

### **Project implementation**

The implementation of the project was smooth, the project partners had sufficient capacities themselves to carry out the planned activities without the need for major help or intervention from the programme management bodies. They received the necessary support from everybody when they needed it. The experience and dedication of project partners were a main source that contributed to a successful project implementation. Their main problem during the implementation was the delay of the contract because of the late establishment of FLC in an ENI-country.

## **Project's impacts and afterlife**

Over the whole project period all planned Steering Group Meetings, the Stakeholder Conference and the Thematic Workshops were organized, and resulted in strengthening the communication and cooperation of involved stakeholders. PA9 provided information for initiating new projects via website and e-mail and organized thematic workshops and stakeholder conferences. The website was continuously updated to raise public awareness and to inform the target groups of PA9 about ongoing activities and developments. The relevant stakeholders were informed via newsletter.

Their project outputs contributed to Specific Objective 4.2 by enhancing the cooperation among both project partners and relevant stakeholders and building capacity for a well-governed Danube region. DTP was essential from a financial point of view and as a framework as well, because making the regular exchange of information and networking possible is important for the success of the project. The project partners thought that it was a learning experience for them as well, and they found the 3-years long project length to be sufficient.

## **Seed Money Facility**

### **Project preparation**

The preparation of a Seed Money Facility project seems to take a smaller amount of time than other projects, since it took only a few days for the EAST project partners. In their case, the Lead Partner worked on similar topics in the previous years, but the SMF was an opportunity that they have not had an experience with beforehand. They saw the benefit of transnational cooperation in the fact that they could involve a wide range of stakeholders to prepare for bigger projects. The decision about the roles and responsibilities of project partners was based on the needs of the project and the knowledge, professional experiences and capacities of the project partners. They found the project preparation process relatively easy, and it took little time to prepare the application.

## **Project implementation**

The project lasted for a year. The team was appointed by the Lead partner, and the terms of references for each role were discussed and agreed upon in the beginning of the project. The internal communication was held through live and virtual meetings. All partners were involved and active and they had a more intense communication in the second phase of the project because of the kind of tasks that they had to implement in that period.

During the preparation of the application and the project preparation itself, they were in contact with the MA/JS and a policy officer of the DSP. While they received every support they needed and the relationship was smooth, the interviewee did not recall any difficulties that would have necessitated the stronger cooperation between project partners and EUSDR management bodies.

## **Project's impacts and afterlife**

The project was successful in reaching its goals, since they were able to submit two project proposals, and get one of them financed. The Seed Money Facility helped focus their resources on project development, which is a rare opportunity, they would not have been able to finance these kinds of activities without it.

## **Tested Theory of Change - SO 4.2**

The analysis of the case studies suggests that the activities that contribute to a more effective governance of the EUSDR are key elements for reaching the objectives of EUSDR and also for realizing the outputs and impacts of the Danube Transnational Programme, which confirmed the assumptions of the Theory of Change:

- The DSP contributed to the efficiency of the information flow and the strengthening of ties among stakeholders with its activities, and also had great role in establishing a new monitoring system and in evaluating the Strategy, both of which provide long-term stability for EUSDR and makes the work of other managing bodies more efficient
- PACs have contributed to policy development and to the successful implementation of strategic projects
- Seed Money Facility has the potential to turn into strategic projects either within DTP or in other European problems, both of which contribute to the embeddedness of the EUSDR

## 4.4 Analysis of the data resulting from the beneficiary survey

### 4.4.1 Descriptive statistics

The table below presents an overview of the number of project partners in projects which constitute the scope of the evaluation and the number of survey respondents by SOs, in the first, the second, and the third calls. It is important to note, that the beneficiary survey regarding the first call was conducted in the former phase of the evaluation (in 2021), but the results of that are also included in the analysis of the survey data.

**Table 6: Number of project partners in first, second and third call projects and survey respondents by SOs**

	Which specific objective does your project address?											
	First call				Second call				Third call			
	First call total		Survey respondents		Second call total		Survey respondents		Third call total		Survey respondents	
SO 1.1	145	21%	22	20%	33	12%	8	15%	37	7%	12	10%
SO 1.2	63	9%	7	6%	71	26%	9	17%	110	20%	27	23%
SO 2.1	40	6%	4	4%	46	17%	10	19%	32	6%	11	9%
SO 2.2	114	16%	27	25%	48	18%	7	13%	129	23%	26	22%
SO 2.3	26	4%	6	5%	50	18%	6	12%	25	4%	6	5%
SO 2.4	15	2%	4	4%	0	0%	1	2%	11	2%	2	2%
SO 3.1	144	20%	20	18%	24	9%	6	12%	53	10%	10	8%
SO 3.2	44	6%	7	6%	0	0%	1	2%	40	7%	7	6%
SO 4.1	115	16%	13	12%	0	0%	4	8%	120	22%	16	13%
SO 4.2	0	0%	0	0%	0	0%	0	0%	0	0%	2	2%
<b>Total</b>	<b>706</b>	<b>100%</b>	<b>110</b>	<b>100%</b>	<b>272</b>	<b>100%</b>	<b>52</b>	<b>100%</b>	<b>557</b>	<b>100%</b>	<b>119</b>	<b>100%</b>

Source: KPMG/VVA (2023). Based on data included in the EMS system as of March 30, 2023, and survey responses.

Comparing the distribution of the pool of project partners with the distribution of the sample based on SOs we found a very similar pattern in the case of all of the three project calls. Both the survey samples in the previous phase (1<sup>st</sup> call) and the current phase (2<sup>nd</sup> and 3<sup>rd</sup> calls) capture an accurate representation of the broader population of projects.

Nonetheless, we have made some small corrections<sup>6</sup> compared to the data in Table 6, which resulted in 46 beneficiaries in the 2<sup>nd</sup>, and 121 beneficiaries in the 3<sup>rd</sup> call.

Another comparison which needs to make in order to analyse representativeness is the distribution of the population and that of the sample by countries, as demonstrated in the following table.

<sup>6</sup> As Table 6 represents, there was no beneficiaries within the 2<sup>nd</sup> call of SO 2.4 and SO 3.2, yet we did receive 1-1 responses, claiming that their project addresses those SOs. Furthermore, SO 4.2 was not the scope of the 3<sup>rd</sup> call of the programme, yet we did receive 2 responses to the questionnaire from the 3<sup>rd</sup> call claiming that their project addresses SO 4.2. We decided to delete those 4 responses from the survey sample. Moreover, there was no beneficiaries within the 2<sup>nd</sup> call of SO 4.1, yet we did receive 1-1 responses, claiming that their project addresses this SO. As there were a lot of beneficiaries in SO 4.1 within the 3<sup>rd</sup> call, we considered it as wrongly written to the 2<sup>nd</sup> call instead of the 3<sup>rd</sup> and analysed the survey data according to that.

**Table 7: Number of project partners in in first, second and third call projects and survey respondents by countries**

<i>Where is your institution/organisation located?</i>												
	First call				Second call				Third call			
	First call total		Survey respondents		Second call total		Survey respondents		Third call total		Survey respondents	
<b>Austria</b>	87	12%	13	12%	25	9%	2	4%	18	15%	18	15%
<b>Bosnia and Herzegovina</b>	25	4%	6	5%	11	4%	4	8%	4	3%	4	3%
<b>Bulgaria</b>	61	9%	12	11%	17	6%	3	6%	13	11%	13	11%
<b>Croatia</b>	63	9%	9	8%	26	10%	9	17%	15	13%	15	13%
<b>Czechia</b>	35	5%	3	3%	9	3%	2	4%	4	3%	4	3%
<b>Germany</b>	42	6%	7	6%	18	7%	3	6%	11	9%	11	9%
<b>Hungary</b>	101	14%	10	9%	38	14%	2	4%	13	11%	13	11%
<b>Montenegro</b>	8	1%	1	1%	2	1%	2	4%		0%		0%
<b>Republic of Moldova</b>	0	0%	0	0%	10	4%	3	6%	1	1%	1	1%
<b>Republic of Serbia</b>	65	9%	12	11%	27	10%	5	10%	8	7%	8	7%
<b>Romania</b>	93	13%	14	13%	38	14%	8	15%	9	8%	9	8%
<b>Slovakia</b>	57	8%	6	5%	20	7%		0%	8	7%	8	7%
<b>Slovenia</b>	69	10%	15	14%	23	8%	7	13%	15	13%	15	13%
<b>Ukraine</b>	0	0%	2	2%	8	3%	2	4%	0	0%	0	0%
<b>Total</b>	<b>706</b>	<b>100%</b>	<b>110</b>	<b>100%</b>	<b>272</b>	<b>100%</b>	<b>52</b>	<b>100%</b>	<b>119</b>	<b>100%</b>	<b>119</b>	<b>100%</b>

Source: KPMG/VVA (2023). Based on data included in the EMS system as of March 30, 2023, and survey responses.

In this case as well, the distribution of project partners among countries is very similar to that of survey respondents in all of the three calls, which drove us to the conclusion that by analysing the survey sample we can get a fairly representative picture about the characteristics of the whole population.

Lastly, we compared how the share of private- and public partners in the whole population compared to that of the survey sample (see the table below).

**Table 8: Number of private- and public partners in first, second and third call projects and survey respondents by SOs**

<i>What is your institution's/organisation's legal status?</i>												
	First call				Second call				Third call			
	First call total		Survey respondents		Second call total		Survey respondents		Third call total		Survey respondents	
<b>Private</b>	199	28%	21	19%	92	34%	13	25%	207	37%	47	39%
<b>Public</b>	507	72%	89	81%	180	66%	39	75%	350	63%	72	61%
<b>Total</b>	<b>706</b>	<b>100%</b>	<b>110</b>	<b>100%</b>	<b>272</b>	<b>100%</b>	<b>52</b>	<b>100%</b>	<b>557</b>	<b>100%</b>	<b>119</b>	<b>100%</b>

Source: KPMG/VVA (2023). Based on data included in the EMS system as of March 30, 2023, and survey responses.

The difference in the share of public- and private actors in the population and the survey is slightly more substantial in the case of the 1<sup>st</sup> and 2<sup>nd</sup> calls than what we discovered in other categories; however, it is still unlikely to influence our results significantly when we analyse the whole survey sample together.

## 4.4.2 The general context of project implementation

In this section, the analysis of the characteristics of implementing a project is presented. First, we discuss the respondents' impression about the **external factors** of preparing and implementing a project, as described by the ToC models. Questions were asked in connection with:

- the stakeholder's awareness with the Programme;
- the effectiveness of information distribution;
- the availability of programme management authorities;
- the availability of necessary resources for project implementation;
- the ability to find common problems and to prioritise among them;
- the importance of involving stakeholders into project implementation;
- the existence of political or legal barriers;
- the complementarity of the programme with other programmes;
- the ability of the programme to influence the behaviour of stakeholders.

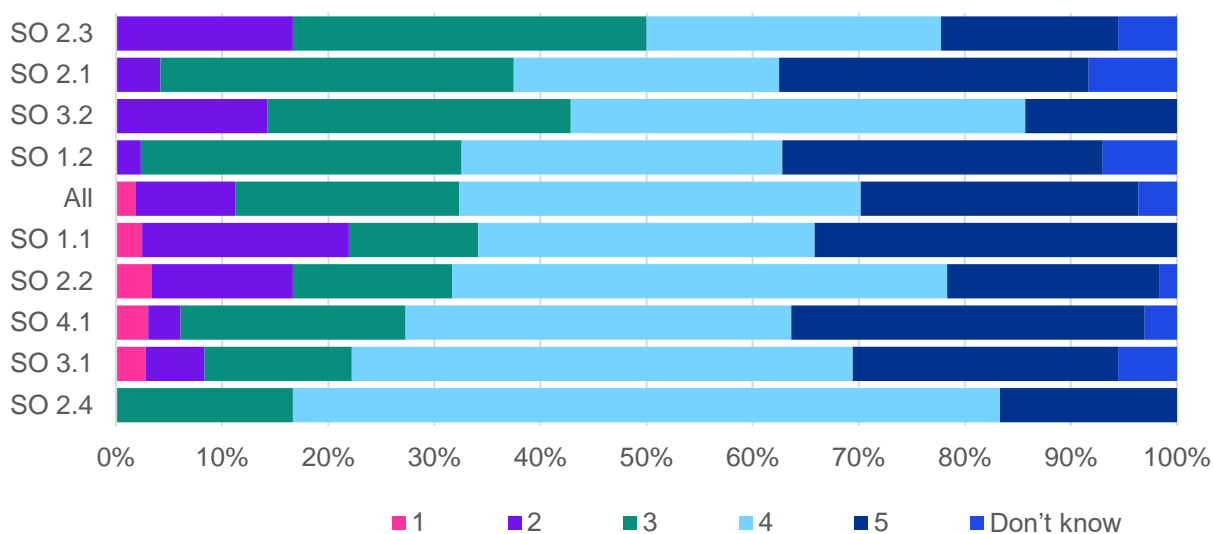
Second, we go into more details regarding **how the projects were implemented**, covering topics like intensity of cooperation, embeddedness of the projects, private sector involvement and the projects' performance in reaching its objectives.

Finally, we present our results regarding **the impacts of the projects** covering the fields on which the intervention exerted an impact, including capacity building, usability of outputs for both the public and the private sector, and the impact the intervention had on the general strength of specific thematic areas.

## 4.4.3 External factors

The majority of respondents (64%) were on the opinion that **local stakeholders were aware of the DTP and supported its goals**. 21% agreed with this statement moderately, while a further 11% did not support this claim at all. Yet there were only slight differences in the responses from the 3 different project calls. Regarding SOs, the share of negative responses was the highest from projects implemented under SO 1.1 (improve framework for innovation), SO 2.2 (foster sustainable use of natural and cultural heritage and resources) and SO 2.3 (foster the restoration and management of ecological corridors). Responses were more optimistic than the average under SO 3.1 (support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas) and SO 2.4 (improve preparedness for environmental risk management) (see the figure below).

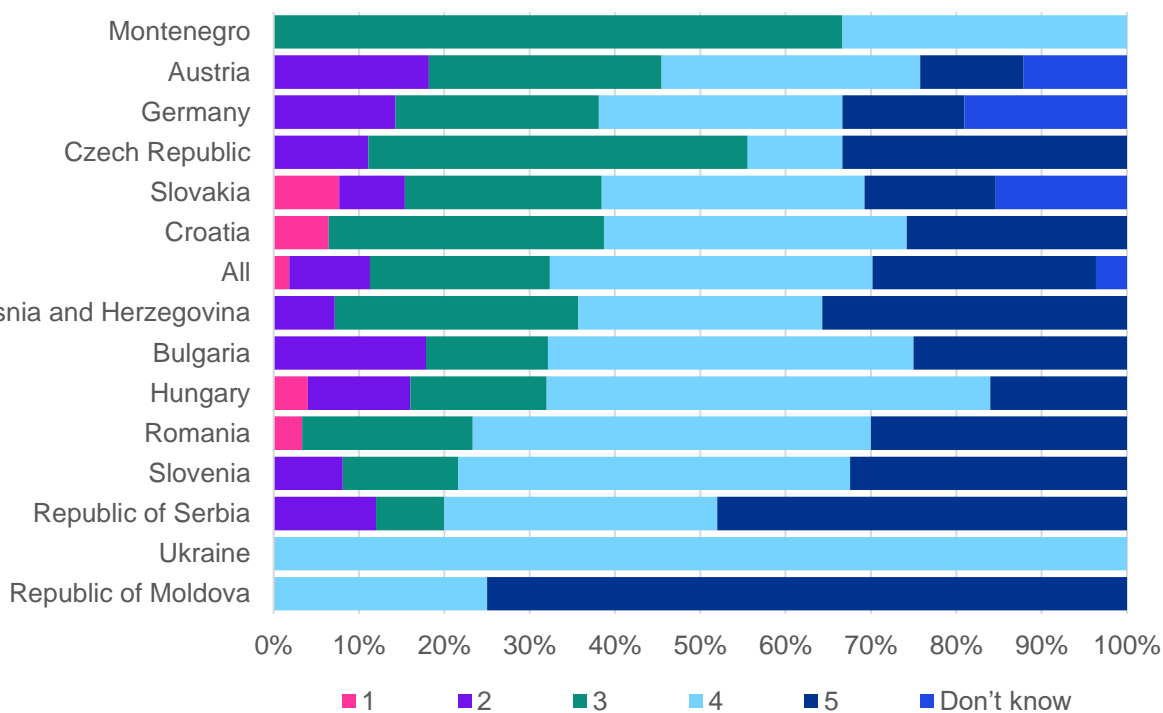
**Figure 16: Agreement with the assertion: ‘Local stakeholders were aware of the DTP and supported its goals’ (by SOs)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

Respondents from Bulgaria, Hungary and Austria gave more negative marks to this question, than the average, while the impression of partners from the Republic of Moldova, Ukraine and the Republic of Serbia are more optimistic (see the figure below). Public and private partners have similar views regarding the local stakeholders’ awareness of the DTP and the support of the program’s goals (Figure 17).

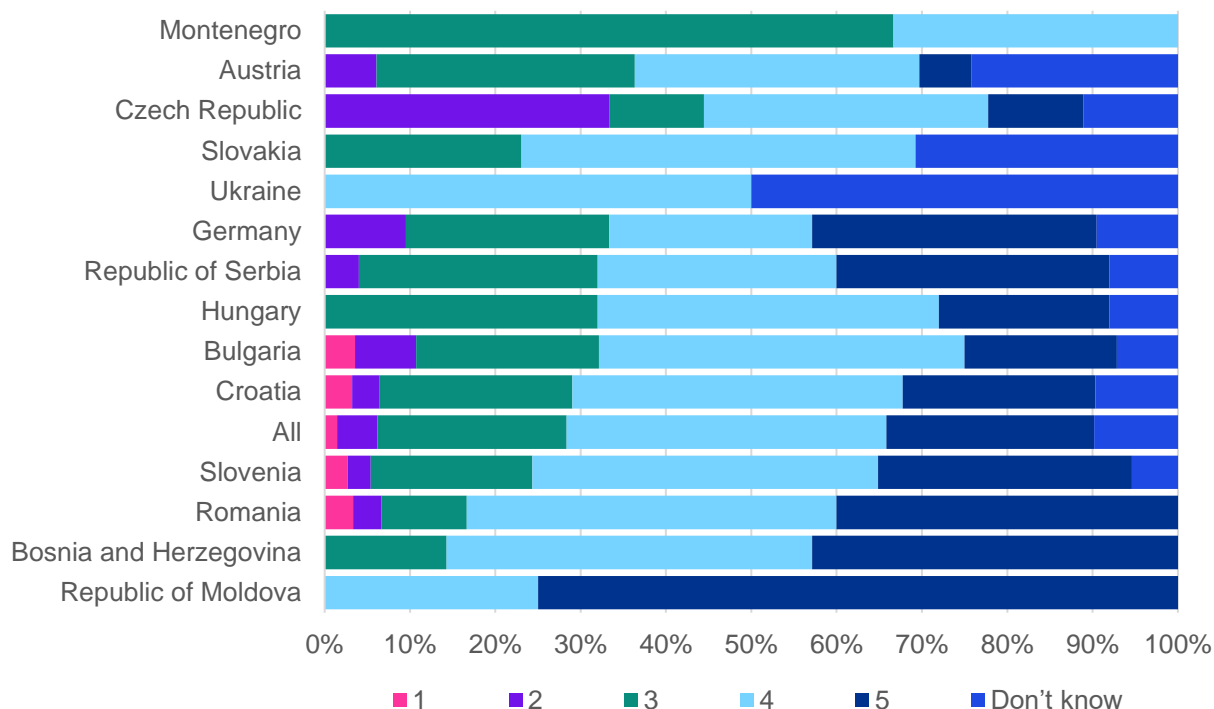
**Figure 17: Agreement with the assertion: ‘Local stakeholders were aware of the DTP and supported its goals’ (by countries)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

The general opinion of respondents is that **programme institutions responsible for information distribution were able to effectively communicate information necessary for applying for and implementing the programme**. 62% of respondents claim that the NCP of the DTP and other programme institutions responsible for information distribution could reach relevant stakeholders and could effectively communicate information necessary for participating in the programme, while a further 22% took on a moderate stance, while only 6% responded rather negatively to this question (see the figure below).

**Figure 18: Agreement with the assertion: ‘Programme institutions responsible for information distribution could reach relevant stakeholders and could effectively communicate information’ (by countries)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

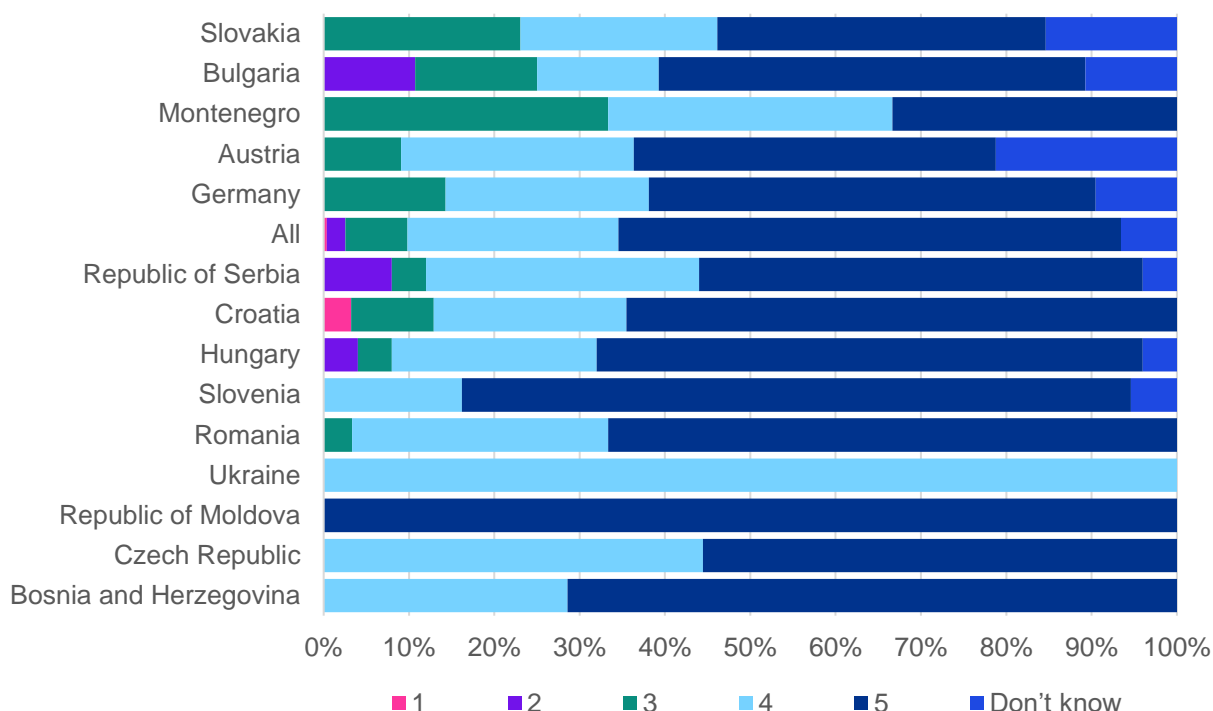
There are some differences among how respondents evaluate the effectiveness of information flows depending on SOs. Under SO 1.1 (Improve framework conditions for innovation) and SO 2.3 (Foster the restoration and management of ecological corridors) respondents’ opinion was slightly more negative, than that of the average, while under SO 4.1 (Improve institutional capacities to tackle major societal challenges) SO 2.2 (Foster sustainable use of natural and cultural heritage and resources), and SO 3.2 (Improve energy security and energy efficiency) beneficiaries valued the effectiveness of information distribution more positively. We could discover bigger differences among countries: the Czechia, Bulgaria and Germany were generally more negative about the performance of programme institutions in securing the availability of information, while the Republic of Moldova, Bosnia and Herzegovina and Romania were more positive. Regarding the three different project calls, there were only slight differences in the assessment of the beneficiaries. The public and private partners had similar views on this matter as well.

**Whenever support was needed during the implementation process, programme management authorities were available** – according to 84% of respondents (see the figure below). Respondents from Serbia and Bulgaria were on a more negative opinion



than the average, while satisfaction was 100% in a plenty of countries (e.g., Bosnia and Herzegovina, Czechia, Moldova). In the case of Specific Objectives, respondents were the most pessimistic in 4.1 (Improve institutional capacities to tackle major societal challenges), in SO 3.1 (Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas) and SO 1.1 (Improve framework conditions for innovation) and SO and the most optimistic in SO 2.4 (improve preparedness for environmental risk management) and SO 2.3 (Foster the restoration and management of ecological corridors). Generally, the public sector has a more positive opinion (with 88% agreement rate) than the private. Although, there are only slight differences in the assessment of the three different calls regarding this matter (Figure 19).

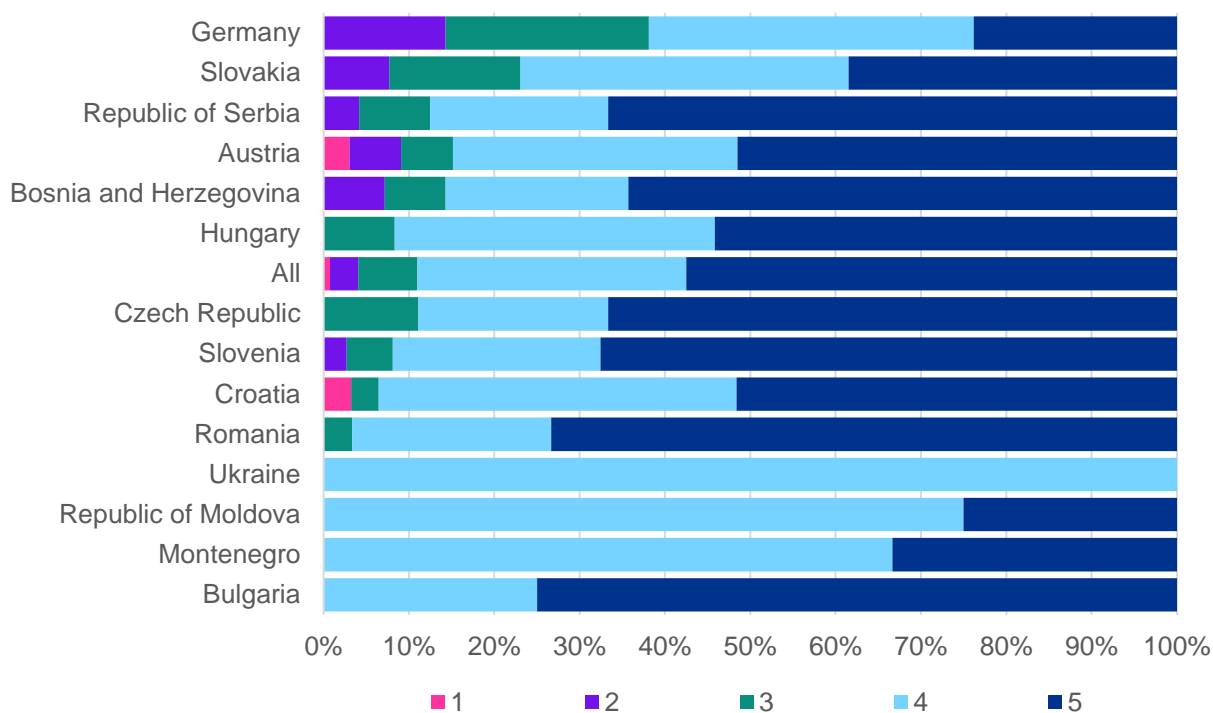
**Figure 19: Agreement with the assertion: ‘Programme management authorities were available when support was needed in implementing the project’ (by country)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

As demonstrated on Figure 20, lack of human or institutional resources was not characteristic of the projects: 88% of **respondents reported that they had the necessary human and institutional resources** applying for funds and implementing the project. Amongst countries, difficulties in this regard were reported mainly from Germany, Austria and Slovakia, while Bulgaria, Montenegro, the Republic of Moldova and Ukraine had more positive experiences on this matter (see the figure below). In the case of the SOs, under SO 2.3 (Foster the restoration and management of ecological corridors) and SO 3.1 (Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas) the share of negative responses was higher than in other SOs, and in SO 1.2 (Increase competences for business and social innovation) and SO 3.2 (Improve energy security and energy efficiency) the respondents gave somewhat more positive answers. Notable differences cannot be discovered among respondents neither comparing public partners with private partners, nor the different project calls.

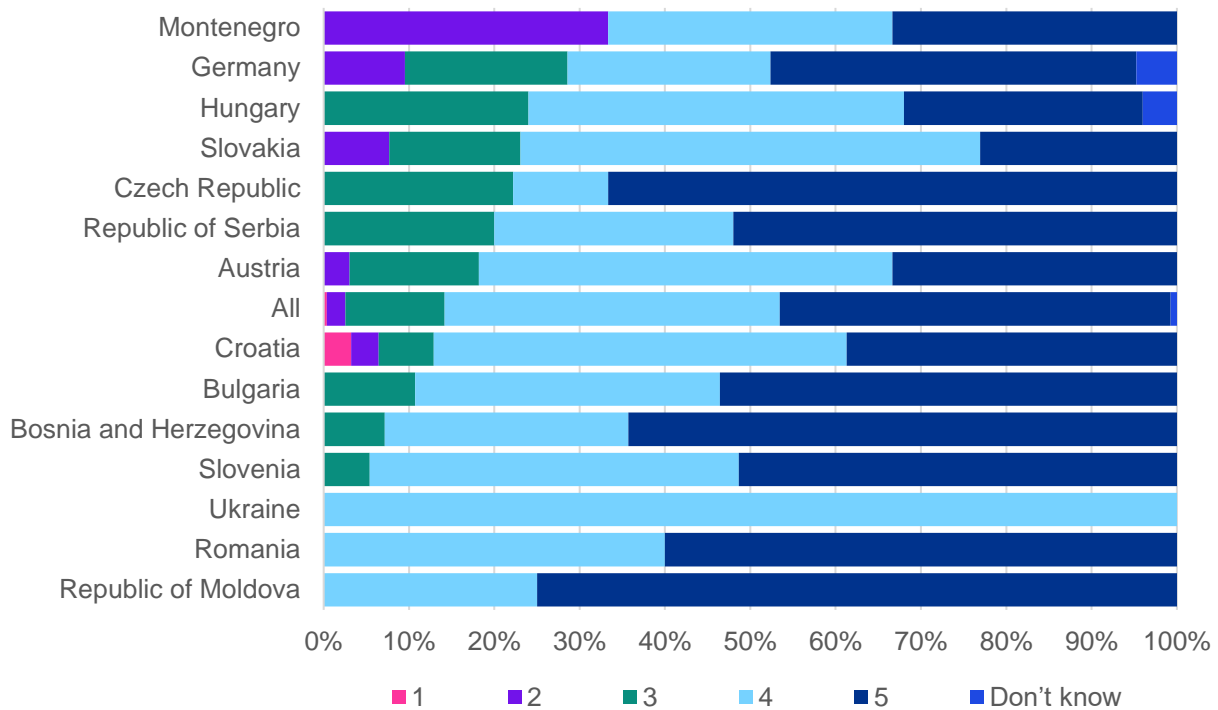
**Figure 20: Agreement with the assertion: ‘Partners had the necessary resources to apply for funds and manage programme implementation’ (by country)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

**Finding common problems, and then prioritising amongst them was not a problem among respondents** – according to 85%. Respondents from some SOs were on a more moderate opinion than others, and we received the most negative assessment under SO 2.3 and SO 3.1, quite contrary to SO 2.1 and SO 1.1, where responses were more positive than the group average. Taking a look at countries, we see, that in Montenegro and Germany finding and prioritising among problems was a little bit more of an issue than in others. Although, in Moldova, Romania and Ukraine, 100% of the respondents agreed with the statement that common problems were shared among participating countries, and they were able to prioritise and find mutual solutions (see the figure below). Comparing public partners with private partners there were identified only slight differences, as well as in the different project calls.

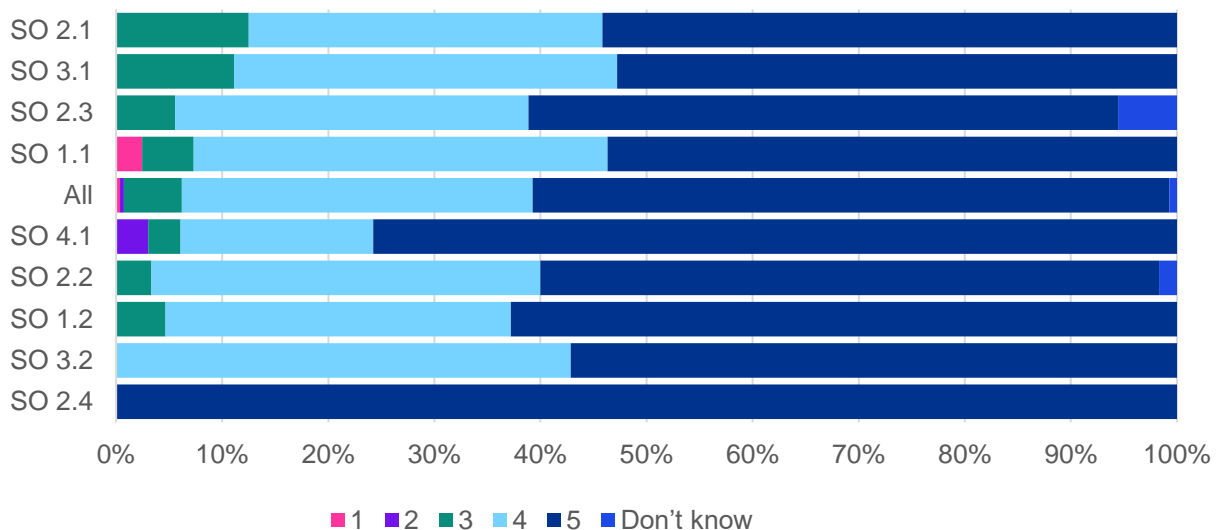
**Figure 21: Agreement with the assertion: ‘Common problems were shared among participating countries, and they were able to prioritise and find mutual solutions’ (by country)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

As demonstrated on Figure 22, almost all respondents (93%) agreed with the importance of **involving the relevant stakeholders** into the implementation of the project to achieve the project’s desirable objectives (see the figure below). In this regard there were no outliers in the SOs, countries, project calls, or between public and private project partners. The least favourable assessment came from the respondents of SO 2.3 (foster the restoration and management of ecological corridors, 83% agreed), and Germany (81% agreed).

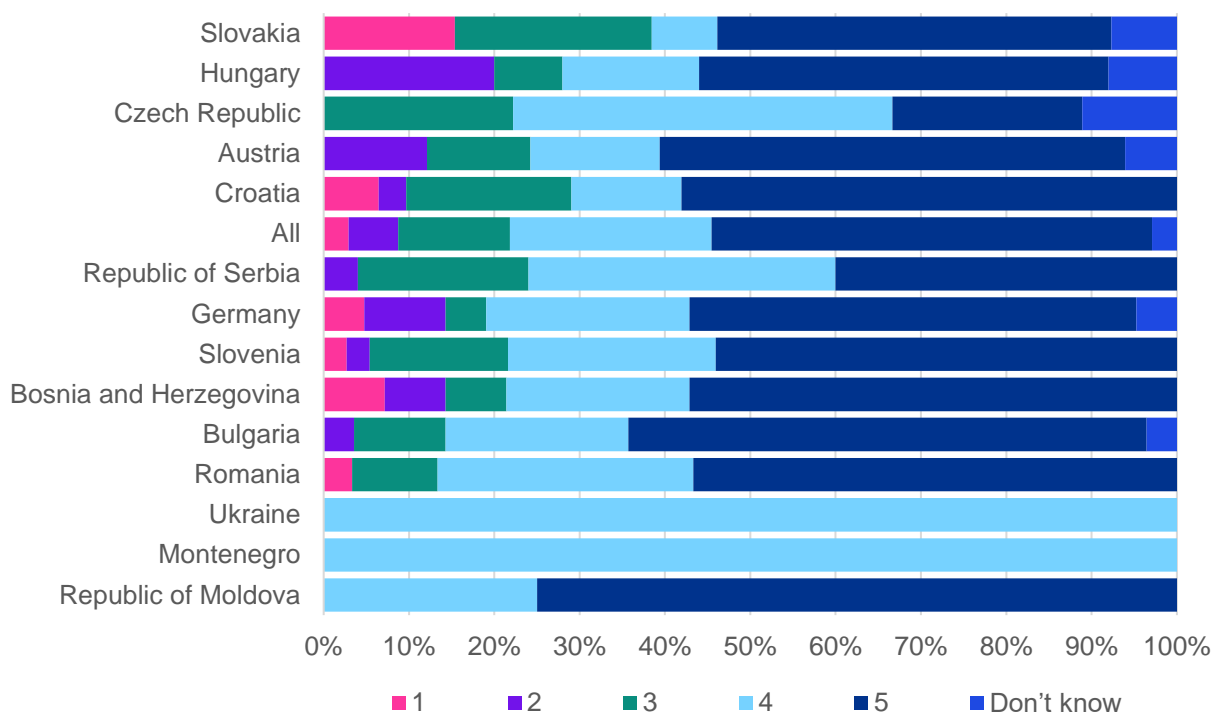
**Figure 22: Agreement with the assertion: ‘It was important to involve the right mix of stakeholders’ (by SO)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

We could identify more variance in the opinion of respondents regarding the **political or legal barriers** in implementing the projects outputs in partner countries. However, the majority of respondents (75%) could not identify any barriers, a further 13% took on a moderate opinion, while 8% was rather pessimistic in this regard (Figure 23). Under SO 3.2 (improve energy security and energy efficiency), SO 2.3 (foster the restoration and management of ecological corridors) and SO 3.1 (Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas) the ratings were more negative than the average. While the share of positive responses was higher in SO 2.1 and SO 2.4. Regarding countries, the share of negative opinions was higher in Slovakia, Hungary, Germany, and Bosnia and Herzegovina, while respondents were more optimistic in Montenegro, Republic of Moldova and Ukraine. The beneficiaries from private and the public sector has a similar opinion in this matter, similar to the different project calls.

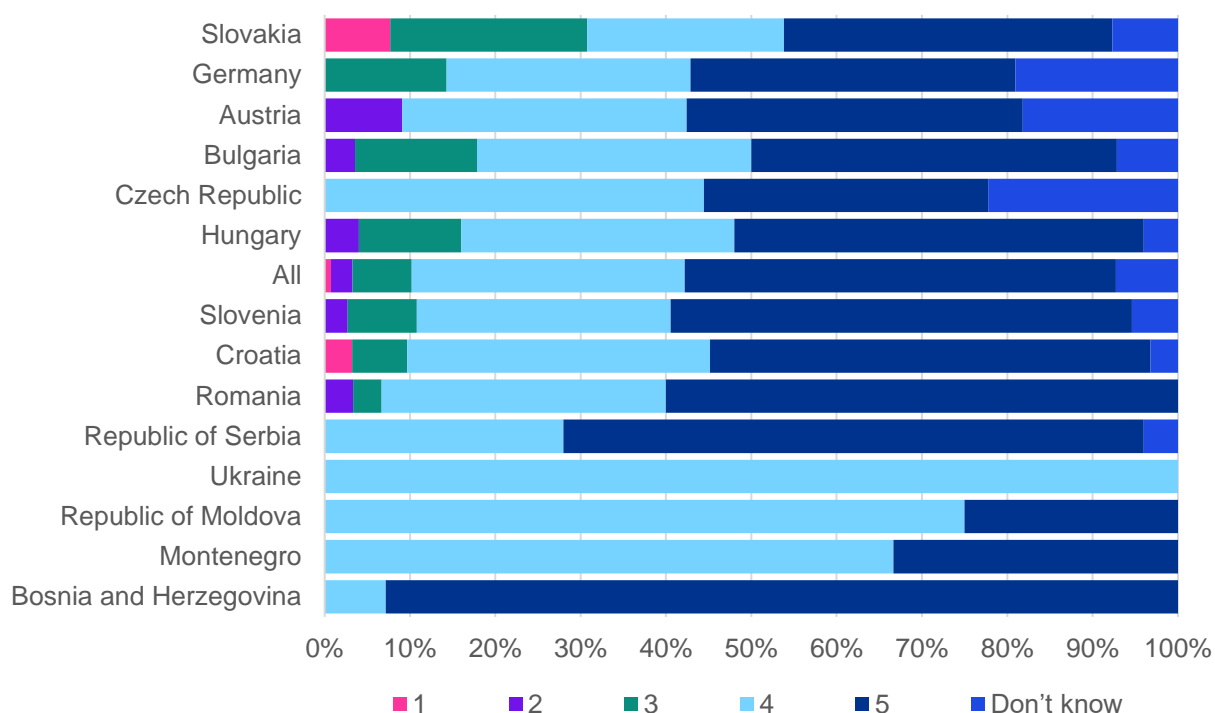
**Figure 23: Agreement with the assertion: ‘There were no political or legal barriers in implementing the outputs of the project’ (by country)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

Majority of respondents (83%) was on the opinion that **the programme was complementary with other national and EU-level programmes** (see the figure below). Considering SOs, respondents under SO 3.1. and SO 3.2 (improve energy security and energy efficiency) had more negative opinions than the others, and the respondents of SO 1.1 and SO 1.2 were rather more optimistic than the average. Moreover, some countries' respondents agreed with the statement by 100% (e.g., Bosnia and Herzegovina, Montenegro, Republic of Moldova), although Austria and Slovakia had more pessimistic views on this matter. There are only slight differences between the assessment of the public and private entities, with the public sector being a bit more optimistic. There could not been identified significant differences between the different project calls either.

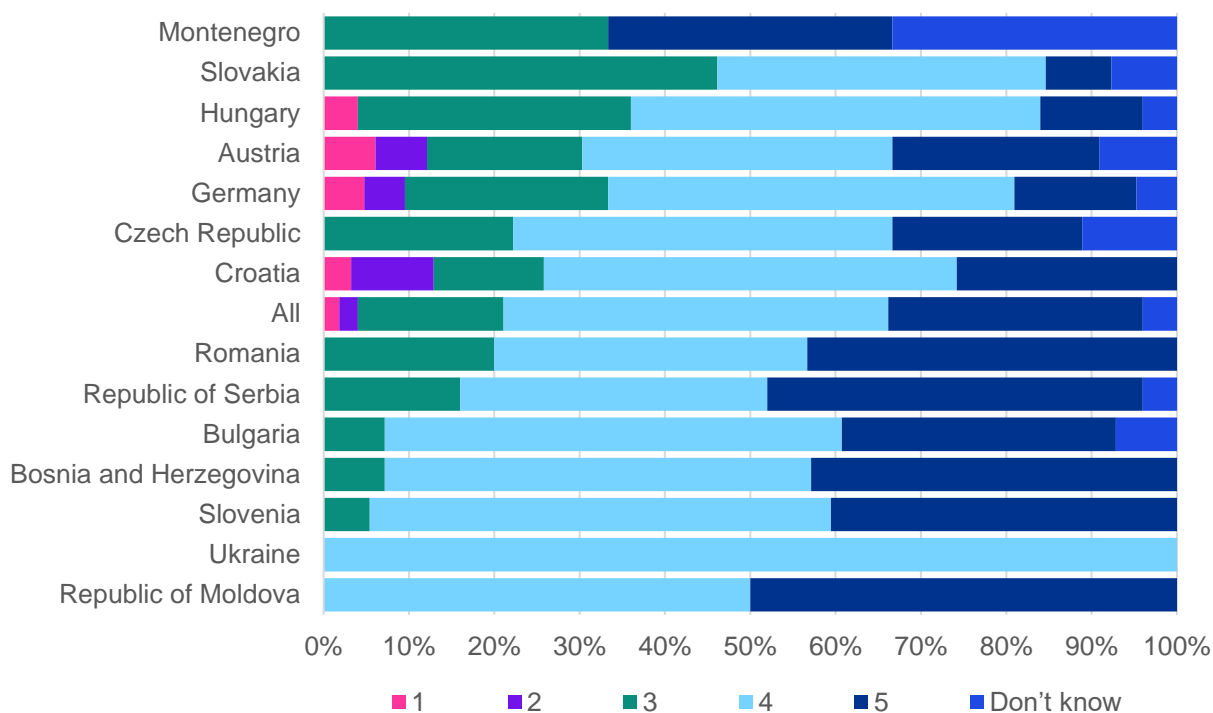
**Figure 24: Agreement with the assertion: ‘The DTP was complementary with other national and EU-level programmes’ (by country)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

The majority of respondents (75%) were positive regarding the question whether **the programme intervention was large enough to influence the behaviour of cooperating actors**. 17% of respondents took on a moderate stance, while 4% of them were more pessimistic. Especially under SO 3.2 and SO 3.1 (Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas) the share of negative responses was higher, while under SO 2.4 (Improve preparedness for environmental risk management) and SO 4.1 the share of positive ratings was higher than the average. We received very different ratings from different countries: respondents were more pessimistic in Croatia, Austria and Germany, while respondents from Republic of Moldova and Ukraine, rated this question more positively than the average (Figure 25). Notable differences cannot be discovered among respondents neither comparing public partners with private partners, nor the different project calls.

**Figure 25: Agreement with the assertion: ‘Project intervention was large enough to influence the behaviour of cooperating actors’ (by country)**

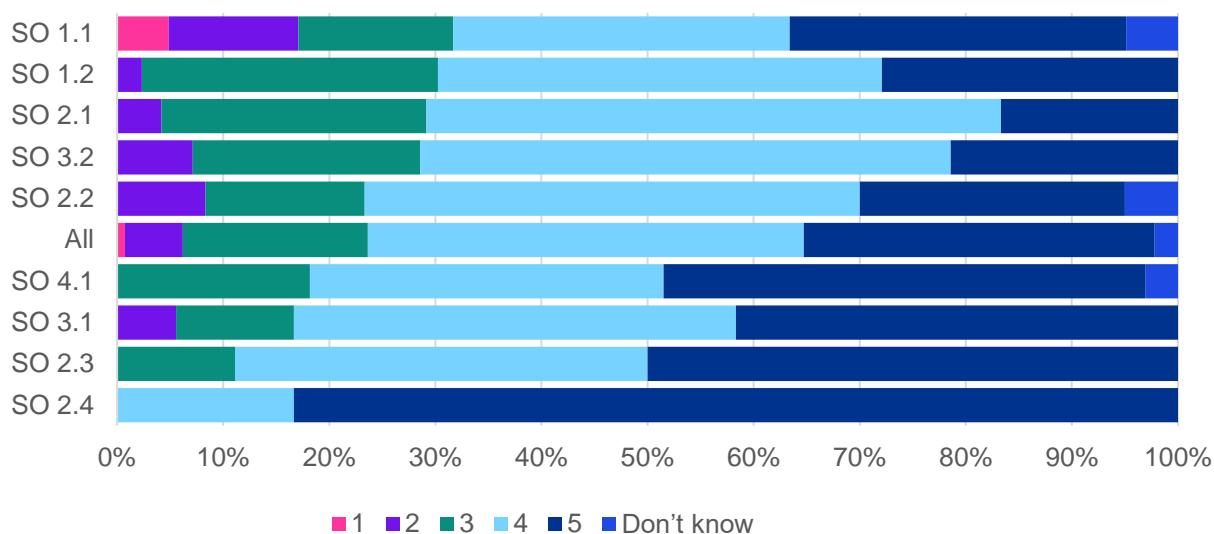


Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

#### 4.4.4 General factors of project implementation

The majority of survey respondents (74%) sees that **regions involved in projects cooperated very closely** during the implementation. 17% valued the intensity of cooperation as moderate, and a further 6% was on a rather negative opinion regarding this indicator. However, there are some notable differences in the judgments of respondents among specific objectives. Especially respondents from projects under SO 1.1 (Improve framework for innovation) have a more negative picture about how intense the cooperation was among the regions, while in SO 2.4 (Improve preparedness for environmental risk management) and SO 2.3 respondents were much more optimistic (see the figure below). Regarding countries, Moldova and Serbia had more optimistic view on this matter, while we received the most negative answers from the Czechia and Germany. Notable differences cannot be discovered among respondents neither comparing public partners with private partners, nor the different project calls.

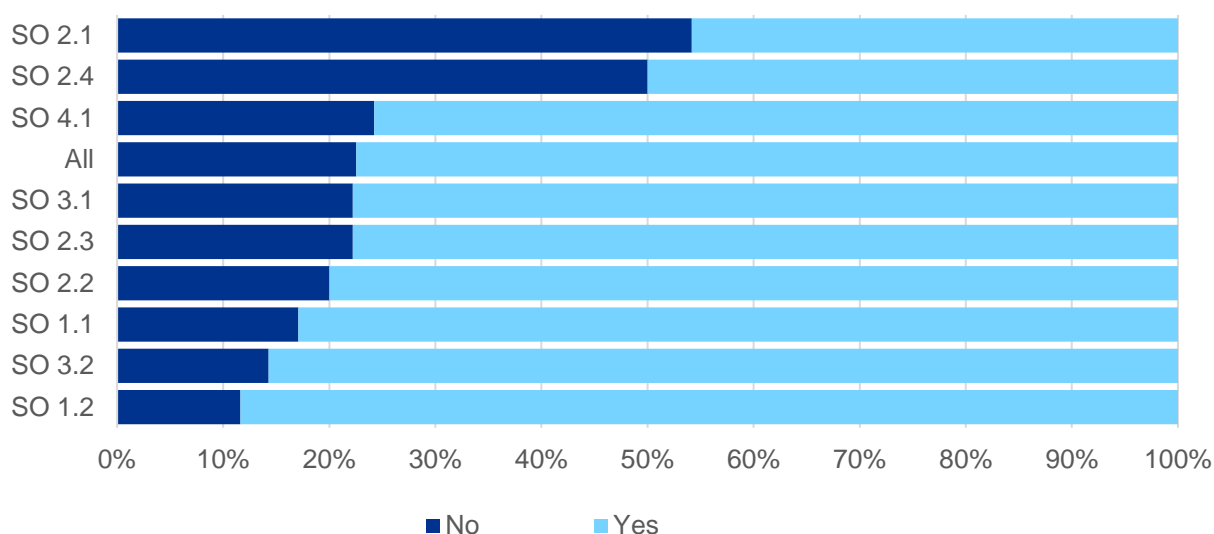
**Figure 26: Agreement with the assertion: 'Intensity of cooperation among the regions involved in the project' (by SO)**



Source: KPMG/VVA (2023). Based on survey responses. 1: strongly disagree – 5: strongly agree.

As the figure below shows, 77% of respondents claimed that the **private sector was involved** in their projects without being a partner. Forms of private sector involvement was mostly consultancy during developing project outputs and/or evaluating the finished project outputs. A significant number of respondents claimed that the private sector is using the outputs of the project. The private sectors involvement without being a partner was the most significant in Slovakia (92%), Bosnia and Herzegovina (86%) and Slovenia (84%). The private sector did not involve in the projects without being a partner in Ukraine, and the sector's involvement was also low in Moldova (50%). Comparing project calls, the private sector's involvement was the lowest in the 2<sup>nd</sup> call (63%), which was followed by the 1<sup>st</sup> call (77%) and the 3<sup>rd</sup> call (83%).

**Figure 27: Answers to the question: 'Was the private sector involved in the project without being a partner?' (by SO)**

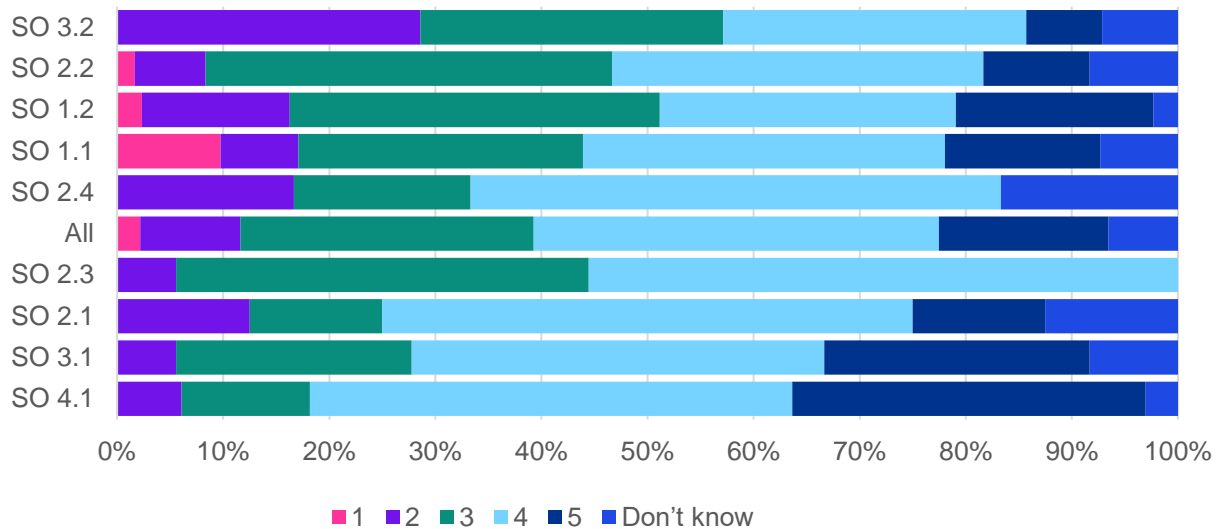


Source: KPMG/VVA (2023).

54% of respondents rated positively their **projects' embeddedness in regional development processes** (Figure 28). 28% took on a moderate stance, while a further

11% rated the embeddedness low. There are differences among specific objectives, namely under SO 3.2, SO 2.4 (Improve preparedness for environmental risk management) and SO 1.1 the share of negative feedback is higher than the average, while in the case of and SO 4.1 (Improve institutional capacities to tackle major societal challenges) and SO 3.1 the respondents' opinions were more positive.

**Figure 28: Answers to the question: 'How would you rate your project's embeddedness in regional development processes?' (by SO)**

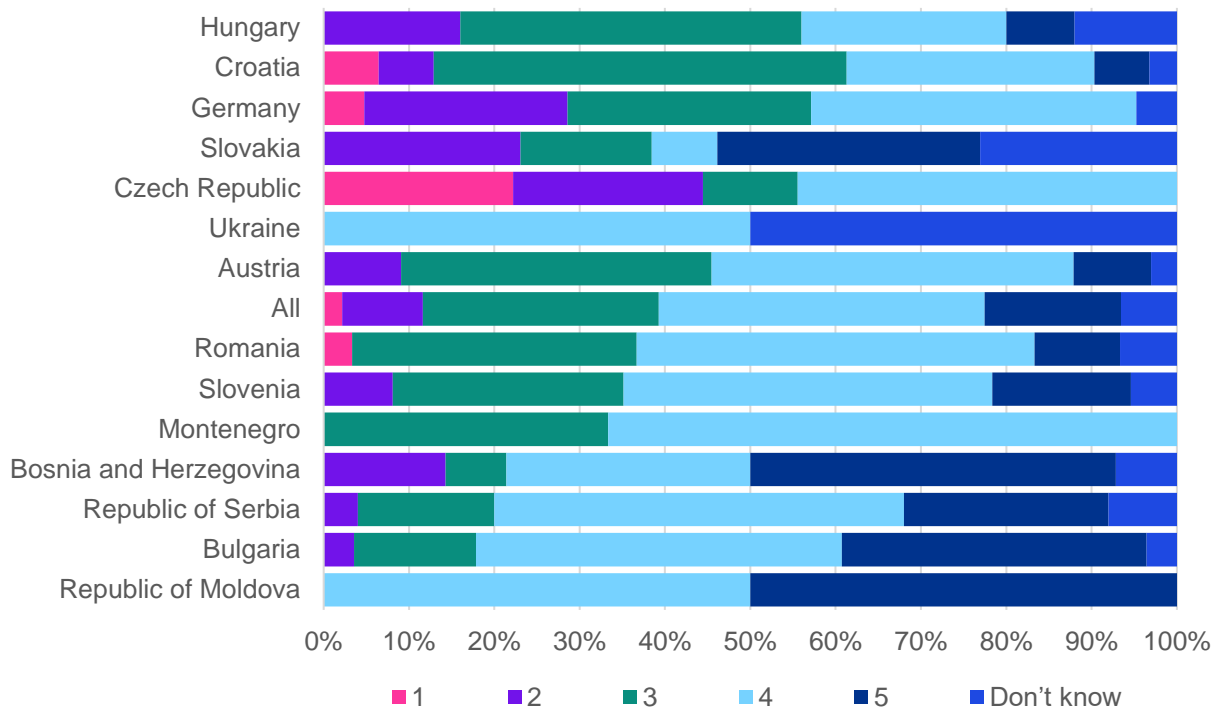


Source: KPMG/VVA (2023).

Comparing countries, the most negative responses regarding the **projects' embeddedness in regional development processes** came from the Czechia, Germany and Slovakia, on the other hand respondents were more positive in Moldova and Bulgaria. Notable differences cannot be discovered among respondents neither comparing public partners with private partners, nor the different project calls (Figure 29).



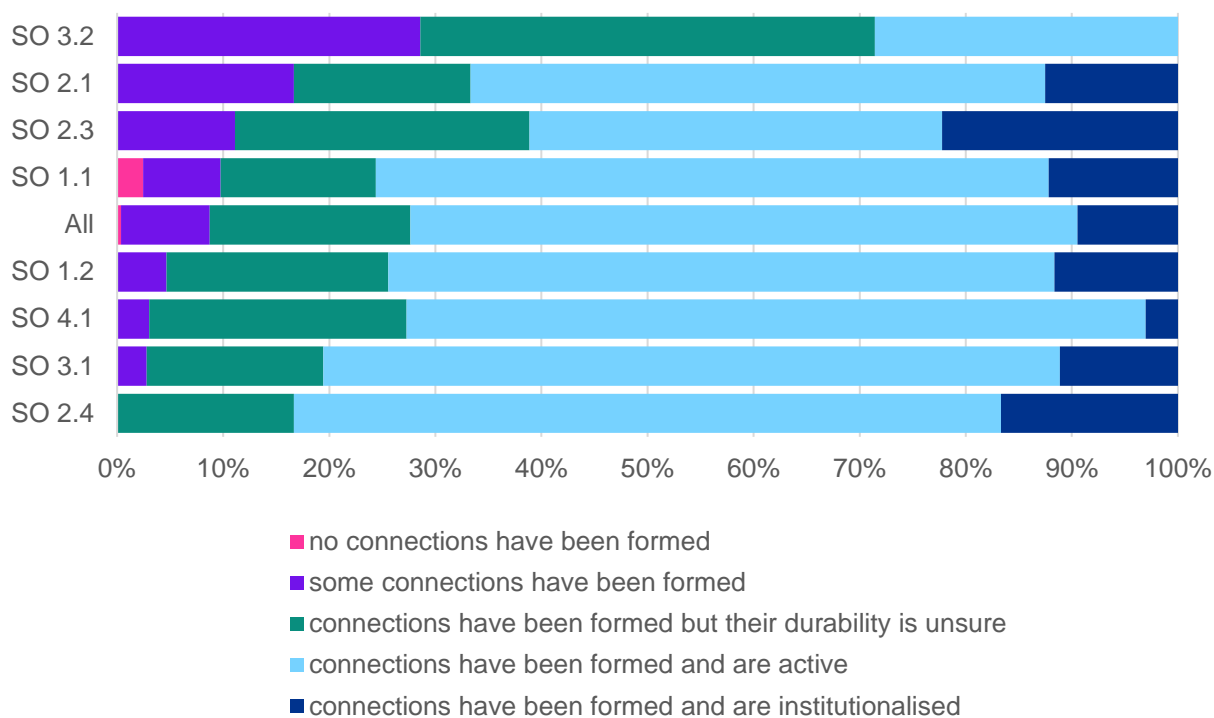
**Figure 29: Answers to the question: ‘How would you rate your project’s embeddedness in regional development processes?’ (by country)**



Source: KPMG/VVA (2023).

91% of respondents sees that **connections have been formed as an effect of the cooperation**, while a further 8% stated that only some connections were formed, and fewer than 1% was unsuccessful in generating some forms of connections (see the figure below). The most successful SOs are SO 2.4 (Improve preparedness for environmental risk management), SO 3.1 (Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas), and SO 4.1 (Improve institutional capacities to tackle major societal challenges). Comparing countries, the most successful were Bosnia and Herzegovina, Moldova and Serbia in the formation of connections, although in Ukraine only some connections have been formed.

**Figure 30: Answers to the question: ‘How would you rate your project’s success in generating an increase in cooperation among your project’s target groups?’ (by SO)**



Source: KPMG/VVA (2023).

#### 4.4.5 The effects of projects in the region

The following table gives a comprehensive overview on the projects’ impacts based on the result of the survey analysis in the following categories:

- Intensity of cooperation;
- Effects of projects in cooperation;
- Integration of non-EU countries;
- Capacity building;
- Private sector;
- Outputs as future inputs in legislation or policy-making;
- Additional effects.

The table contains the weighted average of ratings given by survey respondents to each question regarding programme effects by specific objectives and country of origin on a scale of 5, where 5 is the most positive rating and 1 is the lowest, according to the following notions:

- The weighted average of rating is higher than 4
- The weighted average of rating is between 3 and 4
- The weighted average of rating is between 2 and 3
- The weighted average of rating is between 1 and 2

**Table 9: Analysis of survey results in connection with the effects of programme implementation (by SOs and countries)**

Question	All	Specific objectives									Countries												Calls					
		1.1	1.2	2.1	2.2	2.3	2.4	3.1	3.2	4.1	AT	BA	BG	HR	CZ	DE	HU	ME	MD	RS	RO	SK	SI	UA	1st	2nd	3rd	
<b>Intensity of cooperation</b>																												
How would you rate the extent to which the project contributed to increasing the cooperation of key actors in the programme area?	3.84	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Effects of projects in cooperation</b>																												
How would you rate the following objectives were reached after implementing the projects:																												
It is possible to further build upon the knowledge resulting from project implementation in future cooperations	4.59	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Knowledge gaps were filled by linking actors with complementary thematic specialisation, experiences, methodological approaches or geographical scope	4.06	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Thematic networks were strengthened in the programme area	4.11	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Integration of non-EU countries</b>																												
How would you rate your project's contribution to the integration of non-EU countries in the Danube region?	3.64	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Capacity building</b>																												
How would you rate your project's contribution to enhanced capacity building in the Danube region?	3.98	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Private sector</b>																												
How would you rate the private sector can use the output(s) of the project?	4.03	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Question	All	Specific objectives										Countries										Calls						
		1.1	1.2	2.1	2.2	2.3	2.4	3.1	3.2	4.1	AT	BA	BG	HR	CZ	DE	HU	ME	MD	RS	RO	SK	SI	UA	1st	2nd	3rd	
Please give your ratings for the following categories based on the category's relevance for private sector benefits:																												
Policies and the regulatory framework became more clear, thus decreasing the cost of compliance for businesses	2.74	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Private sector can invest in the output(s) generated	2.96	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Countries involved in the project harmonise their regulatory frameworks, thus helping businesses to broaden their activities to other countries in a more cost-effective way	2.52	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Outputs as inputs in future legislation or policy-making</b>																												
How would you rate the following objectives were reached after implementing the projects																												
Project outcomes can be used for future legislation/policy/investments and further initiatives	4.32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Project implementation serves with important lessons for designing future transnational cooperation programmes/projects	4.45	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Programme effects</b>																												
Would you agree that project results would not have been achieved had the project not get financial support from the DTP?	4.45	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Source: KPMG/VVA (2023).

Overall, survey respondents view that their **projects had positive effects on the cooperation** of key actors in the programme area with an average assessment of 3.84 out of 5. Their ratings are especially positive in SO 2.3 (Foster the restoration and management of ecological corridors) and SO 4.1 (Improve institutional capacities to tackle major societal challenges), and in Republic of Moldova and Bulgaria. There were only slight differences in the different project calls.

Almost all respondents (4.57) think that the **result of their projects serves as good basis for future cooperation** and there are only slight variations among SOs, countries and project calls in this respect. There is a bigger variance regarding the statement that ‘the majority of respondents managed **to fill knowledge gaps** by linking actors’, with an average assessment of 4.06. The picture is less positive regarding this matter in SO 3.2 (Improve energy security and energy efficiency) and SO 1.1 (Improve framework conditions for innovation), and in Slovakia, Ukraine and the Czechia. There were only slight differences in the different project calls in this matter. Project beneficiaries are on the opinion that they managed to **strengthen the thematic networks** in their field in their projects’ thematic areas with an average assessment of 4.11. Only respondents from SO 3.2, SO 2.4 and from Slovakia and Ukraine gave fewer positive ratings. There were no significant differences in the different project calls in this matter as well.

Survey respondents rated the success of **integration of non-EU countries** in the Danube region as moderately positive (3.64 out of 5), and in SO 1.1 and Slovakia respondents didn’t think that their projects contributed to this objective much. In Bosnia and Herzegovina, Moldova, and Ukraine (3 out of the 4 non-EU countries participating in the DTP) respondents gave higher ratings than the average. Respondents from the 1<sup>st</sup> call had a slightly negative opinion in comparison to the 2<sup>nd</sup> and the 3<sup>rd</sup> calls.

Respondents view their project’s success in **building capacities** as rather positive (3.98 out of 5), moreover in SO 2.4 and SO 4.1 their assessment was higher, while in the case of SO 1.1 responses were lower than the average. Projects were more successful in this regard in Moldova and Bulgaria, however respondents from Slovakia are more negative than the average in this regard. Respondents from the 3<sup>rd</sup> call were more optimistic on this matter than in the 1<sup>st</sup> and the 2<sup>nd</sup>.

Survey respondents think that their **outputs can be beneficial for the private sector** (4.03 out of 5): ratings are positive in most of the SOs, although in SO 2.1 beneficiaries were less positive than the average. When analysing responses among countries Ukraine, and Slovakia stand out with more negative ratings than the average. Respondents from the 2<sup>nd</sup> call were slightly less positive than in the 1<sup>st</sup> and the 3<sup>rd</sup>.

In the other questions regarding the private sector, the beneficiaries had more negative assessments, although it is partly due to the fact that in this question group we received more ‘I don’t know/can’t judge’ answers than in the other questions. Firstly, survey respondents agree less (2.74 out of 5) with the assertion that as a result of the cooperation **policies and the regulatory framework became clearer, thus decreasing the cost for businesses**. The most negative responses came from SO 3.2, SO 2.1, and SO 2.2, while in SO 4.1 and SO 3.1 the beneficiaries’ assessment was more positive. We have not received any numerous answers for this question from Ukraine, and most of the negative responses came from Slovakia, Germany and Austria. Respondents from the 3<sup>rd</sup> call were the most negative, while in the 2<sup>nd</sup> call the most positive in this matter.

The respondents’ assessment was quite moderate (2.96 out of 5) regarding the statement of ‘**private sector can invest in the output(s) generated**’. We received the most negative responses from SO 2.1, and Slovakia and the Czechia (we neither received any

responses for this question in the case of Ukraine). Although, respondents from SO 4.1, Bosnia and Herzegovina and Moldova gave more positive assessments in this regard. The opinion of the 2<sup>nd</sup> call respondents was slightly more negative than in other calls.

We received the most negative assessment (2.52 out of 5) from the table above for the statement of ‘**countries involved in the project harmonise their regulatory framework, thus creating an opportunity for businesses to broaden their activities to other countries in a more cost-effective way**’. Respondents from SO 2.1 and SO 2.2, SO 1.2, gave the most negative assessments, among countries Germany, Slovakia Austria and the Czechia have the most negative opinion in this matter. Although, respondents from Moldova gave more positive assessments. 3<sup>rd</sup> call’s respondents gave a slightly more negative response than from the other calls.

On the other hand, respondents rated their **outputs usability in legislation, policy-making investments and further initiatives** very positively (4.32 out of 5). Only in Slovakia, Hungary and Croatia were the responses slightly more negative. Responses are more unanimous (4.45) regarding **project results’ usefulness in designing future transnational cooperation programmes and projects**, where the ratings are very high. We received similar responses regarding the statement of ‘**project results would not have been achieved had the project not get financial support from the DTP**’ with an overall assessment of 4.45. The responses were high in all SOs, countries and calls.

#### 4.4.6 Governance of the EUSDR

Generally, all respondents rated the effect of the support on the governance of the EUSDR given under SO 4.2 positively, although respondents from Serbia and Slovenia were less positive in this regard. Respondents agreed the most with the question that the programme support was necessary in making the governance of the EUSDR more effective.

Respondents were less positive regarding the statement of the ‘implementation of the EUSDR is modified to be more efficient’, especially in Slovenia, and in the SMF call.

The following table gives a comprehensive overview on results of the survey analysis and uses the notation already introduced:

**Table 10: Survey results in connection with the effect of support given under SO 4.2**

Survey question	All	Countries								Calls				
		AT	HR	DE	HU	RS	RO	SK	SI	SMF	PAC (1st)	PAC (2nd or 3rd)	DSP (1st)	DSP (2nd)
How would you rate the programme support’s impact on making the governance of the EUSDR more effective?	4.13	●	●	●	●	●	●	●	●	●	●	●	●	●
Would you agree, that the programme support was necessary in making the governance of the EUSDR more effective?	4.42	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Additional effects</b>														
Outputs produced can be used for future programmes/next programming period	4.21	●	●	●	●	●	●	●	●	●	●	●	●	●
Implementation of the EUSDR is modified to be more efficient	3.38	●	●	●	●	●	●	●	●	●	●	●	●	●
A more appropriate narrative is found in order to communicate the goals of the EUSDR for public and private actors	3.67	●	●	●	●	●	●	●	●	●	●	●	●	●




Source: KPMG/VVA (2023).

## 5. Conclusions

### 5.1 Testing the ToC models

To assess the Theory of Change models, we synthesised the results of the various research activities (desk research, interview, survey), based on which we could judge the elements and causal linkages of the models. Each causal link and each element of the theory were assessed critically including the assumptions on external factors and additional effects.

Notation of the assessment charts is as follows:

-  Confirming evidence of the element / causal relationship
-  Insufficient or contradicting evidence of the element / causal relationship
-  Disconfirming evidence of the element / causal relationship

#### 5.1.1 Theory of change models for 'traditional' project calls

In the cases of ToC models for traditional projects, since the external assumptions are the same, first we tested their validity. Generally, all of the assumptions were validated by either stakeholder interviews or the survey, however slight differences can be observed among SOs and countries, as summarised in the following table.

**Table 11: Validation of external factors in each ToC model by SOs, countries and calls**

Assumption	All	Specific objectives									Countries										Calls							
		1.1	1.2	2.1	2.2	2.3	2.4	3.1	3.2	4.1	AT	BA	BG	HR	CZ	DE	HU	ME	MD	RS	RO	SK	SI	UA	1st	2nd	3rd	
Local stakeholders are aware of the DTP and support its goals.	3.66	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
NCPs and other programme institutions responsible for information distribution can reach relevant stakeholders and can effectively communicate information.	3.49	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Programme management authorities are capable and stable enough to execute the programme in an effective and efficient way.	4.20	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Potential applicants have the necessary resources (human and institutional) to apply for funds and manage programme implementation.	4.39	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Common problems are shared among participating countries, they are able to prioritise and find mutual solutions.	4.26	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
The right mix of stakeholders are involved.	4.50	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
There are no political or legal barriers in implementing the output of the project in either of the cooperating countries or in other regions.	4.07	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●





programme management bodies that in the case of strategy the difficulty is that sometimes stakeholders get stuck in putting the strategy in practice.

According to the interviews, to have an impactful strategy is challenging, in many cases, stakeholders of the projects are unable to scale up the strategies into policies/further initiatives. On the other hand, pilot actions have more visibility, and it is harder to identify those results, which were built into the policy making process. It was also mentioned by the interviewees that stakeholders have less of a role in the strategies and are therefore less involved than in the other outputs, they are mainly interested in tools and pilot actions.

Although, it is still possible to identify some projects that succeeded to produce outputs which further served as an input in decision-making, or at least policy recommendations were formulated. In the case of Tid(y)Up, policy recommendations were formulated, together with the Danube Commission and the concerned areas of the Danube Strategy. These recommendations can be utilised in the policy-making process in the following years. In the case of JOINTISZA the results were accepted on ministerial levels and were integrated into the flood protection plans of Danube countries, and in the Danube Sediment project, the outputs were fed into the Danube River Basin Management Plan and the Danube Flood Risk Management Plan. Both projects managed to reach a commitment from ministries and government offices, which according to programme management bodies increases the chances of the outputs to be further used in higher-level decision-making processes, especially when these organisations are involved in the very beginning of the project, for example as partners.

The example of the JOINTISZA and Danube Sediment projects further strengthens the opinion of programme management bodies that projects that can build on an existing framework are more successful in finding channels to integrate their outputs into decision-making or further strengthen the cooperation. In the area of water management projects can build on a living network either by reaching out to organisations like the ICPDR or by building on the outputs from previous projects like FLOODRIK in the case of JOINTISZA.

The performance of strategies in building institutional capacities is also questionable, especially in SO 2.2, SO 2.3 and SO 2.4 and Germany, Montenegro and Austria, which probably contributed to the findings that building further cooperation and supporting the integration of non-EU countries into the region are also goals which were only moderately supported by the creation of strategies.

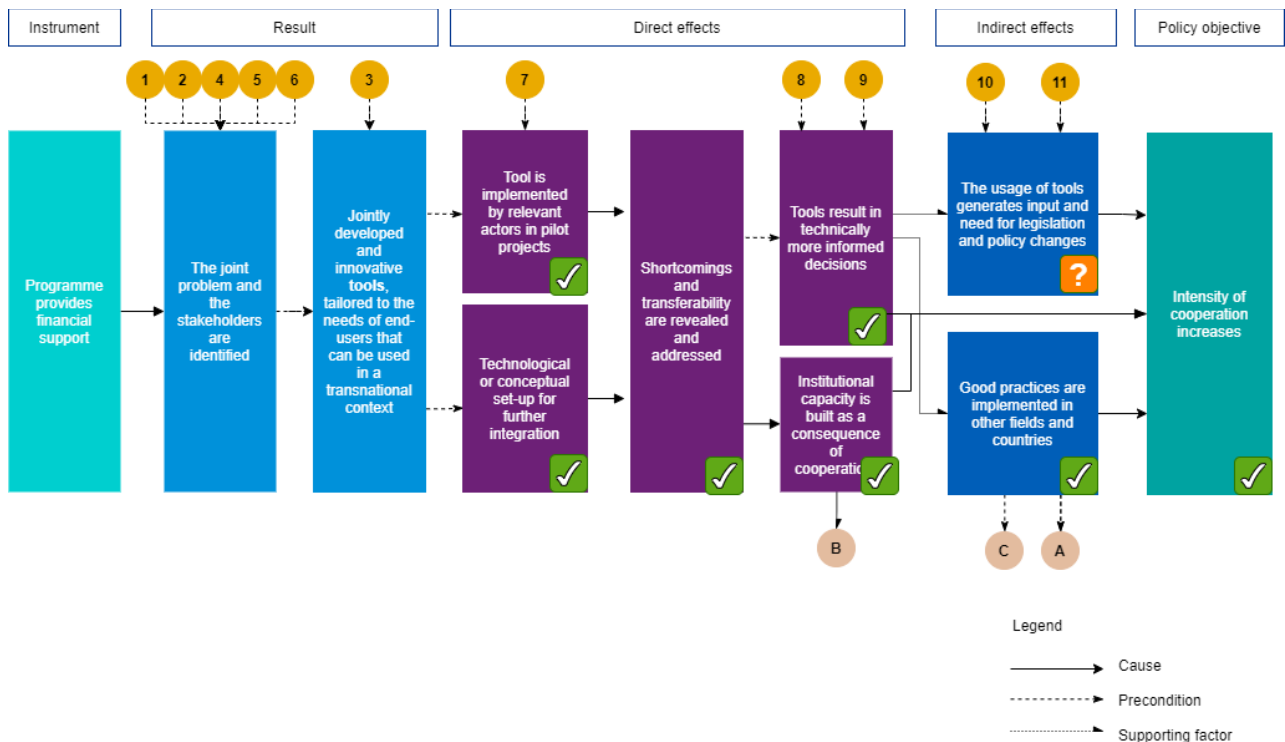
The conclusions regarding the elements of the ToC model for strategies are summarised in the table below detailed by SOs, countries and calls:

**Table 12: Results of ToC validation for strategies by SOs, countries and calls**

	All	Specific Objectives									Countries										Calls						
		1.1	1.2	2.1	2.2	2.3	2.4	3.1	3.2	4.1	AT	BA	BG	HR	CZ	DE	HU	ME	MD	RS	RO	SK	SI	1st	2nd	3rd	
<b>Common understanding of joint problems</b>	4.23	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>A common vision was agreed among partners in the specific field with mid- and long-term objectives</b>	4.14	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Stakeholders were identified and became involved in planning and implementation of the strategy</b>	4.03	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●



**Figure 32: Validated theory of change - tools**



Source: KPMG/VVA (2023).

The effect of tools in reaching the programme’s main goal (increasing the cooperation of key actors) is higher than strategies in all specific objectives. The effects were rated slightly less negatively in SO 2.1 and in SO 2.2. According to the programme management bodies, tools are easier to comprehend, that is one of the reasons why tools were more successful in reaching the objectives of the Programme.

Tools, such as databases, software, decision-making trees, trainings, and websites, are essential components of many projects. They require constant and continuous cooperation from participating partners and are developed throughout the project period. Moreover, they can be used even after the project has ended its implementation. For instance, the DAREFFORT project standardized data collection in different countries for flood forecasting models, producing outputs that can be further used to solve problems relevant in the region. This not only encourages countries to maintain their relationships in the long term but also allows new stakeholders to build further cooperation using this output. In fact, tools have been found to be slightly more successful in capacity building activities than strategies, mainly because the use of tools may need to be mastered, and several projects have developed materials for this purpose. Overall, tools play a crucial role in the success of projects, and their impact can be felt long after the project has concluded.

Despite the tools’ success in increasing the cooperation of key actors in the programme area, their capability of serving as inputs in decision making remains questionable. DAREFFORT was already mentioned as a positive example in this regard, while DarlingE is an example for how a project can generate economic impacts, since it provides solution for simplifying the process of utilising geothermal energy. Still, a lot of tools were unable to reach actors responsible for decision-making despite their ability to target relevant problems in the region, which would need transnational cooperation. Therefore that in some SOs (SO 2.4) beneficiaries disagreed with the assertion that the developed tools

resulted in technically more informed decision making, or that good practices were implemented in other fields or countries (SO 2.4, SO 3.2).

The conclusions regarding the elements of the ToC model for tools are summarised in the table below detailed by SOs, countries and calls:

**Table 13: Results of ToC validation for tools by SOs, countries and calls**

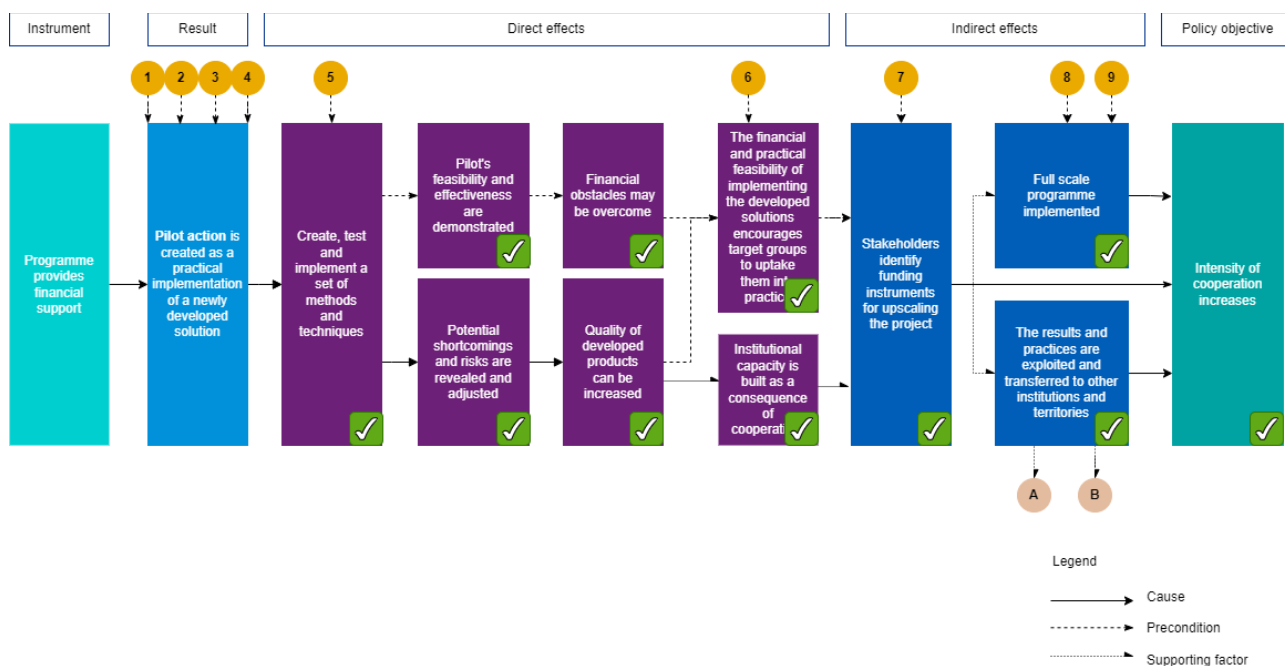
	All	Specific Objectives									Countries										Calls							
		1-1	1-2	2-1	2-2	2-3	2-4	3-1	3-2	4-1	AT	BA	BG	HR	CZ	DE	HU	ME	MD	RS	RO	SK	SI	UA	1st	2nd	3rd	
Tool was implemented by relevant actors in pilot projects	4.03	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Tool was set-up technologically and/or conceptually for further integration	4.19	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Shortcoming and transferability of tool were revealed and addressed	3.79	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Tool resulted in technically more informed decisions	3.73	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Institutional capacity was built as a consequence of cooperation	3.50	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
The usage of tools generated input and need for legislation and policy changes	2.94	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Good practices were implemented in other fields and countries	3.33	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
How would you rate the effect of creating a tool in increasing the cooperation of key actors in the field of your project?	4.03	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Additional effects																												
A more balanced involvement of partner countries to contribute to a higher degree of integration of the very heterogenous Danube region	3.69	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Project outputs are used for future legislation, policy, investments and further initiatives	3.85	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Countries outside the Danube region also harmonize their policies	2.89	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Source: KPMG/VVA (2023).

### Theory of Change model – Pilot action

The following section summarizes the results on the factors of the ToC created for pilot actions and the causal linkages between the established theory and the outcomes of the field work as presented by the figure below:

**Figure 33: Validated theory of change – pilot actions**



Source: KPMG/VVA (2023).

According to our findings, the intervention logic is completely validated in the case of pilot actions. There are no specific objectives, which rated the effect of pilot actions on increasing the cooperation negatively, and there is only one country, Ukraine that did so. Quite on the contrary, our findings heavily underline their effectiveness. Although, in some cases, our validation results are somewhat less positive: addressing the potential shortcomings, upscaling, increasing the quality of developed product, and the implementation of the full-scale program, especially in SO 2.4. The reason behind the hardships in upscaling might be, that projects did not identify necessary financial resources, however there is great volatility in this factor among SOs. For example, in SO 2.3 and SO 2.4 beneficiaries were very successful in the identification of obstacles of financial nature, but less so in SO 3.2. Despite the outstanding success of pilot action in increasing the cooperation in the programme area, some beneficiaries responded that they failed to increase institutional capacities (mainly in SO 2.4).

More interviewees mentioned that pilot actions are more visible. Most of them considers that the pilot actions generally have greater impact than the other outputs. Although, some interviewees justify this by the greater visibility of the pilots.

Pilot actions were also very useful in generating inputs for other outputs, especially strategies. When cooperating countries tested the various activities, or tools developed by their projects, their results were summarised in documents which served as a basis for strategic plans, since during the implementation process almost every practical, legal or political shortcomings could be identified, which makes it easier for partners to focus on issues which require further actions from countries/decision-making bodies.

We found the most evidence of other countries using the outputs of pilot actions, like in the case of SO 1.1, where a framework for research infrastructure mapping is spread to the Western Balkan 6 economies (Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro and Serbia) also including countries outside of the DTP area.

The conclusions regarding the elements of the ToC model for tools are summarised in the table below detailed by SOs, countries and calls:

**Table 14: Results of ToC validation for pilot actions by SOs, countries and calls**

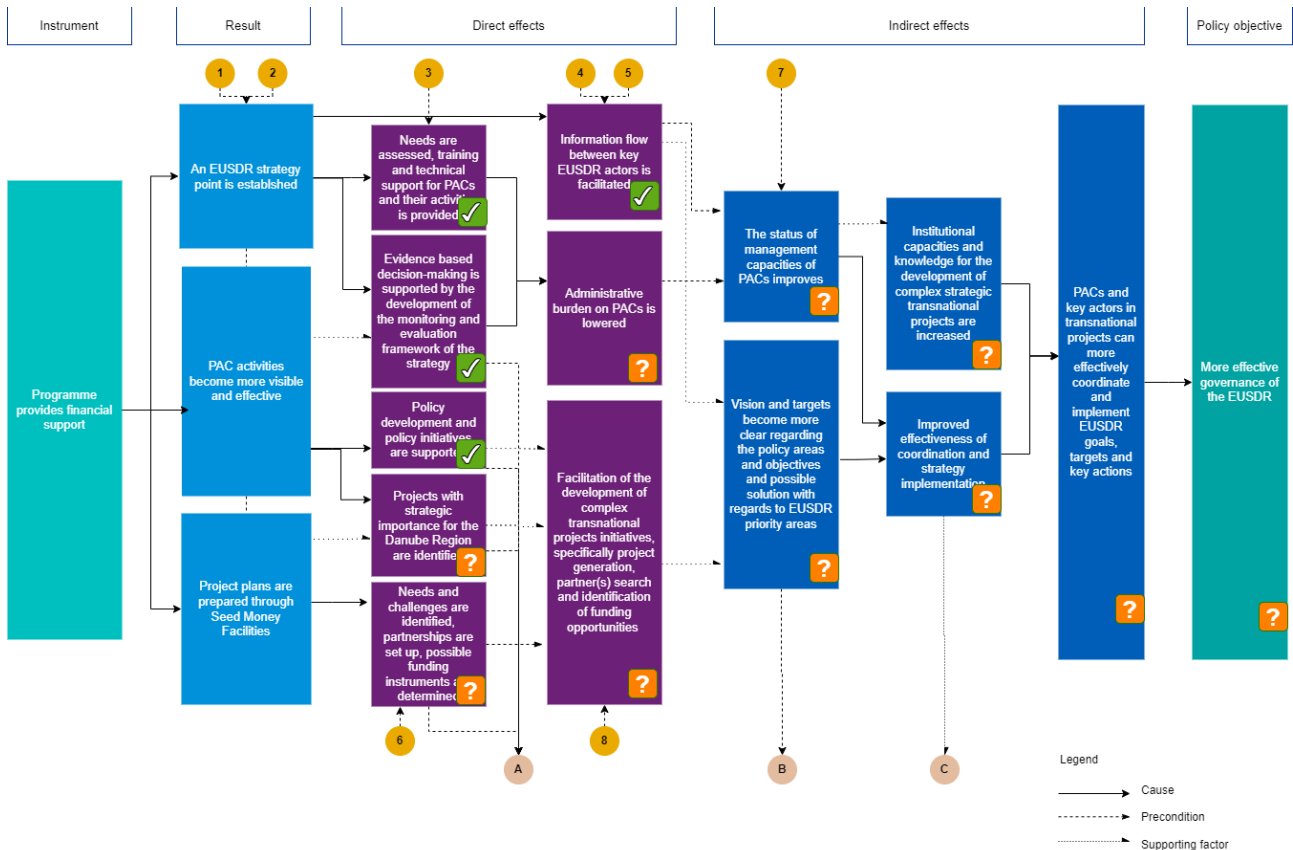
	All	Specific Objectives										Countries										Calls					
		1.1	1.2	2.1	2.2	2.3	2.4	3.1	3.2	4.1	AT	BA	BG	HR	CZ	DE	HU	ME	MD	RS	RO	SK	SI	UA	1st	2nd	3rd
A set of methods and techniques were created, tested and implemented with the cooperation of project partners	4.33	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Programme feasibility and effectiveness were demonstrated	4.15	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Potential shortcomings and risks of the project were revealed and adjusted	3.57	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Financial obstacles were identified	3.58	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Quality of developed products could be increased	3.63	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Financial and practical feasibility of implementing the developed solutions could encourage target groups to uptake them into practice	3.94	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Institutional capacity was built as a consequence of creating, testing the pilot action	3.61	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Stakeholders could identify funding instruments for upscaling the project	3.42	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Full scale programme could be implemented	3.56	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
The results and practices could be exploited and transferred to other institutions and territories	4.26	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
How would you rate the effect of creating a pilot action in increasing the cooperation of key actors in the field of your project?	4.43	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Source: KPMG/VVA (2023).

### 5.1.2 Theory of change - Governance of the EUSDR

The following section summarizes the results on the factors of the ToC created for support given under SO 4.2 and the causal linkages between the established theory and the outcomes of the field work as presented by the figure below:

**Figure 34: Validated theory of Change – Governance of the EUSDR**



Source: KPMG/VVA (2023).

Generally, all external factors of the ToC model for SO 4.2 were validated, especially the following:

- the availability of programme management bodies;
- outputs produced can be used for future programmes/next programming period;
- the project partners having the necessary resources (human and institutional) to apply for funds and manage programme implementation;
- appropriate communication channels were established and could be used by all stakeholders.

Some of our interviewees also highlighted that in some PAs the staff fluctuation can cause problems with the implementation of the Strategy, and also when looking at the expenditure of PACs, we found that in a number of countries PAs finance their staff from the DTP support heavily.

Some of the respondents, especially from Serbia, Germany and from the SMF and DSP calls view, that problems were not shared among PACs, and the DSP was only slightly able to find solutions to the issues the PACs are facing with. Evidence from interviews also suggested that PAs in which both partners are very active and are able to coordinate can reach their goals successfully. Put it differently, PAs where only one partner was active were not able to successfully implement their projects.

Some respondents, especially from Serbia and Hungary did not agree with that the PACs used their capacities liberated by the support of the DSP for reaching strategic goals.

Some countries reported that they did not have the necessary political support for implementing their projects, especially in Serbia – we got responses in this regard from the

DSP as well. All evidence suggests, that in the case of support given under SO 4.2, political support and the institutional setup is more important than in traditional projects. In countries where there the government supports PACs to produce results, PACs are usually more inclined to implement their project on a high level on one hand, and where the government support their activities they get more help to carry out their activities.

Factors which hindered the work of PACs is that they are treated as traditional projects, which decreased their ability to flexibly react to changes which cannot be avoided considering the nature of their activities. Moreover, in the case of PACs, defining concrete outputs is harder, still it is required by the programme intervention logic.

Despite the room for improvement, the general sentiment was that the DSP support a lot the work of PACs, and constant and intense communication with the DSP, and the obligation on PACs to plan their activities are listed among good practices which support the efficiency of funding provided for PACs. Despite, that some mentioned the rigidity of the framework as a disadvantage the fact that the programme has a clear intervention logic helps PACs to have a guideline/agenda on a yearly basis, which supports their planning.

A more comprehensive overview on the external factors based on the survey results can be found in the following table:

**Table 15: Validation of ToC – Governance of the EUSDR**

Survey question	All	Countries								Calls				
		AT	HR	DE	HU	RS	RO	SK	SI	SMF	DSP (1st)	DSP (2nd)	PAC (1st)	PAC (2nd or 3rd)
<b>External factors</b>														
Programme management authorities were available when support was needed in implementing the project	4.25	●	●	●	●	●	●	●	●	●	●	●	●	●
You, as a project partner had the necessary resources (human and institutional) to apply for funds and manage programme implementation	4.17	●	●	●	●	●	●	●	●	●	●	●	●	●
Common problems were shared among PACs, and the DSP was able to prioritise and find the right training to overcome them	3.00	●	●	●	●	●	●	●	●	●	●	●	●	●
It was important to involve the right mix of stakeholders into the project implementation to achieve the desired project objectives	3.96	●	●	●	●	●	●	●	●	●	●	●	●	●
Appropriate communication channels were established, and could be used by all stakeholders	4.13	●	●	●	●	●	●	●	●	●	●	●	●	●
The capacity was available (human and institutional) for you for producing high level professional outputs	3.92	●	●	●	●	●	●	●	●	●	●	●	●	●
PACs used their capacities liberated by the support of the DSP for reaching strategic goals	3.50	●	●	●	●	●	●	●	●	●	●	●	●	●
There were no political or legal barriers in implementing the output of your project in your country	3.63	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>Additional effects</b>														



Outputs produced can be used for future programmes/next programming period	4.21	●	●	●	●	●	●	●	●	●	●	●	●	●
Implementation of the EUSDR is modified to be more efficient	3.38	●	●	●	●	●	●	●	●	●	●	●	●	●
A more appropriate narrative is found in order to communicate the goals of the EUSDR for public and private actors	3.67	●	●	●	●	●	●	●	●	●	●	●	●	●

Source: KPMG/VVA (2023).

## 5.2 Answers to the evaluation questions

**Evaluation objective I.: assess the extent to which the project is impacting the Programme' Specific Objectives under priorities 1-3 and SO 4.1 (increased the cooperation of key actors/key institutions in the programme area in order to improve the framework conditions in specific policy fields).**

**EQ.I.1: To which extent has the programme contributed to improving the cooperation of key actors in the programme area?**

**EQ.I.1.1. Has the programme managed to reach the relevant stakeholders and target groups of the specific objective evaluated?**

The majority of projects succeeded and many even outperformed in reaching the stakeholders and target groups as initially planned at the application stage. From the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> call projects 42 projects faced difficulties in reaching all desired stakeholder groups. It is worth to be mentioned that while these projects faced difficulties in reaching one- or multiple types of stakeholders, the vast majority of the same projects managed to reach more of different types of stakeholders than anticipated at the application phase.

Some of the underperformance can be explained with the fact that some partners experienced complications with the monitoring process. In some project progress reports beneficiaries reported, that when setting their target number during the application phase, the rule on double-counting was not taken into consideration and marked this as a main reason for not meeting their targets. Not meeting the targets can often be attributed to internal challenges with the project implementation as well, such as changes in partners, or complications with the budget. These challenges obstructed the smooth implementation of the projects in general, i.e., their impact is not limited only to reaching target groups as planned.

On the whole, summarising the results of projects in reaching their target groups defined by their application forms, we found the programme to be very successful.

**EQ.I.1.2. What is the intensity of cooperation among the regions involved in the programme?**

When analysing the intensity of partnerships on project level, we found that in most of the projects all partner regions were involved in almost all of the work processes and served with inputs for developing the desired outputs. In projects where the activity of a project partner remained low and couldn't contribute to the implementation partner changes were made to solve the problem.

Survey respondents rated the intensity of cooperation among the regions involved in the programme on a scale of 5 as 3.84 on average. The rating was somewhat lower in SO 3.2 and SO 2.4, but much higher in SO 2.3 and SO 4.1. Non-EU countries except for Ukraine rated the intensity of cooperation higher than member states.

Survey evidence also shows that the intensity of cooperation among the regions increased, which is especially true in the case of neighbouring countries. 74% of survey respondents said that the intensity of cooperation among the regions involved in the project increased. The increase was especially high in SO 2.3 and SO 2.4 and Moldova and Serbia, but the rating was low from respondents from Czechia and Germany.

### **EQ.I.1.3. What is the impact of the programme in terms of increasing cooperation of the relevant stakeholders?**

The DTP contributed to a large extent to increasing cooperation of the relevant stakeholders. 91% of survey respondents reported, that as a result of their project, connections have been formed among the projects' target groups. 63% reported that they are still active and 9% responded, that these connections got institutionalised. 19% of the respondents see the durability of these connections as unsure, either because the activity remained low or because the project was not successful in institutionalising these connections, while a further 8% stated that only some connections were formed, and fewer than 1% was unsuccessful in generating some forms of connections. The most successful SOs are SO 2.4, SO 3.1, and SO 4.1. Comparing countries, the most successful were Bosnia and Herzegovina, Moldova and Serbia in the formation of connections. In Ukraine only some connections have been formed.

Most of the projects managed to produce outputs which constitute a suitable base for future cooperation. Projects mostly managed to fill knowledge gaps, only beneficiaries from Slovakia think that their projects were not successful in filling the existing knowledge gaps, and also rated (besides Ukraine) their projects' ability to strengthen thematic networks lower compared to beneficiaries from other countries, who think that networks were definitely strengthened as a result of the cooperation.

During the testing of the ToC models, we concluded that tools and pilot actions are more effective in generating an increase in the cooperation of stakeholders in a specific area. Strategies on the other hand mostly fail to set up a clear action plan with concrete tasks and milestones, which could be further used in deepening the cooperation efforts. Failing to do this, strategies are not used for strategic purposes after they are prepared.

### **EQ.I.1.4. What are the barriers that made the difference between successful and less successful intervention results?**

A robust and well-balanced partnership comprising a diverse set of partners and possessing adequate financial resources for pre-financing are critical factors in achieving success. In contrast, projects that failed to meet their intended indicators encountered significant obstacles and delays as a result of the COVID-19 pandemic, changes in their partnerships during implementation, or budgetary alterations that impacted their implementation plans, leading to the postponement or reorganization of certain activities. Beneficiaries who failed to foster increased cooperation cited a lack of adequate human resources for implementing their activities, insufficient project scope (connected to the volume of financing as well) to bring about a change in stakeholders' behaviour, or political barriers hindering the execution of project outputs.

In order for projects to be executed effectively, it is imperative that they establish a robust and well-balanced partnership with a diverse group of institutions, where roles and responsibilities are clearly defined and a concrete and comprehensive implementation plan is formulated during the preparation phase. Furthermore, to ensure the smooth implementation of projects, a well-balanced mix of skills must be maintained throughout their execution.

There has to be partners who:

- are professionals in the project's thematic area;
- have solid experience in project management;
- are experienced in building networks;
- can manage the internal and external communication effectively.

Having partners, who are experienced in Interreg projects can help a lot, however it is not a necessary condition in effective implementation, since programme management bodies give a lot of support in administration. Nevertheless, those projects, where the partners know each other for a long time and even have worked together previously are more efficient in project preparation and implementation.

#### **EQ.I.1.5. What are the benefits that the stakeholders / target groups see by participating in DTP cooperation programme compared to other type of interventions (e.g., Horizon, 'mainstream' programmes)?**

The Danube region presents a unique set of challenges that require specific solutions, and the programme effectively addresses these issues. Certain objectives within the programme are particularly tailored to address these distinctive characteristics. For instance, matters related to water management (SO 2.1), environmental hazards (SO 2.3), and the preservation of natural and cultural heritage (SO 2.2) in the region are areas where natural, historical, and economic factors have shaped conditions that transcend national borders, making transnational cooperation essential for addressing the challenges faced by the region. Supporting the realisation and effective management of transnational cooperation activities is a significant advantage of the Programme compared to other alternatives, which mostly fund cross-border cooperation projects.

Other advantages of the DTP compared to alternative programmes – especially to H2020 and LIFE – are on one hand the thematical variety of activities that can be financed, and a more moderate level of competition. As emerged during the interviews, projects focusing on innovation had no other funding opportunities prior to the DTP, yet the DTP provided the framework for innovation and technology projects to be funded for EU and non-EU countries in the region. During the implementation period of DTP, it was a unique opportunity to involve non-EU countries in transnational projects, while in the 2021-2027 programming period, more EU programmes, such as the Horizon Europe became open for non-EU countries as well.

#### **EQ.I.1.6. Is the DTP embedded in the regional development process?**

Regional development processes encompass activities from problem identification, through strategic and operational planning to implementation. In the ideal scenario, opportunities meant by the DTP are taken into account in each step of the process. 54% of survey respondents assessed the programme's embeddedness as good or excellent, 28% as moderate, and 11% viewed that the DTP is only weakly embedded in regional development processes.

The reason for a rather notable variance in opinions might be the difference between regional development initiatives implemented at an international scale and those where planning takes place at the national level. Based on the interviews with the programme management, the DTP is well embedded in the planning and implementation of other transnational programmes, however the difference in the motivation of some countries to participate in the programme might come from a country specific characteristic, namely that some countries pay less attention than others on finding the complementarities of the DTP with other operational programmes or national development strategies. Ratings from

the survey were especially low in SO 2.1, SO 2.4 and in Croatia, the Czech Republic, Hungary, Germany and Slovakia. On the other hand, respondents from Bulgaria, Bosnia and Herzegovina and Montenegro rated the programme embeddedness very high.

## **EQ.I.2. What is the programme impact in terms of improving the framework conditions of the specific objective evaluated?**

### **EQ.I.2.1. Are the outputs generating inputs for future legislation, policy, future investments and further initiatives?**

The majority of survey respondents think that their project's outputs could be used in the future as an input for legislation, policy or investments. Only 4% think that the outputs are not, or are just moderately suitable for this purpose, mainly from SO 1.1 and SO 2.3 and 4.1. During the testing of the ToC models, we concluded that all of the outputs could present moderate success in generating an impact on legislation, decision-making or investments. One of the reasons for this seeming contradiction is, that the afterlife of project's outputs is not followed once the projects are closed.

During the desk research process and the interviews, we found only a limited number of concrete cases where outputs served as inputs in decision-making processes. Among the positive examples we can mention the JOINTISZA project, the results of which were accepted on ministerial levels and were integrated into the flood protection plans of Danube countries. Another example is the DAREFFORT project, which standardised data collection in different countries for flood forecasting models. The outputs of the Danube Sediment project were fed into the Danube River Management Plan and the Danube Flood Risk Management Plan, while DarlingE is an example for how a project can generate economic impacts, since it provides solution for simplifying the process of utilising geothermal energy. Moreover, in the Tid(y)Up project, policy recommendations were formulated, together with the Danube Commission and the concerned areas of the Danube Strategy. These recommendations can be utilised in the policy-making process in the following years.

Those beneficiaries, who think that their projects are not suitable for further use tend to mark the lack of political support and partners inability to find common problems and prioritise among them as a problem during the project implementation. Also, they said that when they were applying to the programme and then started to implement it, local stakeholders were not aware of the DTP and did not support its goals. This is in line with the opinion of programme management bodies, who unanimously stated that the political support and especially involving actors from decision-making bodies into the project is very beneficial when partners aim to produce outputs which can be used in further decision-making processes. So, the generated outputs can support further legislation processes, but the policy impact depends on the involved stakeholders as well. In cases, where the project partners were less optimistic about the uptake of the legislation inclusiveness of their outcomes agreed, that the visibility of their outcomes might have not reached the right amount or variety of stakeholders, therefore political support and involvement of decision-making bodies remain significant. Important to note that changes in legislation usually take a longer period of time, therefore the projects' immediate effects on legislation are considered difficult to judge in short term.

Moreover, we found that many project outputs which could be used in the future are not known and hard to reach for potential users. The programme should put more emphasis on output management, especially after the projects' closures, so those who did not play a role in the project implementation could benefit from the project and use the created

outputs (such as tools, experiences of the pilot projects etc.) after the programme implementation.

### **EQ.I.3. What type of impact the programme has in the process of integration of non-EU countries in the Danube region?**

Initially, a number of difficulties emerged when it comes to attracting neighbouring countries, primarily connected to the establishment of First Level Control systems. These problems were the most prominent in Ukraine and Moldova. In Serbia, Montenegro, Bosnia and Herzegovina – in countries which already started the process of integration – participation in the programme was frictionless. With the support of programme management bodies, these issues were gradually resolved.

On average, non-EU countries responded more positively when asked about the impact the programme had and on whether the intervention was able to reach its goals (Ukraine's assessment was somewhat more negative than the other three countries'). They think that the programme was very effective in building capacities, bridging knowledge differences in their projects' thematic area, in strengthening networks and building new relationships. Overcoming the initial difficulties were beneficial for non-EU countries, because they got even more familiar with EU processes and rules, collected experience on how to cope with EU institutions, exchanged knowledge with EU-representatives, and gained experience in how to participate in international programmes. They became members of new networks, contributed to the creation of new ties in the Danube region and gained experience in how to find consensual solutions to common problems. In order for these effects to be long lasting, processes and knowledge gained from the programme needs to be institutionalised in these countries, which might take time and its output is still unsure. Participation of neighbouring countries was not only beneficial for them, but also contributed to knowledge exchange activities by sharing their good practices and knowledge with EU members.

Representatives of the programme management were also generally optimistic about the support the programme provides to non-EU countries, in spite of their impression that impact was and is generated in small steps. The majority of survey respondents (66%) was on a similar opinion, stating that their project contributed to the integration of non-EU countries in the Danube region. Only 10% reported no or very small effect, and a further 16% think the effect generated by their project is only moderate.

### **EQ.I.4. What are the non-intended outcomes (positive or negative) the intervention produced? How did they occur?**

Only a small part of respondents indicated that the intervention has non-intended outcomes:

- 7 beneficiaries from the 1<sup>st</sup> call (6,4%)
- 7 beneficiaries from the 2<sup>nd</sup> call (13,5%)
- 18 beneficiaries from the 3<sup>rd</sup> call (15,1%)

The non-intended outcomes were related most frequently to either the development of an existing network or newly developed/expanded networks. Trust is developed among partners or in the networks which provide a framework and context for the implementation of the projects. These connections are sustained even after project implementation. Future cooperation can be built on the connections formed as an effect of the intervention, as was in the case in some projects, where partners decided to cooperate even after the project implementation was finished.

In some cases, pilots/tools could be utilized in more countries than originally planned, or they turned out useful for the private sector, besides the public. Some topics, that did not get so much attention (e.g.: railroad heritage, historical sites) could gain attention via the DTP.

### **EQ.I.5. How did the programme contribute to enhanced capacity building in the Danube region?**

Bringing different stakeholders together to exchange good practices, involving decision makers from governments, learning to cooperate and find consensual solutions all contributed to enhancing the capacity of project stakeholders in the Danube region. Some project partners who were not familiar with international programmes were able to get acquainted with preparing, managing and implementing international projects. Especially in the case of non-EU countries, governmental bodies participating in the DTP now have a better understanding of the processes of EU institutions.

The programme participants who took part in the projects not only generated knowledge in their respective fields but also improved their understanding of the processes and requirements of EU institutions and EU funds. This was particularly beneficial for beneficiaries from non-EU countries. Institutions involved in the projects had the opportunity to enhance their capacities by gaining new experiences, methods, and innovative solutions from their project partners and by involving experts in specific areas. Interviews with stakeholders indicate that even projects with a very narrow technical focus, such as water management, where the professional community is limited, were able to expand their networks by involving new individuals. The funding provided by the DTP has made a significant contribution to this positive outcome.

The DTP facilitated the bringing together of various stakeholders to exchange best practices, involve decision-makers from governments, and promote cooperation in finding consensual solutions, thereby enhancing the capacity of project stakeholders in the Danube region. Some project partners who were not familiar with international programmes were able to gain experience in preparing, managing, and implementing international projects through their participation in the programme. This was particularly beneficial for governmental bodies from non-EU countries, as their involvement in the DTP provided them with a better understanding of the processes of EU institutions.

### **EQ.I.6. How is the private sector involved in the projects and how it can be involved without being a partner?**

74% of survey respondents reported that the private sector was involved in their projects one way or the other. Actors of the private sector, especially of the non-profit sector are regularly involved as project partners or as ASPs (where co-financing is not a requirement).

Representatives of the for-profit actors are rarely involved as project partners primarily due to two reasons:

- for-profit actors benefit from the implementation of the projects indirectly;
- they are obliged to invest their own resources to the project (15% co-financing rate) – similarly to public partners.

As emerged during the interviews with the Managing Authorities, the 15% co-financing requirement was usually complemented by governments from national funds, yet the support provided varied from country to country. Due to the structure and financing of DTP, many private partners could not pre-finance the required contribution, and the

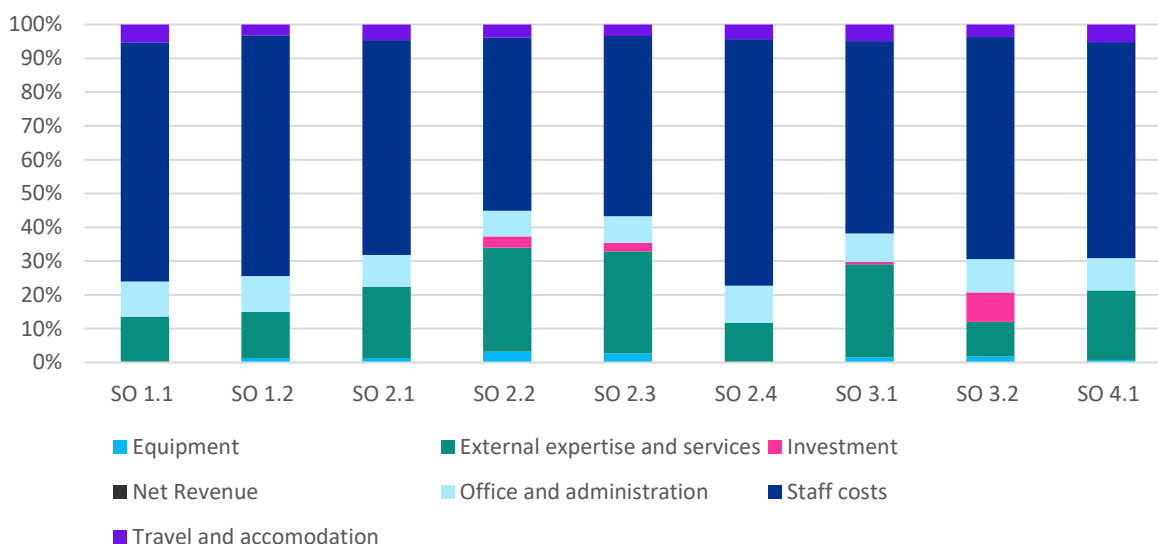
governmental support did not cover all the co-financing needs. Different scale of governmental support in co-financing can lead to divergences in private partners' involvement in the projects either as project partners or project leaders.

Moreover, the direct involvement of the private sector is desired specially in topics where their relevance and contribution are considered to be more important, such as in the topics of innovation and technology, yet their involvement is mostly limited to NGOs. On the other hand, the private partners' involvement is harder to maintain in the mid- or long term.

The involvement can happen nonetheless, through other channels, than becoming involved as project participant, mainly through intermediaries, such as business support organisations or industry agencies. Private actors were also involved in capacity building activities, like trainings and seminars, where they provided external services for the project or shared their expertise in areas covered by the specific projects. On average 74% of survey respondents claim, that the private sector was involved in their projects. Under SO 2.4 the involvement is higher than the average (here, 100% of respondents claimed, that private actors were involved in the implementation process), while under SO 1.1 (Improve framework conditions for innovation) the involvement seems lower based on survey results (63% of respondent said, that they involved private actors into the projects).

It is also very common that private actors are invited to working group meetings, steering group meeting or workshops for consultation, which is very beneficial in the identification of common challenges and channelling in the interests of the private sector to processes. On average, 20% of the projects' budgets was spent on external services. In SO 2.1, SO 2.2, SO 2.3 and SO 3.1 the share of expenditure was higher than the average, while SO 1.1, SO 1.2, SO 2.4, SO 3.2 the share was lower (Figure 35).

**Figure 35: Share of spending per purposes (by SOs)**



Source: KPMG/VVA (2023).

Overall, we have no evidence which suggest that beneficiaries and stakeholders of the programme find the current level of involvement of the private sector non-satisfactory.

### EQ.I.7. How is the private sector benefiting from the projects?

The private sector can benefit from networking events, or from the fact that a lot of projects considered their needs and used their inputs when implementing the projects. Whenever outputs reached decision-makers or they were used as inputs in legislation or regulation,

the private sector was also affected – mostly positively, because the regulatory framework usually became clearer as a result of project interventions. However, in other cases, where project results had smaller reach, the usefulness of the outputs for the private sector is questionable, as in most cases they are not maintained longer than a couple of years after the project has finished its implementation.

Evidence shows that the project outputs can be very beneficial for the private sector: survey ratings are very positive in all SOs, except for SO 2.1, in which ratings were slightly less positive than the average. When analysing responses among countries, Ukraine and Slovakia stands out with a more negative rating than the average. Respondents moderately agree with the assertion that as a result of the cooperation policies and the regulatory framework became clearer, thus decreasing the cost for businesses. However, respondents are more positive in SO 3.1, SO 4.1, and in Moldova and Bosnia and Herzegovina. Respondents modestly agree with the statement that the private sector might invest in their outputs, only in SO 2.1 and in Slovakia was the rating more negative than the average. Overall, survey respondents do not think that countries involved in the project harmonise their regulatory framework, thus creating an opportunity for businesses to broaden their activities to other countries in a more cost-effective way.

#### **EQ.I.8. What type of interventions and in which field generate more awareness among the general public/ civil society?**

During the programme implementation, 47 regular call projects (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> call) set target values to reach general public, while 63 projects aimed to reach interest groups including NGOs. Most of the projects were successful in reaching their target values, and many of them overachieved the initial targets.

In regards to reaching the general public, the most effective projects targeted the intervention categories of inland waterways and ports; the development and promotion of the tourism potential of natural areas; the protection, development and promotion of public cultural and heritage assets; the development and promotion of public cultural and heritage services; the protection and enhancement of biodiversity, nature protection and green infrastructure; and the protection, restoration and sustainable use of Natura 2000 sites.

The available data suggests that the projects that concerned the environment and culture responsible Danube region had ambitious targets that they were able to deliver during project implementation as well. The project partners used a diverse set of tools to reach their target audience: TV clips and radio contributions on local channels, generating news in local or regional newspapers, attendance and/or organization of events for local communities, publishing information on their own website and using Facebook campaign tools.

#### **EQ.I.9. To what extent is the programme contributing to the EUSDR and how? (from thematic scope, capitalisation and perfect alignment of the types of actions of the programme, involvement of relevant types of actors, support of the projects to a more structured process of planning and implementation of the EUSDR PAs)**

The DTP was envisaged to have a fundamental role in the implementation of the EUSDR reflected by the strong thematic relation between the Strategy and the Programme: priority areas and specific objectives are aligned with that of the Strategy's, which means that the objectives of the projects are in line with those of the Strategy's. While some other Interreg programmes are available in the region and ENI finances cross border cooperation programmes with neighbouring countries, the DTP is the only programme which is strongly



fully aligned with the EUSDR both geographically and content wise, and the only directly providing financing for its implementation.

While the DTP and the EUSDR are strongly aligned at the strategic level, at the level of implementation, alignment depends heavily on the pro-activeness and capacity of PACs. The connection between the DTP and the EUSDR is strongest in projects, in which stakeholders of the Strategy play a role either at the preparation and/or at the implementation phase. Interviews also suggest that strategic alignment between the DTP and the EUSDR could be further improved by involving PACs more heavily at the programming of the DTP in a structured format.

During the desk research activity, we identified the following projects which carry strategic value for the EUSDR:

**Table 16: Projects of strategic value for the EUSDR**

EUSDR Priority Axis	SO	Projects considered as of strategic value	
PA 1a: Waterway Mobility	3.1	DANTE	Improving Administrative Procedures and Processes for Danube IWT
	3.1	Daphne	Danube Ports Network
	3.1	Danube STREAM	Smart, Integrated and Harmonized Waterway Management
	3.2	Energy Barge	Building a Green Energy and Logistics Belt
	4.1	Danube Skills	Increased institutional capacity in Danube navigation by boosting joint transnational competences and skills in education and public development services
	3.1	Green Danube	Integrated transnational policies and practical solutions for an environmentally-friendly Inland Water Transport system in the Danube region
	3.1	DBS GATEWAY REGION	Regional and Transport Development in the Danube-Black Sea Region towards a Transnational Multiport Gateway Region.
PA 1b: Rail-Road-Air-Mobility	3.1	CHESTNUT	CompreHensive Elaboration of STRategic plaNs for sustainable Urban Transport
	3.1	City Walk	Towards energy responsible places: establishing walkable cities in the Danube Region
	3.1	Linking Danube	Linking transnational, multimodal traveller information and journey planners for environmentally-friendly mobility in the Danube Region
	3.1	Transdanube Pearls	Network for Sustainable Mobility along the Danube
	3.1	eGUTS	Electric, Electronic and Green Urban Transport Systems
	3.1	TRANSGREEN	Integrated Transport and Green Infrastructure Planning in the Danube-Carpathian Region for the Benefit of People and Nature
	3.1	RADAR	Risk Assessment on Danube Area Roads

EUSDR Priority Axis	SO	Projects considered as of strategic value	
	4.1	Danube SKILLS	Increased institutional capacity in Danube navigation by boosting joint transnational competences and skills in education and public development services
PA 2: Sustainable Energy	3.2	DARLINGe	Danube Region Leading Geothermal Energy
	3.2	3Smart	Smart Building – Smart Grid – Smart City
	3.2	ENERGY BARGE	Building a Green Energy and Logistics Belt
PA 3: Culture & Tourism	2.2	CultPlatForm_21	Danube Culture Platform - Creative Spaces of the 21st Century
	2.2	ART NOUVEAU	Sustainable protection and promotion of Art Nouveau heritage in the Danube Region
	2.3	DANUBEparks CONNECTED	Bridging the Danube Protected Areas towards a Danube Habitat Corridor
	2.2	LENA	Local Economy and Nature Conservation in the Danube Region
	2.2	INSiGHTS	INtegrated Slow, Green and Healthy Tourism Strategies
	2.2	Danube GeoTour	Valorisation of geo-heritage for sustainable and innovative tourism development of Danube Geoparks
	2.2	REDISCOVER	Rediscover, expose and exploit the concealed Jewish heritage of the Danube Region
	2.2	URBforDAN	Management and Utilization of Urban Forests as Natural Heritage in Danube Cities
	2.2	EcoVeloTour	Fostering enhanced ecotourism planning along the Eurovelo cycle route network in the Danube region
	2.2	NETWORLD	Networking in preserving the First World War multicultural heritage in the Danube countries
	2.2	Iron-Age-Danube	Monumentalized Early Iron Age Landscapes in the Danube river basin
	2.2	AoE Bike Trail	AMAZON OF EUROPE BIKE TRAIL
	2.2	DANUrB	DANUrB - a regional network building through tourism and education to strengthen the "Danube" cultural identity and solidarity.
PA 4: Water Quality	2.1	JOINTISZA	Strengthening cooperation between river basin management planning and flood risk prevention to enhance the stats of waters of the Tisza River Basin
	2.1	DanubeSediment	Danube Sediment Management - Restoration of the Sediment Balance in the Danube River

EUSDR Priority Axis	SO	Projects considered as of strategic value	
	2.3	MEASURES	Managing and restoring aquatic Ecological corridors for migratory fish species in the Danube River basin
	2.4	DriDanube	Drought Risk in the Danube Region
	2.1	CAMARO-D	Cooperating towards Advanced Management Routines for land use impacts on the water regime in the Danube river basin
	2.1	SIMONA	Sediment-quality Information, Monitoring and Assessment System to support transnational cooperation for joint Danube Basin water management
PA 5: Environmental Risks	2.4	DriDanube	Drought Risk in the Danube Region
		DanubeSediment	Danube Sediment Management - Restoration of the Sediment Balance in the Danube River
	2.1	JOINTISZA	Strengthening cooperation between river basin management planning and flood risk prevention to enhance the status of waters of the Tisza River Basin
	2.1	CAMARO-D	Cooperating towards Advanced Management Routines for land use impacts on the water regime in the Danube river basin
	2.1	DAREFFORT	Danube River Basin Enhanced Flood Forecasting Cooperation
PA 6: Biodiversity & Landscapes, Quality of Air & Soils	2.3	DANUBE parks CONNECTED	Bridging the Danube Protected Areas towards a Danube Habitat Corridor
	2.2	LENA	Local Economy and Nature Conservation in the Danube Region
	2.2	ECO KARST	Ecosystem services of karst protected areas – driving force of local sustainable development
	2.3	D2C	DaRe to Connect - Supporting Danube Region's ecological Connectivity by linking Natura 2000 areas along the Green Belt
	2.3	REFOCuS	Resilient riparian forests as ecological corridors in the Mura-Drava-Danube Biosphere Reserve
	2.1	CAMARO-D	Cooperating towards Advanced Management Routines for land use impacts on the water regime in the Danube river basin
	2.2	Iron-Age-Danube	Monumentalized Early Iron Age Landscapes in the Danube river basin
	2.2	AoE Bike Trail	AMAZON OF EUROPE BIKE TRAIL
	2.2	Danube GeoTour	Valorisation of geo-heritage for sustainable and innovative tourism development of Danube Geoparks

EUSDR Priority Axis	SO	Projects considered as of strategic value	
	2.2	EcoVeloTour	Fostering enhanced ecotourism planning along the Eurovelo cycle route network in the Danube region
	2.3	coop MDD	Transboundary Management Programme for the planned 5-country Biosphere Reserve “Mura-Drava-Danube”
	2.3	MEASURES	Managing and restoring aquatic EcologicAl corridors for migratory fiSh species in the danUbe RivEr baSin
	2.3	Sava TIES	Preserving Sava River Basin Habitats through Transnational Management of Invasive Alien Species
	2.3	ConnectGREEN	Restoring and managing ecological corridors in mountains as the green infrastructure in the Danube basin
PA 7: Knowledge Society	1.2	Excellence in RESTI	Excellence in research, social and technological innovation project management
	1.1	Made in Danube	Transnational Cooperation to transform knowledge into marketable products and services for the Danubian sustainable society of tomorrow
	1.1	Resinfra@DR	Facilitating macro-regional scope and link up to socio-economic actors of Research Infrastructure in the Danube Region
	4.1	EDULAB	New Danubian Governance in Labour market Relevance of Higher Education
	1.1	D-STIR	Danube Framework for Responsible Research and Innovation using Socio-Technical Integration
	2.2	DANUrB	DANUrB - a regional network building through tourism and education to strengthen the “Danube” cultural identity and solidarity.
	4.1	DRIM	Danube Region Information Platform for Economic Integration of Migrants
PA 8: Competitiveness of Enterprises	1.1	DanubeBioValnet	Cross-clustering partnership for boosting eco-innovation by developing a joint bio-based value-added network for the Danube Region
	1.1	Made in Danube	Transnational Cooperation to transform knowledge into marketable products and services for the Danubian sustainable society of tomorrow
	1.2	Digitrans	Digital Transformation in the Danube Region
	1.1	SMART FACTORY HUB	Improving RD and business policy conditions for transnational cooperation in the manufacturing industry
	1.1	Danube Cluster	S3 Transnational Cluster Cooperation active on Agro – food, based on Smart Specialization Approach in Danube region

EUSDR Priority Axis	SO	Projects considered as of strategic value	
	1.2	Danube Energy+	Boost potential of Young Innovators to pioneer change in energy efficiency inside Danube Macro-region
	1.1	ACCELERATOR	Developing accelerators to provide better access to innovation finance for SMEs
	1.1	EcoInn Danube	Eco-innovatively connected Danube Region
	1.1	KNOWING IPR	Fostering Innovation in the Danube Region through Knowledge Engineering and IPR Management
	2.2	URBforDAN	Management and Utilization of Urban Forests as Natural Heritage in Danube Cities
	1.2	DanubeChance2.0	Embracing failure to facilitate second-chance entrepreneurship in the Danube region
	1.2	Finance4SocialChange	Finance4SocialChange project gives support to economy that inspires positive social change in Danube Region
	2.2	ECO KARST	Ecosystem services of karst protected areas – driving force of local sustainable development
	1.1	InnoHPC	High-performance Computing for Effective Innovation in the Danube Region
	1.1	MOVECO	Mobilising Institutional Learning for Better Exploitation of Research and Innovation for the Circular Economy
	1.1	FORESDA	Forest-based Cross-sectoral Value Chains Fostering Innovation and Competitiveness in the Danube Region
	1.1	CrowdStream	The project “CrowdStream – Crowdfunding to stream innovation” aims at improving the effectiveness of public/private business support for innovative enterprises to access qualitative alternative financing.
PA 9: People & Skills	1.2	SENSES	Strengthening Social Entrepreneurial Landscape through involving socially responsible corporate Practices in Entrepreneurial Competences and Skills enhancement in the DANUBE region
	4.1	Learning by Doing	Targeted capacity building of VET partnerships in the Danube Region for the effective modernisation of VET systems
	1.2	WOMEN BUSINESS IN	Fostering the Young Women Entrepreneurship in the Danube Region
	4.1	EDU-LAB	New Danubian Governance in Labour market Relevance of Higher Education
	1.2	SENSES	Strengthening Social Entrepreneurial Landscape through involving socially responsible corporate Practices in Entrepreneurial Competences and Skills enhancement in the DANUBE region

EUSDR Priority Axis	SO	Projects considered as of strategic value	
	1.2	INDEED	Innovation for Dementia in the Danube Region
	1.2	Finance4SocialChange	Finance4SocialChange project gives support to economy that inspires positive social change in Danube Region
	2.2	ECO KARST	Ecosystem services of karst protected areas – driving force of local sustainable development
	1.2	Danube Energy+	Boost potential of Young Innovators to pioneer change in energy efficiency inside Danube Macro-region
	1.2	InnoSchool	Strengthening social innovation and entrepreneurial spirit of secondary schools' students by using highly innovative Learning System
	1.2	DA-SPACE	Open Innovation to Raise Entrepreneurship Skills and Public Private Partnership in Danube Region
	2.2	DANUrB	DANUrB - a regional network building through tourism and education to strengthen the "Danube" cultural identity and solidarity.
	2.2	AoE Bike Trail	AMAZON OF EUROPE BIKE TRAIL
	1.2	NewGenerationSkills	Unlocking the potentials for business and social innovation in the Danube Region by equipping young people with new generation skills
PA 10: Institutional Capacity & Cooperation	4.1	AgriGo4Cities	Urban agriculture for changing cities: governance models for better institutional capacities and social inclusion
	4.1	ATTRACTIVE DANUBE	Improving Capacities for Enhancing Territorial Attractiveness of the Danube Region
	1.1	CrowdStream	CROWDfunding to mainSTREAM innovation
	1.2	Excellence in ReSTI	Excellence in research, social and technological innovation project management
	4.1	DRIM	Danube Region Information Platform for Economic Integration of Migrants
	1.2	DanubeChance2.0	Embracing failure to facilitate second-chance entrepreneurship in the Danube region
	2.2	REDISCOVER	Rediscover, expose and exploit the concealed Jewish heritage of the Danube Region
	1.2	RI2integrate	Embeddedness of high-quality research infrastructures in the Danube Region
	4.1	YOUNMIG	Improving institutional capacities and fostering cooperation to tackle the impacts of transnational youth migration

EUSDR Priority Axis	SO	Projects considered as of strategic value	
	4.1	RARE	Changing Discourses, Changing Practices: The Roma as Human Resource
	2.2	URBforDAN	Management and Utilization of Urban Forests as Natural Heritage in Danube Cities
	2.2	Danube GeoTour	Valorisation of geo-heritage for sustainable and innovative tourism development of Danube Geoparks
PA 11: Security	SMF	EAST	Effective Enforcement Actions against Sturgeon Trafficking

Source: KPMG/VVA (2023).

### EQ.I.10. Has the specific objective reached its target and, if not, what are the obstacles in this respect?

According to the data available on the programme's online electronic monitoring system (eMS) by the time of the evaluation, it would seem that most of the outputs have not yet reached the level of the target values set for 2023. In reality though the reported numbers are not updated in the reporting system. According to the MA and the interviewed project partners, all projects had reached their outputs, and in many cases the programme even overachieved the set targets. The demonstrated differences are due to the delayed and incomplete reporting of indicators in the eMS system by the project leads.

### Evaluation objective II.: assess how the programme has managed to support the implementation of the EUSDR.

#### EQ.II.1. How has PAC support contributed to supporting the implementation of the EUSDR?

##### EQ.II.1.1. How has the programme support influenced the coordination capacities of the PACs?

The EUSDR addresses a wide range of issues, which are divided among four pillars and twelve priority areas. Each priority area is managed by two Priority Area Coordinators (PACs). Steering groups advise and assist the work of the PACs. Further to that, some priority areas created working groups around sub-themes and tasks.

The DTP almost exclusively funded the PACs; hence it influenced their coordination capacities to a great extent. As it was reaffirmed during the interviews, the support the PACs received helped them to further promote the EUSDR among stakeholders, yet more capacities would have been required to ensure the smooth implementation of PAC activities, and to comply with the reporting and administrative requirements towards to the managing authorities of the DTP.

The DTP provided co-financing to the activities carried out by the PACs. The distribution of the expenditures showed similarities to the regular call projects with 44.8% spent on external expertise and services and 39.8% to cover staff costs. The remaining costs were spent on travel and accommodations (9.4%) and office and administration (6%).

Costs of external expertise refer to studies, surveys, trainings, translations, IT systems, promotion and communication, financial management, legal consultancy, IPR, etc. Staff costs refer to the costs of the personnel employed by the beneficiary institution and executing tasks for project management (project coordinator, project manager, assistant,

financial manager, etc.) and/or tasks for the project content related activities are eligible to be reimbursed by the DTP.

### **EQ.II.1.2. How has the programme support influenced the policy development of the PACs?**

Policy development would not be possible without the support of the DTP. The programme not only gives financial support for this activity, but the networks in which the PACs operate also provide them the necessary connections and expertise for policy development. PAC projects with the support of the DTP managed to prepare several policy recommendations, studies, reports and analysis, while PACs also organised and attended various meetings with policy stakeholders and decision makers. PACs also successfully represented their respective Priority Axis (PA) and the EUSDR generally at various events, meetings such as V4 or IGLO.

The funding is used to bring together the relevant stakeholders to intensify the know-how exchange in the Danube Region and to initialize new project ideas. Therefore, stakeholder conferences and thematic workshops were organized in close coordination with all involved partners to enhance the cooperation.

In the case study which was developed for this evaluation about the work of PA9 we mention, that the “Danube Region Monitor”, a study which documents the development of indicators related to PA9's targets, was finalised in 2019, following one final workshop to discuss the results and develop recommendations. PA9 built upon a network of relevant stakeholders (especially policy makers and statistics-experts) from EUSDR Countries by the support of the Steering Group Members. The activities around the workshop included the invitation management, drafting of the agenda, selection and invitation of speakers and participants, organization of a venue, moderation, reporting etc. Within this workshop relevant results of the chosen indicators in the fields of education and labour market were discussed.

### **EQ.II.1.3. What are the good practices and obstacles hindering the efficiency of the PAC support given by the DTP?**

Most PACs agreed that the administrative burden of the reporting requirements consumes a significant share of time and human resources. The programme framework in which they had to scope and implement their activities hindered their ability to adapt to the various challenges that might have come up during the implementation. As emerged during the interviews, more active cooperation of the DSP with the MC and JS could further improve the efficiency of the PAC support given by the DTP, while it would help to utilize the synergies of the DSP and the DTP.

The differences in the performance of PACs among the different PAs can be attributed to individual- or country specific factors. The efficiency of PACs was higher in PAs where the partners were active and/or the political support for PACs was significant. There are very good examples, where there is a continuous collaboration among projects, the PAC and relevant ministries, and the outputs of these can even shape policies and regulations of different sectors. PA1 and PA9 seem to be examples for good practices on how cooperation among decision makers and PACs can have significant effects in the region.

### **EQ.II.2. How has the seed money facility contributed to the implementation of the EUSDR?**

#### **EQ.II.2.2. How could the seed money projects support the project generation relevant for EUSDR?**



Seed money facilities thematised their activities according to the priorities of the EUSDR. However, to date there aren't many successful seed money projects available. Most of our interviewees mentioned that the average quality of these projects was lower than expected, and there are only a few examples, which were suitable for further project generation.

### **EQ.II.2.3. What support did the seed money projects receive from the EUSDR structures (e.g., PACs, steering groups etc.)?**

PACs supported project managers by advertising the project and cross-checking whether the project topic fits with the respective PA's agenda. However, due to the scheduling of the projects, there wasn't enough time for consultation in many of the cases and they had to give a confirmation whether a project should potentially be supported without knowing the finalized version of the project. Some PACs thought that this approach could lead to some mismatches or lower-quality projects later on.

It was also challenging for most of the PACs to define how exactly they can help for these projects to succeed.

The relationship and the form of support EUSDR structures can provide for SMF projects to succeed was underdefined according to the interviewees. A more formalised approach might clarify the channels through which the support can more effectively reach its goals.

PACs, which had a closer cooperation with Seed Money Facilities brought the information about the Seed Money Facility to relevant stakeholders and supported them in case of questions.

### **EQ.II.3. How has DSP support contributed to the implementation of the EUSDR?**

#### **EQ.II.3.1. How has the programme support influenced the coordination capacities and communication of the EUSDR?**

The DSP acts as a coordinative hub in the sense that it is in close touch with the EUSDR Presidency and DG REGIO, ESPON and Interact, which enables EUSDR internal coordination of processes as well as external coordination with other macro regional strategies. The coordination capacities of the Strategy have increased considerably in various ways:

- it has contributed to embedding EUSDR priorities in EU-, national and regional funding schemes including the coordination networks of ERDF/CF Managing Authorities and the network of IPA and NDICI Programming Authorities in the Danube Region.
- it provided virtual meeting venues from March 2020 onwards, which was a vital contribution to an uninterrupted implementation of the Strategy and helped to keep stakeholders connected.
- the DSP's communication activities facilitated the design of an EUSDR Communication Strategy, updated and harmonised by the EUSDR websites, built up a growing EUSDR online community on social media platforms contributing to the visibility of the Strategy.
- the DSP prepared a working programme together with the DTP and gave the functions that the programme needed in order to making the coordination and the communication of the EUSDR more effective: the governance of the strategy, embedding, monitoring, evaluation, capacity building for core stakeholders and also internal and external communication. These are the pillars based on which the DSP has been working since 2017.

### **EQ.II.3.2. How has the programme support influenced monitoring and evaluation capacities of the EUSDR in relation to the evidence-based decision making?**

There was an evaluation concept introduced, and the materials are available for the general public. In 2019, an Operational Evaluation was conducted, assessing the effectiveness, communication and stakeholder involvement of the Strategy. And in 2022 a Policy/Impact Evaluation was conducted, assessing instruments, tools and activities of the EUSDR in order to measure the impact of the Strategy in the Danube Region. Moreover, an EUSDR Implementation Toolkit was published.

Furthermore, the DSP publishes biennially an EUSDR Implementation Report, which presents in a concise manner the advancements of the Strategy on EUSDR governance level as well as on PA level and gives an outlook on potential future developments.

### **EQ.II.3.3. What are the obstacles hindering the efficiency of the DSP support given by the DTP?**

The objectives and exact roles of DSP were not always clear for some of the PACs, which made it more difficult to identify the topics that PACs could receive support in. Others found the DSP's main functions to be capacity building and enablers for continuous flow of information.

Other obstacles were:

- Length of project duration: In the future it would be beneficial to run the DSP project in longer terms than 3 years to enable DSP to establish a longstanding project plan and continuously work on EUSDR governance support and capacity building.
- Administrative procedures for the Presidency to join the project for the purpose of organising the Annual Forum.

## **6. Recommendations**

### **6.1 Programme strategy**

#### **Recommendation 1: Put a stronger emphasis on the quality of strategies.**

The evidence indicates that pilot actions and tools were more successful compared to strategies when it comes to increasing the intensity of cooperation in the programme area. It must be noted though that in successful projects, strategies, tools and pilot actions work intertwined to achieve the objectives of the projects. In practice this means that strategies are built on the analytic foundations provided by tools and pilot actions are used to test at least some implementation aspects.

In this context the quality of strategies is an important aspect when it comes to supporting projects with a strong potential for long term impacts. A quality strategy is clear, understandable, based on sound evidence, and it is implementable in multiple contexts. An example is the Danube Draught Strategy which led to institutional changes e.g., in BA, RS, SI and SK. Some of the strategies formulated are, however, technical documents presenting analytic results and high-level recommendations based on the tools developed under the project and it is difficult to see their potential to lead to concrete actions in the programme area.

Therefore, it is recommended to put a stronger focus on controlling the quality of strategies to ensure a higher chance for policy actions to be defined based on these outputs.

## 6.2 Monitoring

### Recommendation 2: Introduce indicators with a clearer link to changes and impacts in the programme area.

The output and result indicators of the 2014-2020 DTP have limited usefulness when it comes to assessing programme impacts. Output indicators (number of strategies, pilot actions, tools and documented learning interactions) captured the types of outputs produced by the projects fairly well. Results were planned to be measured by indicators of the intensity of cooperation by SOs. Data for calculating the indicators were collected by a survey among selected key institutions relevant for the SOs. Lack of motivation of the potential respondents to actually respond, however, hindered measuring the results effectively according to the method elaborated at the DTP.

The first version of the 2021-2027 DTP's project monitoring system is based on a limited number of output and result indicators, as follows:

#### 1. Output indicators:

- RCO 87: Organisations cooperating across borders;
- RCO 84: Pilot actions developed jointly and implemented in projects;
- OI4: Policy instruments addressed;
- OI5: Interregional policy learning events organised;
- OI6: Good practices identified;

#### 2. Result indicators:

- RI2: Organisations with increased capacity due to their participation in interregional cooperation;
- RI3: Policy instruments improved thanks to Interreg Europe;

#### 3. Impact indicator:

- II124: Funds influenced.

At the same time, Annex I of Regulation (EU) 2021/1058 provides a number of further options for making the measurement of the outputs and results of the programme more relevant and useful for monitoring changes and the take-up of outputs.

Relevant additional output indicators could be:

- RCO117: Solutions for legal or administrative obstacles across border identified;

Relevant additional result indicators could be:

- RCR82: Legal or administrative obstacles across borders alleviated or resolved;
- RCR85: Participations in joint actions across borders after project completion.

These indicators could be taken up by any of the SOs under the successor programme, as relevant. Compared to the 2014-2020 programming period, Regulation (EU) 2021/1059 provides a larger degree of freedom for authorities when it comes to selecting indicators: common output and result indicators, as set out in Annex I to Regulation (EU) 2021/1058, and, where necessary, programme-specific output and result indicators can be used to measure the outputs and results of Interreg programmes. All common output and result indicators can be used by specific objectives under any of the policy objectives 1 to 5.

While measuring RCR 82 and 85 in practice could be more challenging compared to the current set of result indicators included in the programme, they could make a large contribution to understanding the impact of the programme better in the longer term. At the same time, the timeframe of measurement for RCR85 (one year from project closure) could decrease its relevance, which may be addressed by introducing a project specific indicator instead, measuring what happens after project closure.

An indicator focusing on the increase in the intensity of cooperation could be used for the successor programme as a programme specific indicator. In that case, however, it needs to be ensured that the intensity of cooperation is measured in a uniform way at the project level before, during and after project implementation as well on a mandatory basis, e.g., as part of reporting obligations through self-assessment.

To anticipate challenges with data collection, programme beneficiaries could be obliged in their grant agreements to provide data needed to calculate the result indicators.

## 6.3 Programme calls

### **Recommendation 3: Provide incentives to applicants to include decision making bodies in the project setups.**

All evidence shows that involving decision making bodies with administrative responsibility for the relevant policy areas in the project delivery or in an advisory function increases the chance of project outputs being used for legislation and/or being scaled up and/or being continued. The heavier involvement of such entities in the projects therefore could increase the impact of the 2021-2027 DTP.

A soft option to achieve this is by tailoring the selection/evaluation criteria of applications under future calls. This would entail a formal assessment of the types of legislative / decision making bodies planned to be involved in the delivery, and the underlying rationale.

The other option is to make it mandatory to involve directly as a partner at least some organisations which are responsible for the policy area addressed in the countries involved in the project.

### **Recommendation 4: Streamline the financing the activities of PACs.**

Until the end of 2016 Priority Area Coordinators were financed directly by the Commission. Since 2017, activities of PACs have been supported under SO 4.2 of the DTP. However, a project logic is difficult to apply to the activities of PACs and rigid implementation rules increase the administrative costs of project implementation.

A solution could be to stretch the length of implementation of PAC projects as far as possible within the constraints of the relevant regulations to decrease the administrative burden associated with applications and make financial implementation rules as flexible as permitted by the regulatory context.

### **Recommendation 5: Set realistic targets for reaching target groups.**

The evidence shows that the projects under the majority of SOs outperformed reaching the organisations they planned to reach in their application forms by several magnitudes. This finding raises the question how realistically these targets were set in the first place. In project calls under the successor programme, it should be ensured that the targets for reaching target groups are set realistically in the application forms.

## 6.4 Communication

### **Recommendation 6: Wider communication of the projects and project results of DTP on a programme level**

Project results and achievements shall be collected and advertised on programme level by the managing authorities and PACs to increase the visibility of the projects and increase their reach to the potentially interested parties. This can support not only the uptake of the relevant outputs but can also improve the perception of the programme.

### **Recommendation 7: Communicate the opportunities of the DTP more effectively towards potential applicants without experience in participating in transnational cooperation programmes.**

Evidence shows that the concept of transnational cooperation and the context of transnational cooperation programmes are difficult to understand for interested organisations without previous experience in participating in transnational programmes. At the same time, capitalising on the knowledge and project generation capacity of these organisations could increase the quality of project applications.

It is recommended therefore to target tailored communication activities at these target groups through conferences, workshops, information events, emphasising the benefits of developing transnational cooperation.

Developing detailed guidance materials tailored at the needs of applicants with less experience may also be necessary.

### **Recommendation 8: Communicate project results to national political spheres more effectively through PACs and EUSDR Steering Groups.**

PACs do not only provide process support and a platform for content related discussions, but they also act as an intermediary between the DTP and the political spheres at national level. An involvement of the political level can lead to project results with a larger long-term impact on cooperation.

Involving more intensively the political sphere in the dissemination of project results in formalised manner could therefore contribute to the wider take up and sustainability of project results.

### **Recommendation 9: Make project outputs more accessible for the general public.**

Project outputs are collected and made transparently available on the website of the DTP. At the same time, outputs cannot be searched based on topics, priorities and other relevant criteria. This makes it more difficult for interested parties to identify the outputs relevant for them.

A searchable database and in general, the wider communication of outputs could increase the visibility of the programme and contribute to the wider take up of outputs.

# Annex I: Survey questionnaire

## A. Your background

*In this section we are inquiring about the basic characteristics of your project and your role in its implementation.*

### A.1. Which Specific Objective does your project address?

- A.1.a. Specific Objective 1.1. Improve framework for innovation
- A.1.b. Specific Objective 1.2. Increase competences for business and social innovation
- A.1.c. Specific Objective 2.1. Strengthen transnational water management and flood risk prevention
- A.1.d. Specific Objective 2.2. Foster sustainable use of natural and cultural heritage and resources
- A.1.e. Specific Objective 2.3. Foster the restoration and management of ecological corridors
- A.1.f. Specific Objective 2.4. Improve preparedness for environmental risk management
- A.1.g. Specific Objective 3.1. Support environmentally-friendly and safe transport systems and balanced accessibility of urban and rural areas
- A.1.h. Specific Objective 3.2. Improve energy security and energy efficiency
- A.1.i. Specific Objective 4.1. Improve institutional capacities to tackle major societal challenges
- A.1.j. Specific Objective 4.2. Support to the governance and implementation of the EUSDR

### A.2. What is your role in the project?

- A.2.a. I am the Lead Partner
- A.2.b. I am a Project Partner

### A.3. What is your institution's/organisation's legal status?

- A.3.a. public
- A.3.b. private

### A.4. Where is your institution/organisation located?

- A.4.a. Austria
- A.4.b. Bulgaria
- A.4.c. Bosnia and Herzegovina
- A.4.d. Croatia
- A.4.e. Czech Republic
- A.4.f. Hungary
- A.4.g. Germany
- A.4.h. Montenegro
- A.4.i. Republic of Moldova
- A.4.j. Republic of Serbia
- A.4.k. Romania
- A.4.l. Slovakia

A.4.m. Slovenia

A.4.n. Ukraine

**A.5. Which call has your project participated in?**

A.5.a. 2nd call for projects

A.5.b. 3rd call for projects

A.5.c. PAC call (2nd or 3rd)

A.5.d. DSP call

**If the answer for A5. is a or b, then the survey will direct the participant to parts B, C and then parts D, E, F**

**In other cases parts from part G will apply.**

**B. General questions regarding project implementation**

*In this section we would like to inquire generally about your experience in connection with project implementation.*

**B.1.** How would you rate your project's success in generating an increase in cooperation among your project's target groups?

**Explanation1:** increasing cooperation means that lasting connections have been formed among project partners and the project's target groups.

**Explanation2:** The target groups consist of those individuals and/or organisations towards which the project aims are directed and which will therefore be directly or indirectly affected by the project activities and results. Even if target groups may not necessarily receive funds and be directly involved in the project implementation, they may exploit project outcomes for their own benefit.

**Explanation3:** stakeholders consist of those individuals which are connected by any means - directly or indirectly - to the programme. They involve the programme management, beneficiaries, target groups of the projects, future investorts etc.

B.1.a. no connections have been formed

B.1.b. some connections have been formed

B.1.c. connections have been formed but their durability is unsure

B.1.d. connections have been formed and are active

B.1.e. connections have been formed and are institutionalised

**B.2.** How would you rate the following factors in relation to your project on a scale from 1 (very low) to 5 (very high)?

	1	2	3	4	5	I don't know/can't judge
The intensity of cooperation among the regions involved in the project						
Extent to which the project contributed to increasing the cooperation of key actors in the programme area						
Involvement of target groups in project implementation						
Project's embeddedness in regional development processes						
Project's contribution to the integration of non-EU countries in the Danube region						
Project's contribution to enhanced capacity building in the Danube region						
Project's performance in reaching its targets						

**B.3.** How would you rate your project's performance in reaching the relevant stakeholders and target groups?

- B.3.a. the project couldn't reach any of its target groups
- B.3.b. some of the target groups were reached, but the project couldn't reach its target values
- B.3.c. all target groups were reached but their activity remained low
- B.3.d. all target groups were reached, some were active, others remained passive
- B.3.e. all target groups were reached, and everyone was very active

**B.4.** Was the private sector involved in the project without being a partner? (yes/no)

**B.5.** If yes: how and what was its role?

- B.5.a. they were acting as consultants in project generation
- B.5.b. they were acting as consultants when developing project outputs
- B.5.c. they shared their opinion on finished outputs
- B.5.d. they used/are using the developed outputs
- B.5.e. other: \_\_\_\_

**B.6.** How do you think the private sector can benefit from your project? Please give your ratings for the following categories based on the category's relevance for private sector benefits (1 – it is not relevant; 5 – it carries great benefits for the private sector)

	1	2	3	4	5	I don't know/can't judge
Private sector can use the output(s) of the project						
Policies and the regulatory framework became more clear, thus decreasing the cost of compliance for businesses						
Private sector can invest in the output(s) generated						
Countries involved in the project harmonise their regulatory frameworks, thus helping businesses to broaden their activities to other countries in a more cost-effective way						

**B.7.** How would you characterise the relationship of key stakeholders in the thematic area of your project in the Danube region on a scale from 1 to 5 (1 – it was very uncommon, 5 – very common). Where you experience change, please rate the project's role in it (1 – very low, 5 – very high)

	Prior to the initiation of the project	After project implementation	Project's role
High intensity of exchange of information, knowledge and experience			
Mutual understanding, openness, appreciative atmosphere			
High emphasis on common interests			
High intensity of concrete cooperation in direct areas of interest of the actors			
Degree of binding rules, processes and structures			



High commitment and motivation of the partners to further develop the cooperation			
High intensity of cooperation beyond the project			

**B.8.** How would you rate the following objectives were reached after implementing the projects (1 – objective was not reached, 5 – objective was fully reached):

	1	2	3	4	5	I don't know/can't judge
It is possible to further build upon the knowledge resulting from project implementation in future cooperations						
Knowledge gaps were filled by linking actors with complementary thematic specialisation, experiences, methodological approaches or geographical scope						
Thematic networks were strengthened in the programme area						
Project outcomes can be used for future legislation/policy/investments and further initiatives						
Project implementation serves with important lessons for designing future transnational cooperation programmes/projects						

### C. Question regarding the general programme implementation logic

*In this section we would like to ask you about the conditions of project implementation, about external factors having an influence on your projects, and the expected consequences of participating in the programme.*

**C.1.** Would you agree that project results would not have been achieved had the project not get financial support from the DTP?

- C.1.a. strongly disagree
- C.1.b. disagree
- C.1.c. neutral
- C.1.d. agree
- C.1.e. strongly agree

**C.2.** Would you agree with the following statements? (1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree)

	1	2	3	4	5	I don't know / can't judge
Local stakeholders were aware of the DTP and supported its goals.						
The NCP of the DTP and other programme institutions responsible for information distribution could reach relevant stakeholders and could effectively communicate information necessary for participating in the programme.						
Programme management authorities were available when support was needed in implementing the project.						
You, as a project partner had the necessary resources (human and institutional) to apply for funds and manage programme implementation.						

Common problems were shared among participating countries, partners from different regions were able to prioritise and find mutual solutions.						
It was important to involve the right mix of stakeholders into the project implementation to achieve the desired project objectives.						
There were no political or legal barriers in implementing the outputs of the project in your country.						
Programme was complementary with other national and EU-level programmes.						
The project intervention was large enough to influence the behaviour of cooperating actors.						

**C.3.** Were there any non-intended effects the intervention produced? (yes/no)

**Explanation:** non-intended effects are effects of the intervention which were not expected but are significant nonetheless. For example, it turned out during the project that a software developed for a specific purpose can be used for other purposes, too.

**C.4.** If yes, what and how did they occur?

**C.5.** How strongly would you agree that the following events occurred or will occur in the near future as a consequence of the programme? (1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree)

	1	2	3	4	5	I don't know/can't judge
A more balanced involvement of partner countries to contribute to a higher degree of integration of the very heterogenous Danube region						
Project outputs are used for future legislation, policy, investments and further initiatives						
Countries outside the Danube region also harmonize their policies						

**C.6.** How do you think the programme/projects performed in terms of considering the needs of key stakeholders as well as the institutional context from the early stages of project development? (1 – very poorly, 5 – very well)

**C.7.** Could you list any gaps hindering project implementation?

**C.8.** Can you point out the barriers that made the difference between successful and less successful intervention results?

**C.9.** What type of output(s) was/were generated in your project?

C.9.a. strategy

C.9.b. tool

C.9.c. pilot action

**Based on the answer on question number 9, the questionnaire will direct participant to the relevant part of the survey: either D, E or F.**

#### **D. Questions regarding the implementation logic of a Strategy as an output**

*In this section we would like to ask a few questions about the possible impact mechanism which leads from creating a strategy to a more active cooperation among key actors in the region*

**D.1.** How would you rate the effect of creating a strategy in increasing the cooperation of key actors in the field of your project?

- D.1.a. no effect
- D.1.b. small effect
- D.1.c. some effect
- D.1.d. large effect
- D.1.e. very large effect

**D.2.** How would you rate the following factors contributed to an increase in cooperation among target groups after creating a strategy? (1 – no contribution, 5 – contribution is large)

	1	2	3	4	5	I don't know/can't judge
Common understanding of joint problems						
A common vision was agreed among partners in the specific field with mid- and long-term objectives						
Stakeholders were identified and became involved in planning and implementation of the strategy						
A clear action plan with timeline and financial resources was defined						
Institutional capacity was built as a consequence of cooperation						
Stakeholders got involved in achieving the strategic objectives of the project						
After creating the strategy stakeholders broadened their cooperation to tackle new problems						
Non-EU countries got closer accession (through harmonization and cooperation)						

**D.3.** Could you list the top 3 direct effects of creating a strategy which could lead to an increase in the cooperation of key stakeholders?

**Explanation:** direct effects are the effects of the strategy on the stakeholders and social/environmental/economic variables that were targeted by the scheme.

**D.4.** Can you list the top 3 indirect effects of creating a strategy which could lead to an increase in the cooperation of key stakeholders?

**Explanation:** indirect effects are the effects of the strategy on the stakeholders and social/environmental/economic variables that were not targeted by the scheme.

## E. Questions regarding the implementation logic of a Tool as an output

*In this section we would like to ask a few questions about the possible impact mechanism which leads from creating a tool to a more active cooperation among key actors in the region*

**E.1.** How would you rate the effect of creating a tool in increasing the cooperation of key actors in the field of your project?

- E.1.a. creating a tool does not have an effect on the cooperation of key stakeholders
- E.1.b. creating a tool only has a small effect on the cooperation of key stakeholders
- E.1.c. creating a tool affects the cooperation of key stakeholders, but there are more effective ways in reaching this objective

E.1.d. creating a tool has a significant effect on the cooperation of key stakeholders, but only on the short term

E.1.e. creating a tool has a significant and long-lasting effect on the cooperation of key stakeholders

**E.2.** How would you rate the following factors contributed to an increase in cooperation among target groups after creating a tool? (1 – no contribution, 5 – contribution is large)

	1	2	3	4	5	I don't know/can't judge
Tool was implemented by relevant actors in pilot projects						
Tool was set-up technologically and/or conceptually for further integration						
Shortcoming and transferability of tool were revealed and addressed						
Tool resulted in technically more informed decisions						
Institutional capacity was built as a consequence of cooperation						
The usage of tools generated input and need for legislation and policy changes						
Good practices were implemented in other fields and countries						

**E.3.** Could you list the top 3 direct effects of creating a tool which could lead to an increase in the cooperation of key stakeholders?

**Explanation:** direct effects are the effects of the tool on the stakeholders and social/environmental/economic variables that were targeted by the scheme.

**E.4.** Can you list the top 3 indirect effects of creating a tool which could lead to an increase in the cooperation of key stakeholders?

**Explanation:** indirect effects are the effects of the tool on the stakeholders and social/environmental/economic variables that were not targeted by the scheme.

## **F. Questions regarding the implementation logic of a Pilot action as an output**

*In this section we would like to ask a few questions about the possible impact mechanism which leads from creating a pilot action to a more active cooperation among key actors in the region*

**F.1.** How would you rate the effect of creating a pilot action in increasing the cooperation of key actors in the field of your project?

F.1.a. creating a pilot action does not have an effect on the cooperation of key stakeholders

F.1.b. creating a pilot action only has a small effect on the cooperation of key stakeholders

F.1.c. creating a pilot action affects the cooperation of key stakeholders, but there are more effective ways in reaching this objective

F.1.d. creating a pilot action has a significant effect on the cooperation of key stakeholders, but only on the short term

F.1.e. creating a pilot action has a significant and long-lasting effect on the cooperation of key stakeholders

**F.2.** How would you rate the following factors contributed to an increase in cooperation among target groups after creating a pilot action? (1 – no contribution, 5 – contribution is large)

	1	2	3	4	5	I don't know/can't judge
A set of methods and techniques were created, tested and implemented with the cooperation of project partners						
Programme feasibility and effectiveness were demonstrated						
Potential shortcomings and risks of the project were revealed and adjusted						
Financial obstacles were identified						
Quality of developed products could be increased						
Financial and practical feasibility of implementing the developed solutions could encourage target groups to uptake them into practice						
Institutional capacity was built as a consequence of creating, testing the pilot action						
Stakeholders could identify funding instruments for upscaling the project						
Full scale programme could be implemented						
The results and practices could be exploited and transferred to other institutions and territories						

**F.3.** Could you list the top 3 direct effects of creating a pilot action which could lead to an increase in the cooperation of key stakeholders?

**Explanation:** direct effects are the effects of the tool on the stakeholders and social/environmental/economic variables that were targeted by the scheme.

**F.4.** Can you list the top 3 indirect effects of creating a pilot action which could lead to an increase in the cooperation of key stakeholders?

**Explanation:** indirect effects are the effects of the tool on the stakeholders and social/environmental/economic variables that were not targeted by the scheme.

### **G. For PACs, and DSP: Questions regarding the general logic of the intervention**

*In this section we would like to inquire about the conditions of project implementation, about external factors having an influence on your projects, and the expected consequences of participating in the programme.*

**G.1.** How would rate the programme support's impact on making the governance of the EUSDR more effective? (1 – very low, 5 – very high)

**G.2.** Would you agree, that the programme support was necessary in making the governance of the EUSDR more effective?

G.2.a. strongly disagree

G.2.b. disagree

G.2.c. neutral

G.2.d. agree

G.2.e. strongly agree

**G.3.** Would you agree with the following statements? (1 – strongly agree, 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree)

	1	2	3	4	5	I don't know/can't judge
Programme management authorities were available when support was needed in implementing the project						
You, as a project partner had the necessary resources (human and institutional) to apply for funds and manage programme implementation						
Common problems were shared among PACs, and the DSP was able to prioritise and find the right training to overcome them.						
It was important to involve the right mix of stakeholders into the project implementation to achieve the desired project objectives						
Appropriate communication channels were established and could be used by all stakeholders.						
The capacity was available (human and institutional) for you for producing high level professional outputs.						
PACs used their capacities liberated by the support of the DSP for reaching strategic goals.						
There were no political or legal barriers in implementing the output of your project in your country.						

**G.4.** How strongly would you agree that the following events occurred or will occur in the near future as a consequence of the programme? (1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree)

	1	2	3	4	5	I don't know/can't judge
Outputs produced can be used for future programmes/next programming period						
Implementation of the EUSDR is modified to be more efficient						
A more appropriate narrative is found in order to communicate the goals of the EUSDR for public and private actors						

**G.5.** Were there any non-intended effects the intervention produced? (yes/no)

**Explanation:** non-intended effects are effects of the intervention which were not expected but are significant nonetheless.

**G.6.** If yes, how did they occur?

**G.7.** Could you list the top 3 direct effects of receiving support from the programme which later could lead to a more effective governance of the EUSDR?

**Explanation:** direct effects are the effects of the programme on the stakeholders and social/environmental/economic variables that were targeted by the scheme.

**G.8.** Can you list the top 3 indirect effects of receiving support from the programme which later could lead to a more effective governance of the EUSDR?

**Explanation:** indirect effects are the effects of the programme on the stakeholders and social/environmental/economic variables that were not targeted by the scheme.

## H. Specific questions for PACs

In this section we would like to ask about the possible impact mechanism which connects supporting PACs and the governance of the EUSDR

**H.1.** How would you rate the importance of the following factors in increasing the effectiveness of the EUSDR-governance in connection with PAC-support? (1 – no contribution, 5 – contribution is large)

	1	2	3	4	5	I don't know/can't judge
Evidence based decision-making is supported by the development of the monitoring and evaluation framework of the strategy						
Policy development and policy initiatives are supported						
Projects with strategic importance for the Danube Region are identified						
Administrative burden on PACs is lowered due to the activities of the DSP						
Development of complex transnational project initiatives are facilitated						
Status of management capacities of PACs improves						
Vision and targets become more clear regarding the policy areas and possible solutions with regards to EUSDR priority areas						
Institutional capacities and knowledge for the development of complex transnational projects are increased						
Effectiveness of coordination and strategy implementation improve						

**H.2.** List 3 of the obstacles that hindered the efficiency of the PAC support given by the DTP

## I. Specific questions for the DSP

In this section we would like to ask about the possible impact mechanism which connects supporting the DSP and the governance of the EUSDR

**I.1.** How would you rate the importance of the following factors in increasing the effectiveness of the EUSDR-governance in connection with the DSP support? (1 – no contribution, 5 – contribution is large)

	1	2	3	4	5	I don't know/can't judge
Needs are assessed, training and technical support for PACs and their activities is provided						
Evidence based decision-making is supported by the development of the monitoring and evaluation framework of the strategy						

Information flow between key EUSDR actors is facilitated						
Administrative burden on PACs is lowered due to the activities of the DSP						
Status of management capacities of PACs improves						
Vision and targets become more clear regarding the policy areas and possible solutions with regards to EUSDR priority areas						
Institutional capacities and knowledge for the development of complex transnational projects are increased						
Effectiveness of coordination and strategy implementation improve						

**I.2.** List 3 of the obstacles hindering the efficiency of the DSP support given by the DTP:



# Annex II: Interview questionnaire (Phase II)

## Part 0. General questions

- What is your role in the programme? What your exact duties were during the implementation?
- In general, what would you say works well in the programme implementation and what are the areas in which you think the programme implementation would need improvements?
- What impact do you think the programme generally has in the region? How do you think it is measurable?

## Part 1. Questions regarding “traditional” project calls (SO 1.1 – 4.1)

### Programme impacts

- What were the direct and indirect effects of creating a strategy/tool/pilot action?
- What additional direct and indirect effects were caused by creating a strategy/tool/pilot action?
- How would you think creating a strategy/tool/pilot action helped to reach the programme’s goals?
- What are the non-intended outcomes (both positive and negative) the intervention? How did they occur?
- How did the programme contribute to enhanced capacity building in the Danube region?
- How do you think the project impacted the process of integrating non-EU countries in the Danube region?
- How would you describe the cooperation with project partners during the implementation? What were the main barriers and enablers during the programme?
- Do you think the programme established the grounds for further cooperation between the project partners after the project is closed? What measurements do you take for the most significant to ensure the sustainability of the joint collaboration?
- Were there efforts done in order to have the outputs available and visible for the general public? If so, what exact actions were taken? If not, what is the reason?
- Do you think the generated outputs during the programme can contribute to the development of future legislation, policy, future investments and further initiatives? How is this happening in the case of different outputs?
- To what extent is the programme contributing to the implementation of the EUSDR and how?
- To what extent EU funds contributed to an effective delivery of projects?

### Implementation context

- Is the strong involvement of the private sector necessary for achieving the intended objectives? If yes, why?
- How is the private sector involved in the projects and how can it be involved without being a partner? Is the involvement of the private sector adequate? What are the success factors for a strong

involvement of the private sector? And what are the private sector's main contributions to the program's implementation?

- How is the private sector benefiting from the projects?
- How would you increase the participation of the private sector actors, and what improvement would you think of to ensure their participation and involvement in the project implementation?
- What is the intensity of cooperation among the regions involved in the programme? How did it influence the implementation of the programme?
- Is the DTP embedded in the regional development process? How does this influence the programme implementation?
- Do you think the DTP is embedded in the regional development process in the same way at macro and micro level? If not, what do you think the reason is? How do you think the weaknesses could be strengthened?
- Were there any country- or region specific and contextual issues that hindered the project implementation?
- Are the necessary resources (human and institutional) to apply for funds and manage programme implementation available at the side of potential beneficiaries / programme management?
- What are the factors that made the difference between successful and less successful intervention results?
- What additional contextual factors influenced the implementation of the programme? Are there any member-state specific issues? If yes, what are these?
- How well do you think that the following ToC models represent the programme intervention logic? (show ToC models)

## **Part 2. Questions regarding support given to the DSP and PACs (SO 4.2)**

- How has the programme support influenced the coordination capacities of the PACs?
- How has the programme support influenced the policy development of the PACs?
- What are the good practices and obstacles hindering the efficiency of the PAC support given by the DTP?
- How has the programme support influenced the coordination capacities and communication of the EUSDR?
- How has the programme support influenced monitoring and evaluation capacities of the EUSDR in relation to the evidence-based decision making?
- What are the obstacles hindering the efficiency of the DSP support given by the DTP?
- How well do you think the following ToC describe the programme's intervention logic? (show ToC)

# Annex III: Case studies

## CS 1: DTP2-076-1.1 KnowING IPR

### Part 0. Introduction

*This section contains basic information about the project collected from project documents (e.g., Application forms, Project Progress Reports).*

Project name (full title and/or acronym)	Fostering Innovation in the Danube Region through Knowledge Engineering and IPR Management
Programme priority axis (number and title)	Priority 1
Programme priority specific objective	SO 1.1: Improve framework conditions for innovation
Project Lead Partner organisation	Faculty of Information studies in Novo mesto (SI)
Other project partner organisations	Technical University of Kosice (SK), IN2data d.o.o. (HR), University of West Bohemia (CZ), Research Centre Regional and Global Development (BG), Executive Agency for Higher Education, Research, Development and Innovation Funding (RO), Steinbeis 2i GmbH (DE), H&S Heilig und Schubert Software AG (AT), Pannon Business Network Association (HU), Budapest Chamber of Commerce and Industry (HU), School of Advanced Social Studies in Nova Gorica (SI), Regional Economic Development Agency for Sumadija and Pomoravlje Ltd. (RS), Sarajevo Economic Region Development Agency (BH), Agency for Innovation and Technology Transfer (MD), State Agency on Intellectual Property of the Republic of Moldova (MD), Agency of the Regional Development and Cross-Border Cooperation "Transcarpathia" (UA), Algebra Ltd. (HR)
Other organisations involved in or associated to the project (if existing)	
Amount of EU co-financing (in €)	2,097,120.00 (ERDF + IPA + ENI)
Amount of public contribution (in €)	266,830.00
Amount of private contribution (in €)	96,750.00
Main objective(s) of the project	KnowING IPR improved the framework conditions for innovation in the Danube region by developing a transnational KnowING IPR platform, which provided: <ul style="list-style-type: none"> <li>- an open access tool for advanced intellectual property rights (IPR) analysis,</li> <li>- guidelines for improved and harmonized IPR policy framework across the Danube region.</li> </ul>
Project Specific Objectives	1, Enabling open access to enriched IPR data and IPR management 2, Increasing (transnational) innovation & IPR policy cooperation 3, Reducing gap in access to IPR capacity, especially for SMEs and HEI&RI
Project main outputs	<b>Output 1:</b> Solutions to provide needs-based, systematic and structured access to enriched real-life value IPR data implemented. <b>Output 2:</b> Transnational KnowING Hub platform, providing online access to enriched data for efficient innovation and tools for efficient IPR management developed. <b>Output 3:</b> KnowING Hub transnational platform with services and training developed <b>Output 4:</b> The developed KnowING Hub practical solutions by live-testing tools

	and services providing on-demand knowledge to especially SMEs and HEI tested and, the capacity building tools' efficiency is assessed <b>Output 5:</b> KnowING Hub is further strengthened, and additional services and training materials are added based on the assessment
Key activities implementing the project	<ul style="list-style-type: none"> <li>• Creation of an open access tool for advanced intellectual property rights (IPR) analysis</li> <li>• Creation of guidelines for improved and harmonised IPR policy framework across the Danube region</li> </ul>
Project duration	<b>42 months</b>
Start date	<b>07/01/2018</b>
End date	<b>31/12/2021</b>

## Part 1. Project preparation

### The genesis of the project idea/project partnership

Given the region's varying performance, social and economic cooperation among the 14 Danube countries can be difficult. However, several signs are pointing toward better integration. The benefits of strengthening IPT I&TT have been widely acknowledged. Companies which own at least one patent, registered design or trademark generate on average 20% higher revenues per employee than companies which do not own any of those intellectual property rights (IPRs) (EUIPO, 2021). The strategic goals of the WG I&TT (Innovation and Technology Transfer) as well as PA8 (Priority Area 8 of the European Danube Region strategy) is to improve business support to strengthen the capacities of SMEs for cooperation and trade, within different INTERREG and Horizon projects and within the framework of WG I&TT's flagship project, Danube Transfer Center (DTC) Network.

The work conducted within the KnowING IPR strongly aligns with implementing the EU macro-regional strategies. The EU macro-regional strategies in their 2019 statement states that macro-regional systems should maintain a targeted and result-driven implementation with clear European added value and defined results. At the same time, it observed the need for:

- Rekindling the political momentum in support of macro-regional strategies through high-level meetings and multi-level and multi-stakeholders governance and involvement.
- Increasing involvement, commitment and ownership of stakeholders and partners at local and regional levels as part of a bottom-up approach which brings an increased awareness of and a feeling of inclusion in the EU.
- Making progress in communication activities, such as developing communication strategies and organising events and activities.

Among the most important activities to reach the goals from PA8 and 4:

1. WG I&TT support to increase the participation of the Danube Actors in EU technology Transfer financed project.
  - a. Addresses SO1 (identify main challenges and improve framework conditions), SO2 (foster cooperation and generate transnational projects) and SO7 (support participation of Danube actors in EU financed projects)
  - b. Addresses PA8's TARGET 1.2 (Involvement of at least 10 new Danube actors in EU innovation and technology transfer financed projects)
  - c. Since foundation of DTC network 2012 total sum of 31.834.716,93 EUR funding acquired with partners from the DTC network.
  - d. Successful invitation of 10 new Danube partners in EU financed projects.
  - e. Running and new projects 2020-2022 - **where KnowING IPR is placed.**

KnowING IPR improves framework conditions for innovation in the Danube region by developing a transnational KnowING IPR platform, which provides:

- an open access tool for advanced intellectual property rights (IPR) analysis,
- guidelines for improved and harmonised IPR policy framework across the Danube region.

It ensures broader and needs-based access to existing innovation and research results to patents and IPR knowledge. It encompasses services and training for managing IPR and support to commercialisation of research results and technology transfer.

KnowING IPR is a pioneering effort bringing advanced knowledge engineering technology to the field of IPR. It enables the pooling and exploitation of existing innovation knowledge and increased IPR-based cooperation opportunities (out-licensing, in-licensing, and underdeveloped university technology transfer). The project tackles the bottleneck of the lack of real-value IPR data and IPR management knowledge, thereby stimulating an underdeveloped IPR market, encouraging further innovation investments and creating competitive advantages, especially for Danube region SMEs and HEI&RI.

The main output of the KnowING IPR is an open access Knowing Hub online platform that provides knowledge extraction from patent and other databases, advanced analytics, and training for IPR extraction and management. Thus, it enables IPR collaboration, better-informed freedom-to-operate, future trend decisions, and build-on innovation processes.

Furthermore, the project developed evidence-based Policy Recommendations for the Danube region in the field of IPR regarding several critical areas.

### The preparation of the project

Getting involved in an IPR common framework emerged as an opportunity to create an interregional association and to design an ecosystem where stakeholders from other countries could collaborate. The creation of a joint consortium for the programme, plus the constant interaction between the coordination of the project with the organisations involved, has created a rich space of information and concerns. Getting institutions such as universities and other organisations to participate was relatively easy. Nevertheless, convincing certain types of businesses to get involved in the project is a more complicated task. Moreover, a project where multiple organisations from diverse countries get associated has the extra difficulty of handling different cultural, legislative, and political sensitivities.

One of the aspects that came up on the interviews, is that the application process was highly bureaucratic, and a lot of paperwork had to be done. This proved to be a challenge for specific partners that had language barriers or lack of human resources. For countries to participate in the project, they had to rely on their own national agencies and national legislation, which hindered some of the processes due to lack of centralised information.

Regarding the partners, because of the successful collaboration experienced in the HCS project, the original idea was to repeat the consortium. However, there were new partners involved in the IPR project which slightly hindered the collaboration.

As mentioned earlier in the document, by addressing the issue of intellectual property rights protection and management in companies, the project addressed Priority Area no 8. of the EUSDR. Priority Area 8 deals with the competitiveness of enterprises. More competitive enterprises can contribute towards the development and economic prosperity in the Danube region. Apart from this, the KnowING IPR project also aims towards different stakeholders to acknowledge the value of IPR as a policy tool to improve the framework condition for innovation in the region.

Several tasks to support the implementation of the IPR Action plan were developed within the KnowING IPR project:

#### Tasks on the national level:

- Raise awareness activities that include the organisation of dissemination workshops, where applicable.
- Establish and maintain communication with national experts.
- Including national experts into activities related to IPR wherever and whenever possible.
- Seek potential partners working on similar initiatives or EU funded projects.

- Seek and maintain the connection to the companies (SMEs and enterprises) who work in the automotive sector.
- Keep them informed about activities and engage them to participate in other project-related activities and encourage them to get involved in piloting actions.
- Establish and maintain close cooperation with relevant public authorities.

#### **Tasks on the Danube Region level:**

- Seek for potentials to capitalise on the work of already existing initiatives supporting the question of IPR.
- Seek connections to R&D institutions (in the field of IPR) and others to establish a network that will be able to develop new joint applications for projects on the bilateral or EU level, related to IPR and IPR management.

#### **Piloting KnowING IPR HUB and EUSDR Action plan.**

The main aim of the Pilot was to offer a combination of services as constructed within the KnowING IPR HUB. The programme had three components:

1. Group mentoring in the form of 3 workshops delivered between December 2020 and February 2021.
2. One-to-one mentoring in individual meetings between participants and the KnowING IPR partners (upon request made by the participants through a unique application form).
3. Customised support (individualised support for the participants to inspect the commercialisation potential of their ideas/project or to receive a snapshot of the patent situation of a specific technology).

The KnowING IPR project targets the topic of technology transfer, specifically focusing on managing intellectual property rights in SMEs and HEIs&RIs as a factor of innovation and competitiveness. The Pilot's activities aimed towards developing the skills of people working at HEI and R&I organisations (PA9 goal). Through the open call for participants, individuals applied, and those selected underwent intensive training sessions of synchronous and asynchronous learning possibilities.

The interaction with HEIs&RIs was the cornerstone/prerequisite for the implementation of each of the planned activities. The interaction with HEI was established in the context of the WP3 and WP4 activities. It was consolidated within the WP6 activities (in particular, during the processes of promoting the mentoring programme towards the HEIs&RIs and during its implementation). The interaction has taken place mainly online, within the seminars and workshops organised by the Consortium as part of group mentoring; it has also taken place in one-to-one meetings with consortium experts. The group events allowed the participating HEI&RI to learn from other participants and to share their knowledge and experience in acquiring, using, and commercialising the IPRs. They also had the chance to interact with companies and thus understand the private sector's needs, its approach to investing in innovation, and the requirements for a possible acquisition of IP assets. Phone calls and emails were used as well for communication purposes with the representatives of HEI&RIs. Most of participating HEI&RIs preferred to interact within group events and were less interested in applying for one-to-one mentoring and for individualised support.

The Mentoring programme in IPR, patenting and technology offer (MeetIPRhub) aims to enable HEIs to develop their IPR skills, enhance their IPR-based cooperation, access IPR open data and use IPR knowledge to advance their work and solve specific challenges. The Consortium launched the Open Call to increase the selection pool, provide chances for participation to as many people/institutions as possible, and increase the visibility of the KnowING HUB platform and the pilot activity. Potential candidates had to submit their applications online by filing an application form and submitting it to the project. A total number of 20 HEIs & RIs from Danube countries applied to the call. The KnowING IPR partners selected the final participants in a dedicated online meeting on 26 October 2020.

## **Part 2. Project implementation**

### **History of implementation**

The project consisted of creating concrete policies to Fostering Innovation in the Danube Region through Knowledge Engineering and IPR Management, so a right implementation of those policies needs to:

1. Do a diagnose of the region's needs, in terms of Knowledge Engineering and IPR. That diagnose needs to be based on real evidence from both data research and participatory dynamics with the different stakeholders engaged.
2. Once the region's needs are defined, the policy proposal must be contrasted at the common consortium.
3. And, finally, once the proposed policies are contrasted, they need to be implemented into the widest range possible of new businesses, organisations and people that could be a potential beneficiary target.

The project and, therefore, the joint consortium prove that different stakeholders need to agree with the objectives. And at the same time, new stakeholders need to be involved in that objectives. Convincing new actors to be part of this initiative is a challenging task. Still, it is the basis to contribute to the EUSDR as the basis of interregional cooperation for developing a territory. And cooperating for that development means working for landing into regions that are the victims of territorial socioeconomic disparity.

The diagnosis of the regions determined that, overall, technology transfer activities appeared modest at this stage, which is confirmed by the low level of patenting, which hinders the development of the whole innovation ecosystem. Consequently, comprehensive support schemes for IPR development at the Danube region are required and creating awareness and building capacity among the innovation actors are key starting steps to engage in the development of the Danube IPR ecosystem coherently.

**Challenges related to policy:** IPR legislation is in place in most countries in the Danube Region. However, there are apparent differences between industrialised countries (Austria and Germany), where the strategic frameworks are more focused on IPR and the emergent economies / former communist countries, where the availability of legislative measures is still low. In addition, while the former has well-established and functional technology transfer offices - which act as one-stop shops for all matters related to intellectual property - and has put in place support programmes to enhance the commercial development of research results and foster science-industry collaboration, the latter are still confronted with fragmented policymaking, overly complicated legislation or by weak enforcement of existing regulations. Not each country faces the same challenges, but there are a lot of similarities among the Danube States.

**Challenges related to finance:** Financing R&D activities is tough in transition or developing countries, where the national economy still performs moderately. R&D spending is below the EU average in several countries (Romania, Serbia, Bosnia, and Herzegovina). Moreover, there is a lack of incentives for funding innovative entrepreneurship and commercialisation of research. These facts influence IPR in different ways. Most notably, the lack of R&D activities due to low funding results in a lower level of inventive, novel, and more radical inventions appropriate for patent protection. Secondly, IPRs are often seen as too expensive, especially for start-ups, private inventors, and junior researchers.

**Challenges related to culture:** Awareness of the importance of IP is generally low, both among businesses and universities and other research institutions. Moreover, few research institutions acknowledge the value of collaborating with the business environment and transferring the results of the research processes to the private sector. Challenges are mainly related to those Danube countries in which innovation culture remains largely underdeveloped. This, in turn, has led to a lack of awareness regarding the importance of IPR protection, high tolerance towards infringements of IPR, and low tolerance towards failure and risk-taking. In research, the value of IPR is not acknowledged sufficiently. Therefore, some of the research findings are not adequately protected, making them less attractive for technology transfer to private companies, as these desire more robust levels of protection garnered by IPR. HEIs should strongly support researchers, especially junior scientists, in protecting and exploiting their IPRs.

**Challenges related to human capital:** Most analysed countries are confronted with a lack of specialists in IPR. Moreover, particularly in transitioning countries, there is a lack of collaboration between IPR and TT representatives, and only a few researchers are engaged in the private sector. In addition, the Danube countries lack a corps of experts in technology transfer.

**Challenges related to markets:** A recurring problem in most countries in the Danube Region is the small number of patent applications, coupled with the fact that most patents are internationally owned (foreign

applicants). In emergent economies / transitioning countries, large companies tend to conduct their R&D activities elsewhere. On the other hand, in economically developed countries (Germany, Austria), many patents are “shelf patents” - i.e., not used for commercial purposes but either to prevent competitors from using a given technology or to improve the results of academic evaluations.

**Challenges related to supports in relation to technology transfer** as some issues in regard to IPR were already addressed under the previous chapter. The transfer of research results is still difficult in most analysed countries. In some cases, technology transfer offices are partially functional (e.g. Montenegro), and transfer mechanisms are not always clear. Other factors hampering technology transfer are a lack of information and underdeveloped infrastructure.

General summary of the identified challenges in connection to IP and IP-related databases:

- The databases typically provide only one type of data (e.g. only data on IPR, or on business entities). There is hardly any evidence on inter-linking of different types of data (e.g. linking patent data)
- Lack of data bulk download – this is a crucial functionality for pre-processing of the data or advanced analytics. There is also missing information on available download data format.
- The availability of data in English is surprisingly high, with the average of 2/3 being available in English; however more of the less developed countries pay less attention to this (e.g. Romania or Ukraine).
- Lack of Technology Transfer (TT) databases – only some of the countries – e.g. Slovenia and Austria, provided information on the TT database availability.
- Business (entities) data is mostly behind paywalls or is available only in limited format and/or is limited in scope.
- The national databases are mostly provided by public entities; the majority of them by the national intellectual property offices.

Data fragmentation – some countries have provided higher number of databases, but the same type of databases or databases that cover the same types of data. The challenge is not only relevant due to analysis purposes. Users also may struggle to understand which data is provided by which database. Moreover, if there are overlaps the issues relating to assessing validity of data is prominent.

The Fostering Innovation in the Danube Region through Knowledge Engineering and IPR Management output published in November 2022 identifies that the process of technological transfer and IPR support is very slow, with financial, legislative, and human capital difficulties that continue to hinder and delay the commercialisation of the research results and the integration of IPR in both business and academic work. Some of the most critical issues identified in the regional analysis conducted during KnowING IPR project - country reports and workshops with relevant stakeholders - are: lack of financing; difficult access to informational sources; frail cooperation between the research entities and private companies; weak connection of the researchers to the newest developments in the world-wide research area of interests; the absence of qualified professionals that would facilitate the connections between research institutions/universities and the business environment; expensive and bureaucratic process for patenting and lack of awareness about IPR benefits and about existent support.

These are characteristics related to the pillars of the innovation ecosystem and these reflect the main needs underlined by the relevant stakeholders engaged in the process of research. In addition, the national databases and expert international database assessment underlined the following key specificities: even if the potential for patent application is highly related to the economic potential given by GDP per capita, there seems to be no particular correlation in regard to open availability of IPR data and related databases; moreover, the technology transfer databases are missing in the Danube countries; last but not least, there is a concern relating to the availability of open access business related data both in terms of national and international databases. The analysis showed a limited number of IPR good practices emerging from the Danube countries, most of them being specific to the Western part of the region.

### Successful implementation aspects and major difficulties

To assure the success of proposed activities the following three modes of operation were used and exploited.



**Peer consultation:** All the actions were done with awareness of all other project partners to ensure the highest levels of awareness within a consortium. Additionally, the peers were requested to review the work done to ensure other point of view and be able to collect the first feedback about proposed activity or the execution of it.

**Reporting to stakeholders:** Prior to implement a proposed action the initial contact was done with the local stakeholders. After a task is concluded the reports should be prepared and send to the stakeholders to report. All dissemination channels of the DTP and social media were used, along with the web platform of KnowING IPR. The National Patenting Offices and Automotive Clusters along with HEI and RI institutions were proposed to be among the receivers of the reports. Also, other stakeholders detected along the implementation can be informed about the progress of the tasks.

**Dissemination to wider publics** done through internet, social media, and radio and TV according to the needs and demands in each of the country of the Danube Region. Once the project is established, the common consortium must expect some results and, in consequence, put deadlines.

The interviews highlighted that the communication with the programme officers was “outstanding” or the project implementation and giving advice on how to ensure it. However, for certain countries, the relationship between project partner and national controllers was described as “problematic”. Besides, the interviews mentioned that the programme needs to follow up at all levels, because there were cases in which some partners were not getting paid because of the lack of national controllers in some countries to ensure the payments were being done.

Another difficulty mentioned by interviewees was the insistence of having to deliver hand signed and printed documents instead of digitalised ones.

### Successful implementation aspects and major difficulties

#### Part 3. Project’s achievements, impacts, its contribution to programme specific objectives and afterlife

#### The general progress of the project area in the domain targeted by the relevant specific objective

Throughout its implementation, the KnowING IPR supported the three Priority Areas of the EUSDR. Among those, the primarily PA7 – to develop the knowledge society through research, education, and information technologies; the secondly PA8 – to support the competitiveness of enterprises, including cluster development and, finally, PA9 – to invest in people and skills.

The KnowING IPR project provided additional work and tasks confirmed by the JS as tasks undertaken in the official extension phase. The workflow, joined together under an additional Work package was divided into three parts:

1. Firstly, the consortium updated and further elaborated the training materials, covering additionally the topics of Software patenting and Innovation management. Those new materials were used and presented within the TechTransfer Summer Schools. Two of such summer schools were organised and offered the trainees the combination of synchronous and asynchronous learning models.
2. Secondly, the Mentorship programme was implemented, where a total of 23 SMEs got engaged in a series of one-on-one mentoring sessions with experts.
3. Thirdly the policy endeavours were brought down from the Policy recommendations of the WP6 to three specific countries: Slovakia, Moldova, and Slovenia.

Alongside the activities, the IPR roadshow was organised covering dissemination activities in 5 countries – Romania, Moldova, Hungary, Bosnia and Herzegovina, and Serbia.

#### Direct effects and impact of the project

The main result of the KnowING IPR was the KnowInGHub online platform. Furthermore, the project yield evidence-based Policy Recommendations for the Danube Region in the field of IPR.

KnowInGHub Web Portal provides the complete online infrastructure for access to enriched data, developed knowledge extraction tools and IPR management tools for both basic and more advanced users. It enables

searches and data retrieval using browsers and mobile applications. It offers a complete KnowINGHub service online.

Figures pertaining to the three and a half years of KnowING IPR project implementation:

- The project reached a total of 141 SMEs,
- The project reached 24 enterprises,
- The project reached 23 policymakers,
- The project reached 42 business support organisations, and
- The project reached 100 higher education institutions and research institutions.

Following the figures above, the project activities regarding awareness of the topics of technology transfer and innovation management are the future topics to be further addressed in the Danube region. One of the major lessons learned by the KnowING IPR project implementation was understanding how to approach to gain success.

According to the interviews, the project helps to built capacity in the region by creating job opportunities in site, and thus retaining individuals who would leave the less developed regions in the peruse of better professional prospects.

### **Non-intended outcomes and project afterlife**

The results imply a partial improvement at the region. In fact, the project has been a very powerful basis to protect innovation at the Danube region's businesses. But, to fight regional inequalities, this action need continuity and ambition to affect some economic sectors, businesses, and territories in which the accessibility to this new resource has not been yet a reality.

The more stakeholders that the common consortium could have, the more consensus that could emerge. Then, when more countries have the possibility of getting involved into the project (including some non-EU countries), the contribution to interregional cohesion increases. Nevertheless, more regions mean more complexity at the decision making, considering that complex negotiations should be the basis to the development of interregional cohesion.

However, the compromise of different stakeholders from diverse backgrounds and regions has a significant value, not only because this it is an opportunity for knowledge exchange and policy impulse, but also because stakeholders can meet each other to understand each other's needs and vision. So, in conclusion, this can be a great opportunity for the creation of new associations, initiatives, and policies in which different stakeholders can collaborate and network, and that can be the basis for new development projects for territories that need them.

The 6.3 output details the policy recommendations that emerged from the project. For the development of Human capital, education of institutions (SMEs, HEIs, RIs) and individuals alike (CEOs, managers, researchers, students, engineers) about the importance of patenting and IPR (analysis costs vs benefits) is needed. It states that the younger generation should be educated, and awareness about patent and intellectual property rights should be raised. Information about IPR should be included in the national education curricula of each state and increase the knowledge level starting from an early age.

To develop education, it was recommended to raise awareness among stakeholders by providing good practices and sharing knowledge on IPR should be conducted by each state. Organisation of national events for holders of TTOs and IP offices regularly is needed to assure knowledge transfer on technology, patenting and intellectual property.

For the development of culture, the national patent systems should be strengthened by including HEIs, RIs and Chambers of Commerce in shaping the policy process. There is a need to create a HUB/a connecting point for various stakeholders that could support local TTOs. The Hub would offer support programmes, raise awareness, offer legal and administrative support to researchers, companies, and institutions. The Hub should be able to connect different environments – local, national, regional – and it must be managed by a team composed of representatives of all types of stakeholders (business, academia, RPOs, inventors). Strong working relations that would lead to the formation of a trusting environment inside organisations should be built. Encouragement of the networking between research and the business sector is needed,

resulting in the strengthening of collaboration between the two stakeholders and increasing the commercialisation of the research results.

For the development of policies, the national patent systems need to be updated regularly, following the European and international updates on existing regulations, also considering the national status of the R&D ecosystem. The European and national IPR legislation and support programmes should be harmonised so that regional discrepancies are attended. National plans and strategies to encourage collaboration should be developed.

For the development of funding, simplifying the procedures that govern the programmes aimed to support and stimulate innovation is needed to help SMEs and HEI&RIs apply for different programmes regularly. Financial incentives are very important as they can fully or partially cover patenting costs and help motivate researchers and innovators and boost the patenting application numbers. Finances for SMEs should be available to assure financial resources, avert risks for SMEs and motivate them. The finances can be available in various forms: tax incentives, tenders, innovation vouchers and patent vouchers.

## CS 2: D-CareLabs

### Part 0. Introduction

Project name (full title and/or acronym)	D-CareLabs – Developing Labs to Facilitate Home Care Innovation and Entrepreneurship in the Danube Region
Programme priority axis (number and title)	SO 1.2: Increase competences for business and social innovation
Programme priority specific objective	Better connected and energy responsible Danube region
Project Lead Partner organisation	Diakonie Baden (GE)
Other project partner organisations	Grünhof e.V. (DE); University of Heidelberg (DE); Hungarian National Association of Local Authorities (HU); ACT Group (HR); Faculty of Law of University of Zagreb (HR); Federation of Social NGOs in Transylvania (RO); Federation of social NGOs in Bulgaria (BG); Caritas of the Archdiocese Vienna (AT); Centre for European Perspective (SI); Mozaik Foundation (BA); Partnership for Public Health Association (BA); Network of Organizations for Children of Serbia (SR); AGAPEDIA Moldova Foundation (MD)
Other organisations involved in or associated to the project (if existing)	Ministry of Social Affairs Baden-Württemberg (DE); Ministry of Interior (HU); Directorate-General for Social Affairs and Child Protection (HU); Regional Development Agency – Central Region (RO); Austrian Public Health Institute (AT); City of Vienna Municipal Dept. 23 for Economic Affairs, Labour and Statistics (AT); ERSTE Foundation (AT); Social Inclusion and Poverty Reduction Unit of the Government of the Republic of Serbia (SR); Hungarian Ministry of Human Capacities (HU); Municipality of Maribor (SI); Agency for Social Assistance (BG); Ministry of Health, Labour and Social Protection (MD)
Amount of EU co-financing (in €)	2,515,895.12 (ERDF + IPA + ENI)
Amount of public contribution (in €)	108,529.78
Amount of private contribution (in €)	264,789.55
Main objective(s) of the project	The main objective of D-Care Labs is to strengthen the implementation of innovative social services in the domain of home care. It is focused on developing and implementing innovative solutions to improve the quality and accessibility of health and social care services in the Danube Region, including promoting the use of e-health and telemedicine technologies, improving the training and education of healthcare professionals, and enhancing patient-centred care.
Project Specific Objectives	<ol style="list-style-type: none"> <li>1. Establishing long-term regional D-Care Labs to foster home care innovation in the DR (Danube Region)</li> <li>2. Setup ecosystem of social investment</li> <li>3. Enable macro-regional community-building and knowledge creating</li> </ol>

Project main outputs	<p>Output 1: Transnational Lab Strategy to Promote Innovation Structures in the Field of Home Care implemented</p> <p>Output 2: Transnational Lab of the Labs implemented, and its impact analysed</p> <p>Output 3: Social entrepreneurial and investment competences among partners, and ecosystem(s) of social investment for the innovation programmes and home care innovations developed</p> <p>Output 4: Pilot tests for the first lab cycle by all regional D-Care Labs completed</p>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Project kick-off and closure event</li> <li>- Establishment of project management, structure, control and reporting</li> <li>- Project coordination and project controlling and quality management</li> </ul> <p>Activities 1</p> <ul style="list-style-type: none"> <li>- Preparation of country reports</li> <li>- Preparation and development of the transnational strategy</li> <li>- Development of the Action Plan for implementing the Transnational Lab Strategy on national level</li> <li>- Policy dialogues with local, regional and national stakeholders</li> </ul> <p>Activities 2</p> <ul style="list-style-type: none"> <li>- Draft and finalize the lessons-learnt report: including lab design and infrastructure</li> <li>- Development of the Social innovation Method and Toolbox</li> <li>- Establish the transnational knowledge and experience exchange among regional labs</li> <li>- Development of the diffusion strategy report</li> <li>- Pilot a community online-building tool</li> </ul> <p>Activities 3</p> <ul style="list-style-type: none"> <li>- Social investment stakeholder mapping</li> <li>- Develop guidelines for establishing and maintaining communication with key social investment stakeholders</li> <li>- Establish and maintain a business partner network for home care innovations</li> <li>- Develop Social Entrepreneurship and investment competences</li> <li>- Design and test formats for matching home care innovators and investors <ul style="list-style-type: none"> <li>o Develop a toolbox of match-making formats for area home care innovations</li> <li>o Pilot actions in all regional labs</li> <li>o Pilot action on a transnational level</li> </ul> </li> <li>- Provide thematic guidance support for lab newcomers</li> </ul> <p>Activities 4</p> <ul style="list-style-type: none"> <li>- Launch of the lab: application and selection phase</li> <li>- D-Care Lab programme: define the issue, ideate, prototype and model the home care service or product</li> <li>- Implement innovation results</li> </ul> <p>Provide additional thematic guidance for lab newcomers</p>
Project duration	<b>30 months</b>
Start date	<b>07/01/2020</b>
End date	<b>12/31/2022</b>

## Part 1. Project preparation

### The genesis of the project idea/project partnership

Social services are unequally developed across the countries of the Danube Region. Intra-country differences between rural and urban are also prevalent. Some countries prioritize home care, while others focus on residential facilities. Formal home care services and residential care facilities are though

underdeveloped in certain countries. With the aging population in Europe, demand for elderly care exceeds supply. Improving the quality of long-term care is essential to maintain and to improve the quality of life for elderly residents, and their limited access to the social services can also limit their access to other public services, such as healthcare.

According to the challenges and needs in the framework of the project<sup>7</sup>, the fundamental needs of social home care beneficiaries are not satisfied in the Danube Region by social service providers.

There are extensive eligibility requirements that need to be fulfilled e.g., basic needs (access to proper medical therapies and support for body hygiene (basic needs), provision of adequate home facilities to prevent falls (security needs) and measures to enable social inclusion of those in need into the local community (social needs). Countries of the Danube Region recognise similar concerns and issues of home care on country- and regional level, for example in Germany and Austria, the lack of access to proper social care services is mostly characterised in rural areas and at the lower income households while in Central- and Eastern European countries even essential services are often not provided. Staff shortages, financial restrictions and insufficient use of new digital technologies and solutions are part of the problem in the Danube Region.

The use of new technologies in this sector has untapped potential to improve the quality of elderly care. Telehealth and telemedicine solutions are increasingly utilised in the region, but access and affordability of digital tools, along with a digital gap between generations, hinder progress in this area.

Such common challenges across the countries called for a comprehensive approach by the Lead Partner and the Project Partners. The seeds of D-Care Labs project were planted through a pilot action implemented in Germany prior to the preparation of the DTP application. The successful pilot implementation and a clear idea to generate adequate strategies and actions to overcome these challenges led to the development of the first initial idea of the project.

The project's main objective was to establish specialized macro-regional D-Care Lab innovation structures to enable social service providers, product developers and social start-ups to design, better implement and to innovative home care services and products for elderly persons, people with disabilities and children with special needs. **The Transnational Lab Strategy**, developed in the framework of the project to standardize the labs nationwide, is based on the analysis of beneficiary needs, innovation potentials/logjams and it is intended to identify complementary interregional resources. The project created the **Transnational Lab of Labs** to support and to establish the framework for the incubation of **Regional Labs** and a community of practice to increase mutual learning, knowledge exchange and transnational cooperation. Additionally, the **Ecosystem of Social Investment** was established that creates financial and entrepreneurial support structures for innovations in the field of home care solutions. In the framework of the project, nine pilot tests were ran to demonstrate the features and added value of the Labs. The project was formulated around four main outputs, namely:

- Work package 1: Transnational Lab Strategy to Promote Innovation Structures in the Field of Home Care implemented
- Work package 2: Transnational Lab of the Labs implemented, and its impact analysed
- Work package 3: Social entrepreneurial and investment competences among partners, and ecosystem(s) of social investment for the innovation programmes and home care innovations developed
- Work package 4: Pilot tests for the first lab cycle by all regional D-Care Labs completed

### The preparation of the project

The Lead Partner, Diakonie Baden (Germany) identified the lack of a mechanism to implement new innovation systems in the field of social care as an issue. A project idea aiming to contribute to resolve the issue was piloted in Germany before starting the project preparation. There is a limited number of funding

<sup>7</sup> <https://www.interreg-danube.eu/approved-projects/d-carelabs>

programmes for innovation in home care. Through the Lead Partner's office based in Brussels, Belgium the DTP was identified as the most suitable financing programme for developing and scaling up the activities and outputs designed under the project proposal.

The project preparation started in 2018. It took 2.5 years and was followed by 2.5 years of implementation. Scaling up the aforementioned pilot implemented in Germany (which provided the blueprint for the project) to the transnational level took considerable time and effort from both the Lead Partner and the involved project partners. Initially, they had planned to apply for the 1<sup>st</sup> call of the DTP, however it was further delayed for the 2<sup>nd</sup> call. This allowed the project team to ensure all activities are developed and responsibilities are delegated to the appropriate Project Partner.

Project partners were carefully identified and selected with the support of an already existing NGO network that dates to the early 2010s and was established during the same period as the development of the EUSDR. The Lead Partner not only considered previous expertise, but also put emphasis on the geographical coverage of DTP. One of the main activities that led to lengthy project preparation was the duration of the selection of the project partners. The core idea of the project was promoted among potential partners, and those were selected based on their proposals listing their potential contribution to the project. The Lead Partner selected the project partners based on the received proposals. The project management body of the project was established with representatives of the project partners and was chaired by the Lead Partner to ensure the smooth implementation of the project. They allocated the project partners into the working packages according to their expertise and geographical coverage, while putting the most relevant Project Partner into the Work Package (WP) leader role for each package. This ensured that the responsible partners could provide meaningful and detailed support to the other project partners. Once the teams were set up, the project management structures and processes were established, simultaneously the control and reporting chains were built into the management structures.

The management team also developed a sustainability plan for all deliverables and required the project partners to follow the same approach. This was envisaged to ensure the sustainability of project outputs once the interest of the involved stakeholders started declining.

## Part 2. Project implementation

### History of implementation

D-Care Labs was the first transnational project the Lead Partner developed and successfully implemented. Prior to starting the implementation of the project, a consultation was organised between the Lead Partner and the DTP Policy Officer in Hungary to make sure that the project followed the eligibility requirements of the DTP. To ensure the smooth cooperation and dedication of the project partners, kick-off meetings and workshops were held in person. During these meetings, the project team and the project management structure were established.

The Lead Partner introduced a meeting schedule at the beginning of the project, where obligatory, bi-weekly meetings were set up to monitor the progress of the project implementation. Moreover, every other week a series of more informal meetings, in form of voluntary digital lean coffees, were organized as an open platform to discuss relevant upcoming matters. As emerged during the interviews with Project Leader and project partners, these meetings were one of the main pillars that led to the fruitful project implementation. Additionally, WP specific meetings were held by the leaders of the WPs, once the project structure was set up to monitor and to support the project partners to carry out the specific activities leading to the desired outputs.

The team for all WPs were established with clear responsibilities and objectives. During the workshop for the **Transnational Lab Strategy** as part of **WP1**, a blueprint for assessing the impact of the regional labs, and for the coherent impact measurement report for the Strategy were developed. Firstly, all project partners carried out an in-country assessment on the status of social care – including mapping of the relevant stakeholders in home care sector on local, regional, and national level – in their countries that supported conducting a final transnational analysis. The assessment allowed the consortium and the project management body to better organize the activities and outputs, together with the previously identified and relevant stakeholders, according to the recognised country or region-specific needs and address the challenges with more visibility.

Another important pillar of the project implementation was the **WP2** focusing on the implementation of the **Transnational Lab of Labs**, which was led by the Heidelberg University (Germany). The 1<sup>st</sup> kick-off workshop was held as a face-to-face event in Austria which was followed by online meetings with the Project Partners. In the framework of this WP a social innovation Method and Toolbox was created, and the framework provided a platform for the exchange of transnational knowledge and experience among regional labs. Not to duplicate efforts, the project partners decided to pilot the Lonac platform from Mozaik (Bosnia and Herzegovina). This online community tool focuses on sharing information, network and to build capacity of relevant stakeholders. The knowledge exchange activities were piloted in Hungary and Serbia. The Lonac platform served as a role model for both countries, yet the platform was not available in English nor Hungarian, therefore the Hungarian partner developed a similar platform in the local language.

According to the conducted interviews, the most intense collaboration between partners was noticeable under the **WP3** which was led by Act Group (Croatia). The aim of this WP was to develop social, entrepreneurial - and investment competences among partners as well as to establish ecosystems of social investment for innovation programmes and home care solutions. The main idea of the tool is to lure in potential partners from social investment groups and businesses in order to secure funding for home care innovations. A match-making toolbox was developed to link social inventors with potential social investors (e.g., private investors, banks, foundations, public financiers, refinancing insurances, public institutions). The toolbox is based on the inputs and gathered experiences steaming from the partnership. Match-making formats were developed on country, and on the macro-regional level to initiate the potential operation between stakeholders on a wider scale. Project partners successfully piloted the formulas on national level during the project implementation. Moreover, project partners continued to establish communication and collaboration with further potential partners to secure the sustainability of D-Care Labs and home care innovations.

Finally, the output of **WP4** was highlighted by the interviewed project partners as the most visible aspect of the project implementation. In the framework of this WP, all regional D-Care Labs completed their pilot tests for the first lab cycle. To support the sustainability of WP4, project partners started conceptualizing regional lab concepts for further implementation support schemes for new home care services and products.

## Implementation context

The interviewed stakeholders highlighted that the relationship with the programme management bodies was constructive, and they received the support they needed. Due to the structure of the DTP, project partners had to contact their National Coordination and Contact Points (NPCs) first if they faced any difficulties. The interviewed stakeholders highlighted the importance of a strong national DTP structure that contributed to the project's success. While the support in general was assessed as helpful, the level of DTP support was perceived to vary across countries.

The identified challenges in home care across the Danube Region are in line with **DTP's Specific Objective 1.2** (Increase competences for business and social innovation) and also contributed to **EUSDR Priority Axis eight and nine** focusing on competitiveness of enterprises and people skills and education.

As it was emphasised during the interviews, the right mixture of stakeholders is desirable to reach the objectives of the project due to the different strengths and capacities that those can provide. D-Care Labs was open for all type of stakeholders, but given the topic of the programme, it mostly attracted actors from the private sector. As the project was linked to innovation, the involvement of the private sector was inevitable, and subsequently non-state actors were involved from all countries. Yet, the extent of the private sector's involvement varied between countries in the Danube Region. Furthermore, the involvement of the public sector ensured that the project's effects on the policy making procedures are well kept and contributed to its sustainability in some countries.

## Successful implementation aspects and major difficulties

The project completed all elements specified in the project plan, and all deliverables were produced in time. Less significant delays and challenges appeared during the implementation, nonetheless. The COVID-19 pandemic, the Russo-Ukrainian war, and changes in the Moldovan Partner's project managerial structure affected the implementation process. Due to the COVID-19 pandemic, all meetings had to be moved to online platforms. Especially local face-to-face meetings and events were difficult to be organised under these circumstances. According to the interviewees, the Lead Partner offered online tools to overcome these

challenges. Another noteworthy difficulty was the administration of the project, at least for project partners. Due to the nature of the funds, and the difference between the involved stakeholders' knowledge and experience on the fund-specific directives, the reporting scheme had to be clarified and constituted among the project partners. According to the interviews, both the Lead Partner and the NPCs provided sufficient support to the project partners to ensure that the reports meet the legal requirements. According to the interviews, there was no significant differences between EU and non-EU countries' involvement and progress in the implementation.

The close collaboration, and exchange of knowledge and experience, the clear objectives and well-designed activities and outputs with clear roles and responsibilities all led to make this project's implementation successful. The importance of these factors was stressed multiple times during the interviews. Additionally, each project partner had to develop a sustainability plan with the support of the Lead Partner, and monthly meetings were held in this regard to monitor and ensure the success of the operation.

All of the interviewed stakeholders agreed that without the fundings of the DTP, this international scale of the partnership would not have been possible.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

#### The general progress of the project area in the domain targeted by the relevant specific objective

The project reached all of its three project-specific objectives targeted in the application.

#### **Specific objective 1: Establishing a long-term regional D-Care Labs to foster home care innovation in the Danube Region**

In relation to this objective, interregional social innovation structures for D-Care Labs in nine Danube Region countries have been set up. A total of 238 social entrepreneurs and social innovators have participated in the programme and a total of 47 homecare innovations have been developed under WP4. As part of the objective, a comprehensive assessment on the impacts was conducted, and all partners worked on sustaining the innovation structures in long-term. Several partners – such as Austria, Bosnia and Herzegovina, Croatia, Germany and Hungary – already found ways to ensure the project's sustainability.

#### **Specific objective 2: Setup ecosystem of social investment**

This objective was to create the D-Care Labs as an intermediary support structure to enable new solutions for the field of homecare. This served two purposes: to get access for financing the social innovation structure itself and for the homecare innovations as well. Trainings were provided for all partners on how to communicate effectively and interact with all types of social investors. Additionally, social investment stakeholders were identified, and communication, collaboration have begun with them. Several partners also ensured the sustainability of their regional D-Care Labs and have supported homecare innovators to get access to financial resources.

#### **Specific objective 3: Enable macro-regional community-building and knowledge creation**

One of the main achievements of the third objective of the project was the **Transnational Lab of Labs** which is proved to be an important platform for learning and knowledge sharing among the D-Care Labs community. Lab participants and local partners benefited from the newly gained expertise from other partners from the Danube Region. In order to ensure the sustainability of the transnational collaboration after the project closure, each lab was responsible to sustain its own D-Care Lab and a new transnational network was established.

#### Direct effects and impact of the project

Prior to the programme, there was only a limited number of financing opportunities for digital innovation in homecare solutions. The D-Care Lab incubator programmes in the nine countries can support to scale-up the solutions steaming from the private sector.

The project boosted the cooperation of the relevant stakeholders on an international level, in order to initiate a long-term cooperation in the field of digital innovations of homecare solutions. According to the interviewed



stakeholders, project partners expect the programme remain operational in the future. The involvement of non-EU partners such as Bosnia and Herzegovina and Moldova brought positive effect and created added value for the consortium and vice versa e.g., in the form of knowledge, and experience sharing.

### Non-intended outcomes and project afterlife

Digital skills are not equal in the population, therefore special approaches were required to overcome this significant challenge when it comes to digital solutions. The trends towards using mobile application had to be brought in line with the limited usage of smartphones by the elderly population. Creating middle-ground solutions and making these platforms accessible for all users were key elements to achieve the desired goals. The idea of creating locally based partnerships around the border areas or establishing specialized teams to address similar issues on a cross-border level also can be counted as non-intended outcomes of the project.

Additionally, a follow-up action and cooperation are already planned with the same core team, with small changes in the project structure, in the framework of the 2021-2027 programming period of the DTP. It is foreseen that the two main elements of the follow-up project will be the establishment of system innovation labs and accelerators. System innovation labs will work similarly to the already established D-Care Labs, while accelerators will scale-up the already proven solutions.

Generally, ministries and national authorities are the distributors of the DTP funds due to the EU support schemes' structure, yet institutionalised changes could be witnessed in some of the countries in the Danube Region. The institutional collaboration in Germany for example, has changed significantly, and the attitude and approach of the national institutions have changed as well.

## CS 3: Living Danube Limes

### Part 0. Introduction

Project name (full title and/or acronym)	Danube Region Leading Geothermal Energy
Programme priority axis (number and title)	Priority 3
Programme priority specific objective	SO 3.2 Improve energy security and energy efficiency
Project Lead Partner organisation	Geological and Geophysical Institute of Hungary
Other project partner organisations	Mannvit Planning and Consulting Limited Liability Company; InnoGeo Research and Service Non-profit Public-benefit Limited Liability Company; Ministry of Foreign Affairs and Trade; GEOLOGICAL SURVEY OF SLOVENIA; Local Energy Agency Pomurje; Croatian Geological Survey; Zagorje Development Agency Ltd; Geological Institute of Romania; S.C. TERRATECHNIK S.R.L.; Federal Institute for Geology – Sarajevo; Geological Survey of the Republic of Srpska-Zvornik; University of Belgrade, Faculty of Mining and Geology; Provincial Secretariat for Energy, Construction and Transport; Municipality of Sremski Karlovci
Other organisations involved in or associated to the project (if existing)	Ministry of Infrastructure, Energy Directorate; Association of Municipalities and Towns of Slovenia; City Municipality of Murska Sobota; CROATIAN ENERGY MARKET OPERATOR Ltd.; Ministry of Economy, Entrepreneurship and Crafts; - Ministry of National Development; National Agency for Mineral Resources
Amount of EU co-financing (in €)	2,133,992,98 (ERDF + IPA)
Amount of public contribution (in €)	363,740.98
Amount of private contribution (in €)	12,846.14
Main objective(s) of the project	The main objective is to enhance the sustainable and energy-efficient use of the still untapped deep geothermal energy resources in the Central and SE-ern part of the Danube Region in the heating sector, especially district heating and individual space heating in settlements and various uses in the agriculture sector (heating of greenhouses and plastic tents, animal husbandries, aquaculture). DARLINGe aims to increase the share of available, but still untapped geothermal resources mostly used for balneological purposes by (1)

	identifying new areas of possible utilizations where advantageous geological conditions meet heat market demands; (2) expand current (balneological) sites already using thermal water, however at low energy efficiency by introducing additional, more efficient uses both “downstream” or “upstream”; (3) foster reinjection practice which decreases the necessary amount of thermal water to be abstracted. DARLINGe aims to establish the strategic-policy background and a cluster of dedicated stakeholders to achieve these goals, too.
Project Specific Objectives	<ul style="list-style-type: none"> <li>- Increase cascaded geothermal systems and introduce “resource-parks”</li> <li>- Establish transnational management of geothermal reservoirs</li> <li>- Advance stakeholder cooperation to foster geothermal developments</li> </ul>
Project main outputs	<ul style="list-style-type: none"> <li>- 4.00 strategies to improve energy security and energy efficiency</li> <li>- 2.00 tools to improve energy security and energy efficiency</li> <li>- 3.00 pilot actions to improve energy security and energy efficiency</li> <li>- 6.00 documented learning interactions in finalised operations</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Contractual and financial management</li> <li>- Operational management</li> <li>- Capacity building for project partners</li> <li>- Stakeholder consultations</li> <li>- Training activities for stakeholders</li> <li>- DARLINGe data model (common database)</li> <li>- The Danube Region Geothermal Information Platform (DRGIP)</li> <li>- Current utilization schemes</li> <li>- Case studies of good practices and bottlenecks</li> <li>- Heat sector analysis</li> <li>- Regulatory framework, licensing procedures and funding opportunities</li> <li>- SWOT analysis</li> <li>- Transnational Danube Region Geothermal Strategy</li> <li>- Elaboration of a transnational tool-box</li> <li>- Danube Region Geothermal Action Plans</li> <li>- Benchmark evaluation</li> <li>- Testing of the decision tree</li> <li>- Geological Risk Mitigation</li> </ul>
Project duration	<b>30 months</b>
Start date	01/01/2017
End date	30/09/2019

## Part 1. Project preparation

### The genesis of the project idea/project partnership

The Danube region makes up one-fifth of the European Union’s territory and is inhabited by approximately 114 million people. However, the settlement communities along the Danube remain relatively isolated from one another, hampering cultural understanding between the different nations in the region and limiting the opportunities for economic and cultural development and cohesion in the area. While the Roman heritage is

still present and visible along the Danube region, many of these historical ruins are not sufficiently excavated and are threatened by natural disasters, such as floods.

Predecessor projects like “Danube Limes Brand” and “DANurb” identified the **underused cultural heritage** and organised resources from a spatial point of view along the Danube and aimed to connect them to form viable cultural collaborations and tourism opportunities. Building on already existing work developed by these predecessor projects, a consortium of 19 project partner organisations supported by 27 associated partners from 10 Danube countries developed and implemented the Living Danube Limes project to foster identification with the transnational Roman heritage and maximise synergies and sustainability. Moving beyond the need for a common Roman brand for the Danube countries, the project partners identified the need to **valorise the Roman heritage of the Danube region in a sustainable and eco-friendly way** that ensured the protection and preservation of the shared cultural heritage and physical artefacts of the area.

The project's holistic approach was based on **four components** which are interlinked and equally important:

1. **Archaeology & History**, which dealt with historic characterisation, site strengthening, and the history of the Roman era along the Danube, is linked to *Thematic Work Package 1 (WP T1) “Characterising the Danube Limes Region”*;
2. **Museum Clusters**, which dealt with strengthening museum clusters, visitor centres and pilot sites, and virtual reality reconstructions, is linked to *WP T2 “Placement and strengthening of museum clusters and visitor centres in the Danube Limes Region”*;
3. **Protection & Green Tourism**, which dealt with the protection of the Roman heritage, eco-friendly tourism, and development of the Living Danube Limes mobile application, is linked to *WP T3 “Transnational protection concept of cultural heritage items along the Danube including green tourism solutions”*;
4. **Roman Ship**, which involved the reconstruction of the 4th century Roman Danube vessel, workshops on traditional handicrafts, and related activities, is linked to *WP T4 “Reconstruction of a fully functional Roman Danube Ship for connecting the Danube Region and fostering sustainable tourism.”*

## Building of the Consortium

The partners for the Living Danube Limes project were selected from 10 countries connected to the Danube region. With 19 project partners and 27 associated strategic partners, the project aimed to establish a steppingstone for the creation of a cultural route spanning the entire Danube area. The partners were chosen based on their expertise and experience in various areas such as cultural heritage preservation, sustainable tourism, and regional development.

## Challenges addressed by the project.

The Danube region includes ten countries, each with its own unique cultural heritage, language, and way of life. In addition, the Danube River itself forms the border between the two neighbouring countries for significant stretches. Despite modern national borders, different languages and lifestyles, the Danube countries are closely linked by a common cultural heritage and can look back on a shared history. At the same time, each country has different laws regarding the protection of cultural heritage, different approaches to the use of heritage sites, as well as different standards and goals for sustainable and ecological tourism development. The partners noted the need to connect the entire Danube region and to identify citizens who share the geographic area and its cultural landscape connected by the Danube. These differences also formed the basis of the idea for the project, which sought to establish a cultural trail covering the entire Danube area. The common problem that led to the project's application was the need to highlight the cultural, symbolic, and touristic value of the Danube Limes to promote economic development, foster social and political cohesion, and improve the well-being of the inhabitants of the Danube region.

In addition, the region is challenged by technical issues related to historic sites. Roman remains range from several-story buildings that are accessible and highly visible ruins to structures that are still underground and known through geophysical surveys. The challenge for the partners was to increase the visibility of the Roman heritage, green infrastructure activities or the provision of a reconstructed Roman ship on the Danube, which will be a tangible and highly visible sign connecting the Danube region through the shared Roman heritage.

A more sustainable economic and political future for the entire region was also identified as a challenge. The countries of the Danube region are at different levels of economic and infrastructural development, as well as at different stages of the European integration process. Therefore, the project was also tasked with

developing solutions tailored to the specific needs of each country regarding increasing the visibility of Roman heritage on the ground.

## The preparation of the project

### Organisation of work

Living Danube Limes involved a range of stakeholders with expertise in various areas such as cultural heritage preservation, sustainable tourism, and regional development. The responsibilities and roles of each project partner in the Living Danube Limes project were assigned based on their expertise and experience in various areas.

## Part 2. Project implementation

### History of implementation

The online kick-off meeting gathered over 80 participants from the ten partner countries. Danube University Krems (Project Lead) and the individual work package leads outlined the project in detail during this meeting. Two and a half years later, the project partners reflected on a “successful implementation of the numerous activities” in their latest Living Danube Limes project newsletter.

### Work packages’ outputs

In line with WP T1, three main outputs were produced: two booklets on the Danube Limes from Germany to the Black Sea, the Archaeological Summer School in Viminacium, Serbia, and the geoprospections carried out at selected pilot sites in the eastern Danube Region. The **two booklets on the Danube Limes** are available online and provide a readily accessible overview of the Roman Danube region as outlined in the project objectives. The **Archaeological Summer School** aimed to introduce participants to the entire process of archaeological excavation, from prospection of the terrain to different methods of documentation and processing finds. Due to COVID-19, the first part of the summer school was held online and attracted 30 participants from 12 countries, including Turkey and South Korea. Seven participants participated in the second part of the programme on-site in Viminacium. Also, in 2021, **geoprospections** took place on pilot sites using the latest geophysical prospection methods to map archaeological features hidden in the ground without excavating. These activities gave insight into the historical remains below ground and allowed for the virtual reconstruction of these historical artefacts. It also created vital knowledge for protecting and safeguarding cultural heritage measures below ground.

The **creation of the Museum Cluster Guidelines** has been another milestone of the project implementation. Under WP T2 on identifying the Danube Limes Museums Clusters (DLMC), the project partners prepared a list of all possible active potential core members in the future DLMC through desk research. They published the guidelines for successfully implementing strong and interconnected museum clusters. This document provided potential members and partners with a shared understanding of the utility and significance of museum clusters. Besides, disseminating the Guidelines was a crucial component of the project implementation because it directly contributes to long-term collaboration along the Danube region.

On 31 October 2022, the official project Facebook page announced another milestone of the project: the **creation of a Living Danube Limes mobile and web application**. This app offered users a unique collection of archaeological Roman fortifications and settlements in the Danube region, presenting their relations with museum clusters through maps, texts, and pictures. This app connects all ten partner countries to contribute and transfer knowledge about significant sites, making cultural and historical knowledge about the Roman Empire in the Danube region easily accessible to the general public. A second app, “*Living Danube Limes VR*”, was also created to complement the experience of visiting pilot sites. In their periodical e-newsletter, the project partners shared the findings of a workshop held in Germany. Generally, the local German stakeholders approved the apps, recognising their importance and appreciating that they were easily accessible and complemented the overall experience. Nevertheless, some issues were identified: the apps require certain technical prerequisites (e.g., internet connection) and inherently require aftercare and continuous support and development associated with costs beyond the project period.

The project’s main output and the most significant event was the **reconstruction of the authentic 4th-century Roman vessel and the subsequent “Connecting Cruise 2022”**, in line with WP T4. The reconstruction of the Roman ship began around the spring of 2021. The kick-off festival was held on 15 July 2022, marking the start of the vessel’s 2600 kilometres journey from Germany to Romania. While the project

partners regard this initiative as their most successful activity within the Living Danube Limes project, the event faced some external challenges. Firstly, the start of the Connecting Cruise 2022 did not go as planned. The low water level of the Danube prohibited the start in Ingolstadt in Germany and required last-minute alterations to be made to bring the vessel to Kehlheim to start its journey. Furthermore, the initial plan to go into the Black Sea was abandoned due to the ongoing war in Ukraine and subsequent concern for the safety of the crew and ship. Nevertheless, the project team swiftly changed the start and final destination to ensure a smooth event. One important component of the Living Danube Limes project was the aim to make the Roman heritage of the Danube region come alive. The Connecting Cruise 2022 did just that as it not only reconstructed an authentic historical artefact, but it also featured Roman festivals at select pilot sites (e.g., Rasova, Romania; Vidin, Bulgaria) and participants dressed as Romans.

### **Cooperation between project partners.**

The cooperation among project partners was intense, and it was secured by adapting meetings to the current situation, whether online or face to face. The project involved a wide range of stakeholders, including local communities, NGOs, government bodies, and academic institutions. By engaging with these stakeholders, the project was able to raise awareness about the importance of preserving the region's cultural and natural heritage, and to build a network of partners committed to this goal.

The interviews, however, did reflect a challenging relationship amongst the involved partners. More specifically, they pointed at specific patterns that hindered the process. They said that the German partner did the blackmailing; the Bulgarian partners had a budget for certain activities they said they couldn't procure because of the guidelines of Bulgaria; the Servian partner there is "still a problem", as they haven't filled the fifth report; the Slovakian partners, who had a very important task, kept postponing it. This was overcome thanks to other partners that did more than they had to.

## **Implementation context**

### **Relationship with programme management organisations during the implementation**

An aspect that came up during the interviews is that the programme management organisation provided guidance and help when there were no problems. Once they had trouble, interviewees said that they were told "You are the lead partners; you make the decision". They expressed they felt alone when challenging situations arose. One interviewee specified a situation where their problems were not addressed and handled properly.

### **Involvement of private sector**

While the Living Danube Limes project primarily involved public sector and academic partners, the private sector was also involved through tourism clusters and tourism companies. These private sector partners were involved in the development of sustainable tourism strategies and the promotion of cultural heritage in the Danube Region.

### **Contribution to the EUSDR priority areas**

Living Danube Limes followed a holistic approach with four tiers to achieve its goals within the frame of the EUSDR. These tiers include research, education and training, conservation, and public outreach and engagement.

The project was part of the Environment and Culture axis of the Interreg Danube Transnational Programme (DTP), which is primarily funded by the European Union's European Regional Development Fund (ERDF). The DTP aims to strengthen the heterogeneous Danube Region through transnational cooperation in various areas, including innovation, environment and culture, transport and energy, and governance.

Living Danube Limes specifically contributed to three priority areas of the EUSDR, with a central role in the culture and tourism priority area (PA3). By presenting the Roman Danube Limes in a transnational context, the project aimed to strengthen the common cultural identity of the Danube Region and identify untapped cultural and social potentials. The project also contributed to the priority area of environmental risk management (PA5) by developing a transnational strategy for the protection of cultural heritage along the Danube and defining precautionary measures to strengthen resilience to extreme weather events due to climate change and Danube floods. Finally, the project also took into account the priority area of investment in people and qualifications (PA9) by promoting the establishment and expansion of museum networks and

living history initiatives in the individual partner countries, as well as the strengthening of tourism in the Danube Region.

### **Enhancing regional development processes**

The project partners brought together capacities and competences in fields such as archaeology, ancient history, technology, architecture, virtual-reality, museum structures, tourism, cultural heritage protection, and living-history, among others. By working together across different countries and fields, the project aimed to highlight the cultural, symbolic, and touristic value of the Danube Limes, and foster identification with the transnational heritage.

Secondly, the project sought to close research gaps around the Danube Limes and to develop sustainable tourism strategies. The acquired data from geophysical scanning of pilot sites was used to model virtual-reality reconstructions, which was integrated into a Danube Limes App. The app is freely available and used to disseminate research results and showcase the historic infrastructure of the Danube Limes. In addition, each pilot site was paired with high-quality living-history initiatives to re-enliven the Danube Limes and transmit knowledge and expertise to a wide array of audiences.

The pilot sites established in each Danube country were not only serving as focal points for the implementation of project measures, but also as starting points for the creation of a chain of mutually complementary Limes centres. By connecting the pilot sites, the project aimed to create a unified network of attractions, services, and events along the Danube that showcases the rich Roman heritage of the region.

Finally, the Living Danube Limes project aimed to connect museums in transnational museum clusters, create a European Cultural Route, and implement green tourism concepts. These measures were not only protecting the historic infrastructure along the Danube but also strengthening tourism in the region, contributing to the overall development of the Danube countries. By working towards the nomination of the Danube Limes as a UNESCO World Heritage site and involving the broad public in the project through living-history events, the project also fostered a stronger identification with the shared heritage among the local population.

### **Successful implementation aspects and major difficulties**

#### **Drivers and barriers toward effectiveness**

The project was implemented according to the plan, but there were several difficulties encountered during the process.

One of the main challenges that came up during the interviews was that this consortium had never worked together before, so most partners did not know each other. As stated before, they only meet in person two years after it started, during one of the most intense stages of the project. Besides, building the necessary trust was very difficult due to remote work. Furthermore, an important component of the Living Danube Limes project was the dissemination of knowledge, good practices, and, above all, the Roman past, which involved planning several in-person events. However, The Living Danube Limes partners had to hold their 3<sup>rd</sup> Project Partner Meeting virtually on 6 September 2021, instead of meeting in person as initially planned. This was due to the worsening situation of the COVID-19 pandemic. Additionally, the previously planned Archaeological Summer School had to be carried out in a hybrid form due to the epidemiological situation. Yet, in the case of workshops and partner meetings, the online nature of these events even allowed a broader audience to participate leading to share and transfer knowledge with more people than initially thought.

The impact of the war in Ukraine was recognised in one instance as related to the Connecting Cruise 2022 initiative. Originally planned to sail from Germany to the Black Sea, the work package leads needed to change the cruise's destination due to safety concerns for the crew and ship. While not formally documented in the available project documentation analysed, the Russo-Ukrainian war could have impacted other aspects of the project implementation as the project spanned across the Danube region, including Ukraine.

Other barriers that made a difference in keeping up with the plan and implementation of intervention were data management, public procurement, and external factors such as the lockdown.

Regarding data management, the use of the Google Form to collect and sort data was effective in obtaining information from a large project consortium. However, the limitations of the Google Form in terms of re-

uploading or adding new images to the database proved to be a barrier that required manual intervention by the form's administrator. This issue delayed the process of copying the collected and structured data to the new content management system and using it further in the project implementation.

Public procurement was another challenge that negatively affected the successful implementation of the intervention. Administrative and financial rules made it difficult to contract a professional application developer company earlier in the year, resulting in delays in the process. This delay affected the close cooperation with contracted IT professionals, which further hindered the progress of the project.

### **Factors for success**

The factors that facilitated a successful implementation of the Living Danube Limes project include establishing active and constant communication with experts, adapting to the changing situations, and strong teamwork.

The project team discussed the established concepts and aims of the app, and the content management system with various IT professionals and experts to ensure technical issues were consulted and specified. Adapting to the situation was crucial during the pandemic, which did not allow visits to the sites to collect detailed visual data. The team designed and sent another Google Form for data gathering to partnered countries, for which the responses are still awaited.

During the interviews, participants mentioned that some partners that took more workload, which was key to the success of the programme.

Finally, the strong team performance and relaxing break shortly before the Straubing lock allowed the team to overcome a significant challenge during the project. Overall, these factors contributed to the successful implementation of the project despite the various difficulties faced by the team.

## **Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife**

### **The general progress of the project area in the domain targeted by the relevant specific objective**

The Living Danube Limes project was successful in reaching its specific objectives. The project aimed to strengthen the Danube region by means of its shared heritage, the Roman heritage along the river Danube, which was the former northern border of the Roman Empire. This heritage is a legacy that connects the modern nation states along the Danube. The project strived to make this shared Roman heritage and history visible, tangible, and inclusive. The project achieved this through several activities, including the reconstruction of a Roman Danube vessel, workshops on traditional handicrafts, archaeological summer schools, and living history festivals. The project also developed a guide to Roman archaeological sites and virtual reality reconstructions, which helped to increase public awareness and understanding of the region's heritage.

The Living Danube Limes project also promoted sustainable tourism and development in the region. The project recognised that economic development is necessary for the long-term sustainability of the region's cultural and natural heritage, but also that development must be sustainable and balanced, considering the needs of local communities and the environment. The project developed a mobile application for sustainable and green tourism concepts and implemented physical reconstruction and visibility measures for heritage protection.

The project also sought to support the UNESCO World Heritage nomination of the entire Danube Limes, with a special focus on the nomination process for Croatia, Serbia, Romania, and Bulgaria.

In addition to promoting cultural heritage, the Living Danube Limes project aimed to lay the foundations for a future European Cultural Route traversing the entire Danube region.

The project also achieved its objective of connecting the partner countries with each other and their common Roman history through the reconstructed Roman river patrol vessel, the *Danuvina Alacris*. The vessel travelled from Germany to Romania and tangibly generated interest and further promoted the shared Roman culture among the countries.

### **Direct effects and impact of the project**

The project focuses on involving local stakeholders, such as communities, museums, and first responders in the development and implementation of cultural heritage protection and preservation plans. By engaging with local stakeholders, the project ensured the strategies and solutions are tailored to meet the specific needs and challenges of each pilot site.

Moreover, the project's focus on green and sustainable tourism infrastructure and visitor-friendly possibilities created opportunities for cooperation between different sectors, such as tourism, transportation, and environmental protection. The development of cycling lanes, eco-friendly ferries, and solar-powered boats, for instance, required collaboration between tourism providers, transportation companies, and environmental organisations.

The project organised local focus group meetings and pilot site visits, which aimed at engaging experts from various fields such as archaeology, ancient history, museums, communication, political stakeholders, and conservation specialists. These activities enabled representatives from different sectors who might have an interest in the project and its outcomes to join the project.

Furthermore, the project also involved the participation of architecture students from the universities in various stages of implementation. The students were able to join the project through summer interdisciplinary workshops, which allowed them to gain practical experience and provided an opportunity to contribute to the project's goals.

The Living Danube Limes project aimed to strengthen the Danube Region through shared heritage but potentially achieved more through its contributions to EU enlargement and neighbourhood policies. As the project involved both EU and non-EU member states, one potential positive spill over is its contribution to the EU enlargement and neighbourhood policy goals, as this collaboration worked. By supporting thematic cooperation with non-EU countries, Living Danube Limes could potentially bring stability and cohesion to the region through solid networks and partnerships.

### **Impact on future legislation and initiatives**

The Living Danube Limes project has created several sub-products that will be able to generate input for future legislation, policy, future investment, and further initiatives.

An example of this can be found in the publication "Living Danube Limes. Valorising cultural heritage and fostering sustainable tourism by LIVING the common heritage on the DANUBE LIMES as basis for a Cultural Route", where there were chapters such as:

- "Risk Assessment and Sustainable Protection of Cultural Heritage in Changing Environment" The chapter deals with policies and initiatives related to the preservation and management of cultural heritage. It makes recommendations on how the state can create effective programmes to protect heritage from risks.
- "Knowledge transfer in museums" This chapter can contribute to the creation of effective knowledge transfer programmes in museums in digitised times. It makes recommendations on the most effective ways that can be used by both public authorities and local stakeholders in enhancing the tourist attractiveness of regions.

The project has also produced a publication called "Physical Reconstruction & Visibility Measures" demonstrating examples of good practices for archaeological excavations and historic sites.

Moreover, the best-practice workshops held as part of the project. The Syndicate Working Group 3 on COVID-19 Challenges and Possibilities provided valuable insights and strategies for museums and cultural institutions to develop or maintain contact with visitors and interested people under extraordinary circumstances, which can be incorporated into future policies and legislation. The offline and online strategies developed by the workshop "Good Practice Workshop Living History and Virtual Reality" held on 22-26 March 2021, can potentially serve as a framework for future investments and initiatives aimed at promoting cultural programmes and minimising losses during times of crisis.

### **Benefits for private sector**

One of the primary benefits for the private sector is gaining the opportunity to develop synergies within the museum cluster. Through collaboration and sharing of information between touristic companies who connected to the cluster can improve their operational efficiency and collaboration can support them to reach



their goals. This has the potential leading to cost savings, increasing innovation, and improving the quality of services. Another benefit of the museum cluster is the ability to build a high-quality label or brand. Companies within the cluster can benefit from the reputation of the cluster and its focus on preserving the common Roman heritage of the Danube region. This can help to differentiate their products and services from competitors and attract more customers. Additionally, having a quality label can help companies to meet legal requirements and improve the quality of their services. Finally, the development of the museum cluster can have a positive spill over effect on the surrounding communities. As the cluster attracts more visitors and attention, it can create economic opportunities for local businesses and foster public and private dialogue. This catalyses funding opportunities and private sector initiatives for the development of the socio and economic environment of the surrounding communities.

### Non-intended outcomes and project afterlife

During the interviews one positive outcome was highlighted. Thanks to the online conferences, the synthetic report was published and made publicly available, and the media coverage supported the project to reach a wider audience.

Based on the nature of the project and cooperation programme, the creation of the Danube Limes Museum Cluster was an important element in boosting collaboration between all the museums along the Danube, with long-lasting impacts beyond the project. Given the success of this collaboration, this could foster future cooperation with current and new project partners. While the Living Danube Limes project aimed to strengthen the Danube region through a shared Roman heritage, one of the project's underlying assumptions was that the pilot sites still contained significant environmental differences, which merited tailored approaches to its protection and conservation. Consequently, project outputs and related research methodologies are directly transferable to other pilot sites facing similar problems because it considers the need for tailored approaches every step of the way.

### Result of the Living Danube Limes Project: Institutionalised change

It is possible that the project could lead to some institutionalised change in the future potentially influencing policymaking, investments, or other aspects in the region. The establishment of the Danube Limes Museums Cluster (DLMC) created a network of museums and cultural institutions that work together to promote the Danube region as a tourist destination, leading to increased attention and possible investments from policymakers. Additionally, the research conducted on the consolidation tools of the DLMC helped identifying good practices and strategies for promoting cultural and creative industries in the region, which could inform future policy decisions.

## CS 4: DANUrB+

### Part 0. Introduction

Project name (full title and/or acronym)	DANube Urban Brand + Building Regional and Local Resilience through the Valorisation of Danube's Cultural Heritage
Programme priority axis (number and title)	Priority 2
Programme priority specific objective	SO 2.2: Foster sustainable use of natural and cultural heritage and resources
Project Lead Partner organisation	Budapest University of Technology and Economics
Other project partner organisations	GPS City Guide Kft (PocketGuide); National Institute for Research and Development in Tourism (RO); Hungarian Contemporary Architecture Centre (HU); Pest County Municipality (HU); Slovak University of Technology in Bratislava (SL); "Ion Mincu" University of Architecture and Urbanism (RO); National Tourism Cluster "Bulgarian Guide" (BU); Nansen Dialogue Center Osijek (CR); Danube Delta National Institute for Research and Development (RO); Politehnica University of Timisoara (RO); Association for Urban Transition (RO); New Bulgarian University (BU); Urban Survey Association (RO); Pons Danubii European Grouping of Territorial Cooperation (SL); Bluelink Foundation (BU); Central European Foundation (SL); University of Belgrade (UNIV) - Faculty of Architecture (SE); New Cultural Neighborhood (SE); Municipality of Dunaújváros (HU); Municipality of Esztergom (HU); Giurgiu Municipality (RO); Municipality of Silistra (BU); Municipality of Szob (HU); Felső-Homokhátság Local Action Group (HU); Tourism Association of

	Komárom (HU); Municipality of Calafat (RO); Municipality of Drobeta - Turnu Severin (RO); Municipality of Štúrovo (SL); Town of Ilok (CR); Municipality of Vidin (BU); National Company Danube River Ports Administration SA Giurgiu (RO); Călărași Municipality (RO); National Forest Administration Romsilva - Iron Gates Natural Park Administration R.A. (RO); Pontibus European Grouping of Territorial Cooperation Limited Liability (HU); Primary school of Dalj (CR); Municipality of Baja (HU); Municipality of Smederevo (SE); Golubac Municipality (SE); "Prostor" Public Communal Enterprise Sombor (SE); Association of Danube River Municipalities "Danube" (BU); Municipality of Bačka Palanka (SE).
Other organisations involved in or associated to the project (if existing)	
Amount of EU co-financing (in €)	2,273,452.50 (ERDF + IPA)
Amount of public contribution (in €)	331,397.50
Amount of private contribution (in €)	69,800.00
Main objective(s) of the project	Reactivate underused cultural heritage and resources in shrinking settlements of Danube river's peripheral and border regions, to create new possibilities to make its towns and regions attractive again.
Project Specific Objectives	1, DANUrB Cultural Network in motion 2, DANUrB Actions to use cultural heritage based on the DANUrB Strategy 3, Branding of DANUrB values to increase the attractiveness of towns and regions
Project main outputs	<ul style="list-style-type: none"> <li>- DANUrB platform</li> <li>- Atlas of DANUrB+ towns</li> <li>- Pocket guide tours</li> <li>- "Eyes of the Danube" documentary film</li> <li>- DANUrB+ quality label</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Action Plans developed</li> <li>- Building Camps established</li> <li>- School Programmes developed</li> <li>- Danube Days Celebrations held</li> <li>- Study Tours organised</li> <li>- International and Regional Conferences</li> </ul>
Project duration	<b>30 months</b>
Start date	<b>07/01/2020</b>
End date	<b>12/31/2022</b>

## Part 1. Project preparation

### The genesis of the project idea/project partnership

Many cities and towns along the Danube River face a severe problem of population decrease, particularly in the low Danube area. DANUrB+ builds on the work of the DANUrB project implemented in 2017-2019, which covered seven countries, 20 partners and 22 cities. It collected data on heritage resources and stakeholders, developed thematic tours and organised several local programs. DANUrB+ continues with the networked interregional approach, adding to the settlements and stakeholders already included in the Platform and Cultural Network "shrinking" towns and regions. Thus, several new towns and regions are involved: Svishtov (BG), Corabia (RO), Dobreta-Turnu Severin (RO), Sombor (RS), Baja, Szob (HU) and Gabčíkovo (SK), in which cultural heritage will be used to counteract negative socio-economic processes.

DANURB+ created a dense network of stakeholders and projects along the Danube implementing EUSDR actions in the peripheral and border regions which can count only on the potential of the river to stop socio-economic shrinkage. It was launched to foster the resilient use of cultural heritage as a resource for

developing peripheral and border regions along the Danube. It is creating new attractive opportunities in selected settlements and shrinking areas and activating underused cultural heritage to strengthen the Danube cultural identity. Five universities from different countries participated in spatial tourism planning and research. Professional tourism organisations collaborated with educational institutions to provide knowledge about tourism clusters and the economy, whereas other NGOs managed activities involving local stakeholders to initiate heritage revitalisation projects. Partners from six countries worked together to promote the sustainable use of cultural heritage and resources in the Danube communities. The school program of the project aimed at educating young people about cross-cultural values, encouraging them to discover and appreciate the heritage connected to the Danube River.

The novelty of DANUrB+ is to bring down to earth strategical goals to real stakeholders with action plans and actions usable in peripheric situations parallelly in all sections of the Danube, and to brand these initiatives in inclusive and effective ways. The project also aimed at the creation of a DANUrB+ Quality Label, and ultimately, an enlarged Danube Cultural Promenade.

The project consists of four horizontal thematic flows across four vertical WPs: Research, Planning tools, Education and Actions. Thematic flows are:

- Interregional network as a possibility
- Shrinking cities as a challenge
- Locals and their cooperation as a development asset
- Heritage as a tool

The DANUrB+ partnership consists of 19 partners (17 ERDF and 2 IPA) and 23 associated strategic partners from 6 countries: Hungary, Slovakia, Croatia, Bulgaria, Romania, and Serbia. 10 consortium partners were already part of the DANUrB project including the Budapest University of Technology and Economics (HU) acting again as lead partner.

### The preparation of the project

The project aims to initiate local physical interventions to alleviate the effects of shrinking urban environments. Six pilot actions were initiated over the Danube's three sections: upper, middle, and lower Danube. The pilot sites (buildings, public space) were selected according to their potential positive effect on urban development and in close collaboration with the local communities. The objective is to provide planning, technical measurement, and documentation so that those pilot sites are ready for funding application.

The activities of the project were developed as follow:

1. A documentary movie was produced to raise awareness of cross-cultural and cross-border values, promoting slow life and local values.
2. Three new audio guided tours were delivered, whether as city tours or cross border tours. Those tours provide local communities with a valuable tool for the development of tourism and grow awareness of populations for their own heritage.
3. As the education of the younger generations is essential for a deep and long-term mindset change, guidelines were created for educational programs, and a DANUrBanity game was developed to raise awareness of the local values.
4. Most importantly, all those activities were held in close relation with the local communities the mapping of resources, collaboration with stakeholders are the heart of the DANUrB+ strategy.

The goal of DANUrB+ is the creation of a Danube Cultural Promenade Action Plan by all existing and newly formed regional and interregional initiatives and projects working in heritage valorisation of the Danube.

The aim was to reactivate underused cultural heritage and resources in shrinking settlements of Danube river's peripheral and border regions, to create new possibilities to make its towns and regions attractive again. The basis of DANUrB+ was laid down in the two years of preparation between universities and research institutes that brought the project idea into application.

## Part 2. Project implementation

### History of implementation

The kick-off event and first partner meeting of the interregional DANUrB+ project, co-financed by the DTP, took place online via Microsoft Teams on September 25th and 26th, 2020, with participants from 6 Danube

countries. It gathered over 70 participants from partner organisations (19), the Associated Strategic Partner organisations (20), and several stakeholders from various countries.

The effective engagement and participation of stakeholders were considered as vital factors in the DANUrB+ Project. The stakeholder meetings were part of the awareness building plus engagement, and many of the partners succeeded in having such meetings (mainly in person), regardless of the challenging situation the COVID 19 pandemic has created. The interviews with the project partners highlighted, that the communication was strong among the partners with the Lead Partner, which is vital to the project's success. However, it was also mentioned that for some of the newer partners, there was a lot of freedom in certain areas during the implementation, which they struggled with.

### Implementation context

As a continuation of DANUrB, DANUrB+ also aimed to strengthen the Danube cultural identity by fostering transnational cultural ties between the settlements along the Danube and fostering the exploration of the unused cultural and social capital of the regional network. Such goals are still in full accordance with the targets of the EUSDR action plan. The project's main objectives are relevant to SO 2.2 by fostering the resilient use of cultural heritage and resources in the shrinking communities along the Danube river. In the DANUrB+ partnership, and together with local stakeholders, different strategies and ideas were realized to create a new dynamic for the shrinking situation. To achieve this, many initiatives and activities for reinventing heritage places for fostering networking and mentoring have been implemented to encourage total immersion in the real-life experience of local communities. Those activities were strongly related to the area of Knowledge Society. Moreover, DANUrB+ contributes to the EU Cohesion Policy as it fosters job opportunities in the cultural and tourism sector and helps social cohesion in the regions where the risk of poverty, social exclusion and unemployment are among the highest in the EU.

DANUrB+ project's activities and initiatives are related to the sustainable development of shrinking cities along the Danube Region. Digitalization development is considered an essential tool for Priority Area 10, "Institutional Capacity and Cooperation" (PA 10) of the EU Danube Strategy. One of the critical DANUrB+ outcomes that speak to the EUSDR is the DANUrB Platform (including the stakeholder cooperatives), which aims to present, raise awareness and visibility, connect, and help all stakeholders cooperate and communicate on an international level along the Danube area. Besides, The DANUrB International Association's primary purpose is to coordinate cultural initiatives along the Danube River and to create the quality label of the best practices in the Danube settlements (Danube Urban Brand) also contributes to the EUSDR.

### Successful implementation aspects and major difficulties

After conducting desk research and interviews, we can conclude that the DANUrB+ project was successfully implemented according to the plan. However, unexpected difficulties were encountered during implementation. One of the main challenges was the difficulty of daily physical cooperation between borders, especially in the Middle and Lower Danube regions, due to administrative procedures and deficiencies in traffic infrastructure. This has hindered collaboration between partners and communities. The COVID-19 restrictions and unequal access to vaccines made more difficulties, with some individuals unwilling to get vaccinated due to religious convictions.

The financial management and reporting were identified as another difficulty for the implementation as some of the partners did not have a clear understanding of how the financials of the programme work. However, the Lead Partner gave exceptional support in those cases. On the other hand, despite the difficulties, the intense collaboration among project partners from different backgrounds facilitated the successful implementation of DANUrB+.

## Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

### The general progress of the project area in the domain targeted by the relevant specific objective

The project's first output has been the reactivation of the DANUrB Research Platform, which aims to provide both locals and the public with tools. DANUrB+ aimed to raise their number, raise their awareness, and increase the platform's visibility.

The platform targets local, regional, and international stakeholders who want to manage projects focusing on development based on cultural heritage. It is a communication and participation tool that connects stakeholders to sites and structures of cultural heritage value within networks along the Danube River and shows and promotes already existing cultural initiatives. The platform is an online knowledge repository assembling heritage elements and local stakeholders who can valorise them. The heritage element can be a

building, location (e.g., the riverside promenade), event or gastronomic part. Stakeholders can be municipalities, civil organisations, educational institutions, museums, entrepreneurs or even individuals who are interested in the cultural heritage along the Danube. The platform presents them by displaying geographical localisation. In addition, the platform shows cases which were evaluated and considered as good practices (projects): where one or more stakeholders utilise a heritage element. An important goal is that the collected heritages, stakeholders, and projects can quickly learn about each other with the platform's help by building a Common network.

The Atlas of DANUrB+ cities is one of the key deliverables of the Interreg DANUrB+ Project. The main aim of the Atlas was to enhance the international visibility of small and medium-sized cities and towns along the Danube from Bratislava to the Delta through the comprehensive geographical and urban/morphological maps of these cities and towns, compiled and presented innovatively. These maps, supplemented by side-texts, diagrams, and photos, cover their past and legacy/heritage, present challenges, and future aspirations through local best practices. The Atlas was prepared in both analogue/hardcopy and digital versions. It was a joint work from six Danubian countries: Slovakia, Hungary, Croatia, Serbia, Romania, and Bulgaria. The core of this group is six teams from the faculties of architecture and urbanism from five countries - Bratislava, Budapest, Timisoara, Sofia, Bucharest, and Belgrade (leader). All core authors were organised in smaller author groups, which were responsible for the joint chapters of the Atlas about the specific topics important for the included Danubian cities and towns. The other authors from NGOs, public institutes, and local and regional authorities participated by collecting local data and providing support for fieldwork.

The Faculty of Architecture of the University of Belgrade, as a leader in the creation of the Atlas, was in charge of the proper systematisation, compilation, and revision of all received material, including joint chapters. Aside from this task, the Faculty of Architecture of Belgrade was also responsible for the main maps of Danubian cities and towns regarding their main characteristics: turbo-morphological, heritage-related, economic, demographic, and social. These maps present a general insight into the urban development along the river and the future perspectives of the cities and towns.

The third output was the Pocketguide tours DANUrB partnership that produced a series of 12 audio tours along the Danube for the PocketGuide mobile application ([www.pocketguideapp.com](http://www.pocketguideapp.com)), and during the implementation of DANUrB+ three new tours were added. These tours were designed and promoted to bring tourists to unusual heritage places in the remote towns of the Danube River and to experience and discover unique and non-common parts of the Danube area.

The fourth output was creating the "Eyes of the Danube" documentary film. It is a movie telling 12 stories of shrinking cities along the Danube, shared by citizens about their good practice initiatives valorising heritage in their communities. Made to be the legacy of the DANUrB+ community to future generations, the Documentary film's goal is to inspire others to travel, get to know these places and benefit their societies by following the good examples shown in the movie.

The final output was the DANUrB+ Quality Label, a unified quality criterion in the form of a brand seal granted to all initiatives, services, products and projects that work locally with the heritage valorisation of the Danube. It is a guarantee to municipalities, developers, investors and tourists that the labelled product contributes to the resilience of the given activity region, and is sustainable at the economic, social, and environmental levels, uses local resources and values initiated by local stakeholders and connects to heritage related to the Danube.

### Direct effects and impact of the project

There were six countries involved, and there were two pilot actions implemented in small towns in each of the 6 countries. For example, two abandoned buildings had the possibility to be transformed, so, in collaboration with the university students, they developed ideas on what to do with those buildings.

152 events and activities were organised in the pilot cities to re/activate the shrinking regions, including:

- Action Plans
- Building Camps
- School Programmes
- Danube Days Celebrations
- Study Tours
- International and Regional Conferences

The DANURB+ project aimed to promote the Danube's cultural identity through various activities such as creating a "Danube brand" for cities, monitoring tourist movements and spending, and supporting existing cultural routes. The project also organised events like Danube Days, published an Atlas of DANURB+ towns, and created a documentary film showcasing 12 different locations along the river. These activities aimed to connect various stakeholders along the Danube and increase their capacity for cooperation at local and interregional levels. The project also established a Quality Label based on shared regional values and a Danube Cultural Promenade to revitalize cultural heritage. Ultimately, the project aimed to make the Danube a cultural route with revived urban and cultural heritage sites and active local communities.

### Impact on future legislation and initiatives

The project's partners are constantly producing white papers to be used by decision-makers. Besides, the Atlas provides information about the natural challenges a country or a particular area experienced and how they overcame them. Hence, local governments experiencing similar situations can learn from the project about what works to overcome the challenges.

### Non-intended outcomes and project afterlife

A non-intended outcome identified by interviewees was inspiring people in communities around the Danube to develop similar smaller scale interventions in unused or shrinking areas.

## CS 5: DanubeParksConnected

### Part 0. Introduction

Project name (full title and/or acronym)	Bridging the Danube Protected Areas towards a Danube Habitat Corridor
Programme priority axis (number and title)	Priority 2
Programme priority specific objective	SO 2.3 Foster the restoration and management of ecological corridors
Project Lead Partner organisation	Nationalpark Donau-Auen (AT)
Other project partner organisations	Landratsamt Neuburg-Schrobenhausen (DE); City of Ingolstadt (DE); Passau District (DE); World Heritage Municipalities Wachau (AT); State Nature Conservancy of the Slovak Republic (SK); BROZ- Regional association for nature conservation an sustainable development (SK); Fertő-Hanság National Park Directorate (HU); Danube Ipoly National Park Directorate (HU); Danube-Drava National Park Directorate (HU); Public Institution Nature Park Kopacki Rit (HR); Persina Nature Park Directorate (BG); Club Friends of Public Park Rusenski Lom (BG); Danube Delta Biosphere Reserve Authority (RO); Public Enterprise "Vojvodinašume" (RS)
Other organisations involved in or associated to the project (if existing)	Lower Prut Nature Reserve - Agency Moldsilva (MD); International Commission for the Protection of the Danube River (AT); via donau - Österreichische Wasserstraßen-Gesellschaft GmbH (AT); ALPARC – the Alpine Network of Protected Areas (FR) ; Bavarian State Ministry of the Environment and Public Health (DE); WWF - World Wide Fund for Nature, Danube-Carpathian Programme Bulgaria (BG); European Wilderness Society Ukraine (UA); MAVIR (HU); Ministry of Environment and Nature Protection (HR); ENEL DISTRIBUTIE DOBROGEA SA (RO)
Amount of EU co-financing (in €)	2,517,479.63 ERDF + IPA
Amount of public contribution (in €)	413,837.88
Amount of private contribution (in €)	30,423.30
Main objective(s) of the project	Bridging the Danube Protected Areas to counteract landscape and habitat fragmentation and to make the Danube a key ecological corridor is the main objective of DANUBE Parks CONNECTED
Project Specific Objectives	<ul style="list-style-type: none"> <li>- Empowering the Network by raising awareness among stakeholders</li> <li>- Danube-wide policy on GI boosted by cooperation crossover sectors</li> <li>- Long-term eco-connectivity initiated by implementing tangible PILOTS</li> </ul>
Project main outputs	<ul style="list-style-type: none"> <li>- DANUBE FREE SKY Strategy</li> <li>- DANUBE DRY HABITAT CORRIDOR STRATEGY</li> <li>- Danube Wild Island Habitat Corridor</li> </ul>

	<ul style="list-style-type: none"> <li>- Danube Riparian Forest Fitness Check</li> <li>- DANUBE HABITAT CORRIDOR Guiding Principles</li> <li>- WILDisland Pilot Actions</li> <li>- DANUBE SKY – FREE!</li> <li>- DANUBE DRY HABITAT CORRIDOR Pilotes</li> <li>- Danube Riparian Forest Corridor Demonstration</li> <li>- Cross-sector Interaction Waterway</li> <li>- Free Sky Learning Process</li> <li>- FORESTRY SECTOR TRAINING and CAPITALISATION</li> <li>- Ecological Networks across Sectors and Regions</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- DANUBE FREE SKY Strategy</li> <li>- DANUBE DRY HABITAT CORRIDOR STRATEGY</li> <li>- Danube Wild Island Habitat Corridor</li> <li>- Danube Riparian Forest Fitness Check</li> <li>- DANUBE HABITAT CORRIDOR Guiding Principles</li> <li>- WILDisland Pilot Actions</li> <li>- DANUBE SKY - FREE!</li> <li>- DANUBE DRY HABITAT CORRIDOR Pilotes</li> <li>- Danube Riparian Forest Corridor Demonstration</li> <li>- Cross-sector Interaction Waterway</li> <li>- Free Sky Learning Process</li> <li>- FORESTRY SECTOR TRAINING and CAPITALISATION</li> <li>- Ecological Networks across Sectors and Regions</li> </ul>
Project duration	<b>30 months</b>
Start date	<b>01.01.2017</b>
End date	<b>30.11.2019</b>

## Part 1. Project preparation

### The genesis of the project idea/project partnership

Inland Waterway Transport (IWT) is an important enabler for competitiveness and growth in the Danube Region, being an environmentally friendly and safe transport mode. The gradual integration of the riparian states along the Danube into the European Union has led to the establishment of dynamic economic areas and trading links along the river.

**The potential of the Danube River has not been fully exploited**, as the main needs of waterway users and operators are not fully met, due to shortcomings in infrastructure maintenance, the lack of consistent fairway information services and divergent national priorities, among other things. **The harmonisation of smart traffic infrastructure information in the Danube corridor is vital** for public authorities to be capable of supporting the needs of the stakeholders in the IWT sector. For instance, the availability of constantly updated data on fairway conditions and topical information on the status of the Danube waterway from all the riparian countries would help vessel operators to optimise their transport planning, which is in most cases international. In line with Directive 2005/44/EC, basic River Information Services (RIS) are available in all Danube riparian countries but these differ in degree and quality, since authorities typically focus on their area of competence.

An important step towards the creation of a single platform regarding the harmonisation of data related to the entire Danube waterway infrastructure was raised by the ERDF-funded project NEWADA (Network of Danube Waterway Administrations) (2009 – 2012) and the follow-up project NEWADA duo (2012 – 2014), which launched the **Fairway Information Service Portal (FIS)**. However, the information services do not exploit the opportunities offered by most up-to-date technologies and do not fully meet the demand of waterway users. For instance, up-to-date in-depth information is still not part of Electronic Navigational Charts (ENC), which are commonly used onboard by inland waterway vessels.

Furthermore, as there were nine waterway administrations in control of the Danube River, nine different approaches were in place. Although within previous projects there was an emphasis on service-oriented and proactive waterway management, infrastructure conditions were still diverging, and developing **dialogue and mutual understanding among waterways administrations remained imperative**.

Coordination and harmonisation in the field of waterway management have been acknowledged to be the only way to strengthen waterborne transport in the Danube Region. Given that effective information to waterway users is essential to the success of Danube navigation, the **Danube STREAM project addressed the most critical challenges hampering the navigation on the Danube**, promoting harmonised methods, innovative and proactive waterway management along the river and its main tributaries.

The Danube Waterway Administrations united in Danube STREAM have previously shown a good record of cooperation as they have successfully worked together in the past and could build on results of other projects in which the partnership was involved, such as NEWADA and NEWADA duo. Danube STREAM has indeed allowed the continuation of the activities and pilot projects, which have been defined in the latter projects, and their sustainability over the next five years, as waterway management standards are always evolving, and continuous updating of River Information Systems (RIS) is critical for the waterway administrations.

The **project consortium has been running for more than 15 years** since the GIS Forum Danube, in which the concrete idea of cooperation between Danube waterway administrations was conceived. Such cooperation has resulted in the launch of the two NEWADA projects. The common level of understanding and cooperation achieved through these projects by the Danube Waterway Administrations in the reinforcement of the Danube Navigation was further improved throughout the Danube STREAM, which proved to be a successful cooperation environment for waterway administrations.

More specifically, Danube STREAM provided a framework for joint **Service Level Agreements** signed then by the board of directors of the Danube Waterway Administrations, which committed to providing a set of services and applications, such as the introduction of new waterway management systems, installation of new waterway sensors and user information services in terms of applications and tools, such as the **D4D Data for Danube database** and the FIS portal (including information on water levels, fairway depth and width, information on shallow water sections, etc.) and the waterway marking application to ensure that the durability of the project outputs guarantee the minimum navigability conditions on along the Danube from Austria to the Black Sea during standard operations. These improved information services have globally contributed to a better exploitation of the opportunities the Danube waterway offers, as a single river section may impede the development of IWT also in the neighbouring countries.

On a strategic level, the activities within the Danube STREAM project have been synchronised with the implementation of the **EUSDR's Fairway Rehabilitation and Maintenance Master Plan**. The synchronisation with the master plan started with NEWADA and has been further developed by Danube STREAM. Furthermore, the consulted stakeholders emphasised the good relationship and cooperation with the programme management bodies (MA and JS), together with whom Danube STREAM representatives participated in the high-level meetings organised by the European Commission, EUSDR, Danube Commission, etc. Moreover, the project has **promoted cooperation and synergies with other fluvial commissions** (such as the Sava River Basin Commission and the Central Commission for Navigation on the Rhine), private stakeholders in the field of waterway transport and environmental institutions and associations in the Danube area, to minimise the environmental impact of the project activities.

## The preparation of the project

The **Danube Transnational Programme** was considered by the project leader and the partners the most suitable financing programme for continuing and developing the activities, which were launched by other projects, that aim to improve the cooperation between the waterway administrations along the Danube and commit them to sign a Service Level Agreement, to improve waterway management systems as well as forecasting methods to ensure minimum navigability conditions on the Danube. The preparation period was long but not continuous. The project partners started structuring the project and defining the partnership at the time of the NEWADA duo, as already at that time another project was considered necessary to **boost cooperation between waterway administrations** in the Danube Region. The structuring of the activities and the sub-activities were based on the waterway administrations' needs, along with the requirements at European level, such as the environmental ones.

Danube STREAM developed and supported the systems launched in previous projects such as NEWADA and NEWADA. On the one hand, the D4D – Data for Danube database, a very useful information platform that in the NEWADA project was an internal tool for the waterway administrations. In Danube STREAM it was possible to make sure that end-users and navigation companies benefit from this platform and download the latest versions of the electronic navigational charts' files autonomously. On the other hand, the FIS - Fairway information Services, which provides **real-time information to navigation companies**, was



modernised and upgraded, and the mobile version of the portal was implemented. Moreover, sensors were installed to monitor the dynamics of the river.

Danube STREAM partners had, along with all phases of the project, **all the necessary resources at human and technical level**, as the consortium could benefit from many years of experience and lessons learnt from the NEWADA and NEWADA duo projects. For instance, as emerged from the partners' consultation, AFDJ, as coordinator of the database for the signalling system task in NEWADA duo, shared all the relevant experience to empower the other partners to develop the same system at national level in Danube STREAM. Concerning the financial resources, project partners did not encounter financial problems in carrying out the project activities, or in connection with experts and other technical resources they had at their disposal. However, some of the partners had difficulties in securing budgets and had to lobby the ministries of transport and other administrations to secure expenditures in advance. At the same time, the project budget was quite limited, due to the high technical level, but it was quite successful considering that the project activities led to the signing of Service Level Agreements, the development of waterway management systems and complex platforms that transmit navigation data to navigation companies.

Among the common problems that were shared by project partners that led to the application's submission, there was the need to further develop the outcomes of the previous projects, as the River Information Services (RIS) standards evolve continuously, and their continuous amendment is crucial for the waterway administrations along the Danube. Moreover, the dialogue among the actors of waterway administration was a critical issue, and therefore the improvement of the cooperation, as well as the harmonisation of waterway management methods, can be considered the great achievements of NEWADA projects and Danube STREAM. Moreover, already at the proposal stage, the project proposed direct cooperation with environmental institutions and organisations on the verification of how impactful the proposed solutions are in the respective areas and what criteria should be respected in order to avoid any disturbances in the ecological balance along the river.

Project partners needed resources related to cooperation, which include a common space that would allow them to meet quite often and work together to propose new standard variants and liaise with other commissions such as the Central Commission for Navigation on the Rhine, which is quite active in the area of inland waterways standards. Furthermore, Danube STREAM allowed project partners to attend the meetings of Danube and the EUSDR commission, which was of strategic importance for all project partners. Danube STREAM assisted the waterway administrations in overcoming a range of problems; the most important result, however, is the achievement of the Service Level Agreement, which is crucial for the next stage – namely, the continuous development of complex tools, such as digital and numerical models, to further refine improve forecasting methodologies and testing scenarios to ensure navigability conditions.

## Part 2. Project implementation

### History of implementation

A transnational project with partners from different countries is a **complex setup**, as the coordination of the project needs to take place not only at local and national level, but also at international level. The structure of the project activities was in such a way to start, implement, control, monitor and close the project in a proper way. The relevant tasks were equally shared by project partners (including reports from partners and progress reports). Most importantly, the project activities were distributed in such a way to empower all project partners to carry out the activities according to their **best financial and technical capabilities** and reach the objectives specified in the technical offer. Concerning the cooperation among partners, the partnership met regularly to immediately detect any deviations from the planned time schedule, so that budget and resources could be immediately detected and proper counter measures could be taken. The meetings in the project were organised according to technical issues connected to the maintenance of the navigability conditions (measurements, signalling, dredging, hydrotechnical works), along with different experts on environmental, financial and procurement matters.

From a technical point of view, the **activities were quite straightforward**, as for instance the stage of development of the D4D platform and the FIS Portal was already advanced from the experience in NEWADA duo, and the technical expertise clearly defined their progress throughout Danube STREAM. However, the greatest achievement occurred at the waterway management level with nine administrations constantly exchanging information with each other. The technical specifications could thus be standardised and harmonised, bearing in mind the characteristics and the peculiarities of the Danube River. For instance, the improvements of the D4D platform and the Electronic Navigational Charts have been harmonised – and the

same software resources have been purchased – after the **joint technical analysis** among waterway administrations.

The technical development services of the platforms have been outsourced, as the waterway administrations do not have the capacity to develop IT hardware and software platforms. More specifically, on the one hand, external IT companies were subcontracted to develop/update the waterway monitoring platforms at a centralised level; on the other hand, the waterway administration independently developed, supported by external parties, the hardware infrastructure in each country. For example, the signalling database infrastructure was developed at centralised level by a Romanian company, while the development of the related hardware infrastructure was endorsed by each waterway administration, for what concerns their territory of competence, both on ships and the control stations.

The procurement procedures were mostly smooth, but there was a significant problem relating to the different procurement procedures and lead times in each country. The procurement issues have been overcome through both joint acquisitions and the coordination of individual acquisitions by waterway administrations in such a way as not to unbalance the project activities and reduce the delays to a minimum.

### Implementation context

The consulted stakeholders highlighted that the relationship with the programme management bodies (managing authority and the joint secretariat) was very constructive regarding both the implementation of the project activities and the production of the dissemination items. The Danube STREAM results have been brought to the attention of stakeholders from navigation, environment, administration and tourism as well as the general public through a range of communication channels: the project website, social media and official events, such as the EUSDR Annual Forum. In this way, the harmonised waterway management approach was taken up by the necessary target groups.

The private sector, in particular navigation companies, which are among the main users of the Danube STREAM outputs, were directly involved in the testing of the results, to receive the broadest acceptance possible from the users. For instance, navigation companies were directly involved in the updating process of the paper charts for the entire Danube, which represents the offline support to skippers as they are compendia of Danube waterway infrastructure charts that can be easily printed out and used on the vessels or in the field. Also, the navigation companies were involved in the Danube STREAM activity, which aimed to provide skippers with real-time information regarding the occupancy of berth places and the compiling of the Atlas of Berths for the complete Danube stretch.

From a regional development point of view, Danube STREAM has been considered very successful, as it has helped to further promote complex projects for the waterways along the Danube. Indeed, obtaining the agreement on minimum levels of services, the project has provided justification for larger infrastructure projects, which have much higher budgets, such as the one financed under Connecting Europe Facility (CEF).

### Successful implementation aspects and major difficulties

The project complied with all the elements specified in the technical offer and successfully completed all the activities of the project. There were also difficulties, especially on the harmonisation of acquisitions (when the programme allowed budget relocation from one partner to another), since some partners had complications to maintain the technical capacity due to budgetary approval problems which did not permit them to anticipate expenses. The project's barriers were therefore mainly of an administrative nature, as it was very easy to overcome the technical difficulties, given that the consortium had been cooperating for a long time. Among the factors that facilitated a successful project implementation, the signing of the Service Level Agreement was extremely important, as it is a strategic commitment that will allow further development of the minimum navigation conditions through other strategic projects.

## Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

### The general progress of the project area in the domain targeted by the relevant specific objective

The project has achieved all three project-specific objectives targeted by the technical offer. The first specific objective, **Improving harmonised and innovative waterway management**, has created a set of tools that meet the needs of the waterway users, the shipping and logistics sector, as they all appreciate the information provided by, for example, the D4D and the FIS Portal. They have reported their feedback on several occasions, such as the stakeholder workshops. Also, the waterway managers themselves are supported by Danube STREAM tools such as the waterway marking application. These innovative waterway management tools contribute to harmonised waterway management, as they are based on joint standards.

The second specific objective, **Fostering common user information services**, was met by the provision of continuously updated and targeted information about waterway infrastructure via several tools developed in Danube STREAM – mainly the FIS Portal, the D4D Portal and the waterway marking application. The project partners have worked together to define harmonised targets and efficient operation structures, in order to keep the tools functioning well after Danube STREAM. These information services have been reported to be very valuable to the users, especially the shipping and logistics actors that were consulted during the stakeholder workshops.

The achievement of the third specific objective, **Deploying strategic perspectives**, was the clear success of Danube Stream, as an integrated waterway management approach, which is able to combine navigation and ecology standards, was the key issue of the project. Through several dedicated joint meetings in the board of directors of the Danube waterway administration, both perspectives and needs were discussed and transformed into joint strategies and then into the establishment of a Service Level Agreement.

### Direct effects and impact of the project

Among the direct effects of the project, the design of the innovative waterway management tools, as well as the agreement on a minimum level of services to ensure minimum standards of navigability conditions, encouraged the development of other complex platforms for supporting the waterway management systems, and this has had a concrete effect on the management of waterway systems in the Danube area. For instance, after development of the FIS portal, the waterway administrations were able to develop more complex applications and tools, such as the WAMOS (WATERway MONitoring System) platform, which allows the collection of the necessary information for the production of data to feed the EUSDR reports. Another key tool was WAMS (Waterway Assessment Management System), which supports the scope analysis of waterway management interventions.

The private sector has been directly involved in the testing and developing phase of the project's outputs and was able to deliver very valuable feedback. The developed waterway system tools are useful in guiding navigation companies by showing them the hydrological situation and helping in making correct decisions (i.e. whether to make the journey or avoid becoming blocked along the Danube).

Moreover, Danube STREAM has introduced the concept of equilibrium between good navigation status and good ecological balance, which will bolster future navigation policies, as it is necessary to take into account the imbalances at environmental level caused by infrastructure projects. Also, there is more need of environmental feasibility studies, to assess and benchmark the vulnerability of infrastructure projects towards climate change and environmental issues.

Regarding the direct effects on capacity building in the Danube region, Danube STREAM allowed the implementation of new waterway management solutions and their harmonisation, taking into account the specific characteristics of each Danube waterway sector. For example, it is not possible to implement a good practice from one waterway administration and implement it fully in another country, because environmental, hydrological, hydrographical factors are in play. Also, regarding the wider direct effects on non-EU countries, the Republic of Serbia is one of the most important examples; good cooperation with the International Sava River Basin Commission is very valuable in developing an effective waterway transport network in the Danube area. Sava is indeed the most important tributary of the Danube (and one of the waterways with the highest transport capacities in the region together with the Tisza river) and therefore the signalling system has also been extended to the Sava River.

### Non-intended outcomes and project afterlife

From the stakeholder consultation, it emerged that the results at the strategic, technical, organisational and cooperation levels were not unintended, as they were foreseen in the technical offer. However the relaunch of strategic projects in the Danube area, based on the outcomes from Danube STREAM, was considered a positive non-intended outcome.

Negative non-intended outcomes were mainly limited to environmental implications, but the consortium put in place proper counter measures to minimise their impact. For instance, Danube STREAM carried out several special activities to examine environmental factors and consequences in collaboration with other projects, such as DanubeParks and WildIsland (which deal with maintaining protected areas on the Danube). Navigation on the Danube is very dynamic, and the results of the infrastructure projects can negatively

impact the environment. To maintain the balance between good navigation status and good ecological balance more environmental feasibility studies are needed, which are currently absent.

Regarding the continuation of the project, at the moment partners are considering the idea of a Danube STREAM 2 to further develop the current tools and to improve the already established forecasting methods. However, at the same time, the coordination of the project is not at all simple, and further agreements are needed at the consortium level.

## CS 6: Danube STREAM project

### Part 0. Introduction

Project name (full title and/or acronym)	Smart, Integrated and Harmonised Waterway Management (DANUBE STREAM)
Programme priority axis (number and title)	SO 3.1 Support environmentally friendly and safe transport systems, and balanced accessibility of urban and rural areas
Programme priority specific objective	Better connected and energy responsible Danube region
Project Lead Partner organisation	Austrian Waterway Company (AT)
Other project partner organisations	Slovak Water Management Enterprise, state enterprise (SK); General Directorate of Water Management (HU); National Association of Radio Distress-signalling and Infocommunications (HU); Ministry of the Sea, Transport and Infrastructure (HR); River Administration of the Lower Danube – Galati (RO); Administration of Navigable Canals SH (RO); Executive agency for exploration and maintenance of the Danube River (BG); Ministry of Construction, Transport and Infrastructure – Directorate for Inland Waterways (SR)
Other organisations involved in or associated to the project (if existing)	German Federal Ministry of Transport and Digital Infrastructure (DE); Danube Commission (HU); International Sava River Basin Commission (HR); DANUBEPARKS – Danube River Network of Protected Areas (AT)
Amount of EU co-financing (in €)	1,792,362.19 ERDF + IPA
Amount of public contribution (in €)	308,115.95
Amount of private contribution (in €)	8,183.28
Main objective(s) of the project	The main objective of Danube STREAM is to reach harmonised, innovative, pro-active and effective waterway management along the Danube and its navigable tributaries.
Project Specific Objectives	Improving harmonised and innovative waterway management  Fostering common user information services  Deploying strategic perspectives
Project main outputs	Adjusting of available IT tools  Developing new services  Testing of adjusted and newly developed tools  Strategy on environmentally sound waterway management  Vertical clearance sensor system  Joint interactions between Protected Areas and PPs  Establishing service level agreements  Raising awareness of waterway administrations

	Video on usage of electronic navigational charts
Key activities implementing the project	<p>Project start and closure Financial management Project coordination and controlling Project quality management</p> <p>Internal communication External communication</p> <p>D4D development Electronic Navigational Charts FIS portal development</p> <p>Raising the effectiveness of waterway management Waterway management tools Environmentally sound waterway management</p> <p>Performance indicators and Level of Services Interconnections with relevant inland navigation-related international initiatives Strategic communication</p>
Project duration	<b>33 months</b>
Start date	<b>01.01.2017</b>
End date	<b>30.09.2019</b>

## Part 1. Project preparation

*This section presents in details the context in which the cooperation was born, from project idea to programme application. It details how project partners were found, how the preparation was structured and how partners decided on tasks and responsibilities.*

### The genesis of the project idea/project partnership

The Danube River is a **hub of diversity** in the Danube Region and the river's nature is an integrative element in the region; the large number of Natura 2000 sites is a clear evidence of the EU's commitment to protecting such an important natural heritage. The **Danube Protected Areas** preserve the most valuable sites; however, the fragmentation of the ecosystems and the isolation of protected areas is one of the main threats to biodiversity and limits the efficiency of their management. Due to the Danube's multifunctionality, cross-sector partnerships are needed to **restore riverine landscapes** to increase the multifunctionality by enhancing the supply of provisioning, cultural and other services. Advanced tools to improve the functionality of bio-corridors have to be developed, as well as concrete solutions have to take place to demonstrate win-win situations of Green Infrastructure.

The Danube River connects numerous bio-regions and it is a link among macro-regions. Due to such a key role, the Danube River qualifies to be a **pilot region for ecological connectivity**. However, the level of cooperation, know-how transfer and the level of harmonised actions over the macro-region are still at an early stage. Danube Countries share common policies, but their implementation is still only at the beginning. Due to the special situation in the Danube region, with a mix of old and new EU Countries, candidates and neighbouring countries, joint actions to develop the Danube eco-corridor are needed.

DANUBEparksCONNECTED's aimed at restoring the Danube River's ecosystem multi-functionality, by boosting green infrastructure through a **strong integrative and cross-sectoral approach**. The project managed to raise awareness among stakeholders from different sectors, from policy-makers to civil society, to empower the network and develop innovative and ambitious solutions towards a **Danube Habitat Corridor**. Moreover, the creation of green infrastructure within the project aimed at creating win-win situations for different sectors such as nature conservation, transport, energy, forestry and other land-users, to jointly implement pilot actions as demonstrations of good practice solutions in developing the **Trans-European Networks of Green Infrastructure (TEN-G)**.

### The preparation of the project

The project idea started in 2007 with the signing of the **Tulcea Declaration** in the context of which concerted action has been taken at a high level to develop an active Network of Protected Areas within the Danube River Basin. Moreover, the Tulcea Declaration aimed at boosting co-operation and strengthening links between the national administrations of protected areas of Danube riparian countries, in order to enhance nature conservation of the Protected areas along the Danube River.

The consortium has a long cooperation story, **which has lasted for more than 10 years** and three projects: DANUBEPARKS SEE project (2009-2012); DANUBEPARKS STEP 2.0 (2012-2014) and DANUBEparksCONNECTED (2017-2019). The project partners also shared commitment to the Danube conservation, thanks to the DANUBEPARKS Association, which is a platform for coordinated and extensive collaboration among the various administrations of the Danube Protected Areas. The stakeholder consulted considered DANUBEPARKS more than a network: a big family with a stronger voice to ensure the protection of the Danube Protected Areas.

As regarding the project application, **it took at least one year of discussion, in order to shift from brainstorming to concrete application**. The great majority of the partners had enough resources to participate in the planning process; however some of them did not have enough resources to take part in the designing phase. Moreover, an internal meeting has been organised, through which the structure and the methodology to achieve the project-specific objectives have been successfully defined. The project leader has been described as very diplomatic and efficient and allowed to overcome all the problems that aroused at the preparatory stage.

From the technical point of view, the proposal was a success, despite some difficulties with the measurement of the technical indicators. The most common issues that characterised the preparation stage were of administrative nature, as the consulted stakeholders found the project application was too bureaucratic. In general, the **DTP Programme was the perfect match** for the consortium to achieve its objectives. It has been also noted the good coordination with the Joint Secretariat and National Contact Point in Romania, which has been very helpful and supportive.

## Part 2. Project implementation

*This section shows how the implementation was carried out from the beginning to the end, and asks the interviewees to share how success was reached and list all the difficulties they faced during the project. It will provide a context in which the project was carried out, and we also ask about the external factors which could possibly have an influence on project implementation.*

### History of implementation

After the Kick-off meeting the final allocation of resources was very smooth and in a full collaborative spirit. The consortium was able to **allocate the available resources at their best**, in order to attain the project objectives. Since the early stage, the project has been coordinated in such a way to ensure that all partners have the necessary resources to work on project management, dissemination, research and actual implementation of the project.

The joint understanding of what needs to be developed was a long process, as confirmed by the project leader: “the implementation of DANUBEparksCONNECTED started years before the actual **project implementation**”. Moreover, each of the Work Packages **included expert workshops to better define the outputs** of each deliverable in a cross-sectoral approach by bringing together PAs, NGOs, experts, power line operators, etc. Additionally, communication activities have brought awareness on ecological connectivity and the importance of preserving the Danube biodiversity.

Since the beginning of the project, it has been clear that the creation of the Danube Habitat Corridor would have been a long process. However, DANUBEparksCONNECTED has initiated the first steps to secure the future perspectives of the **Danube Habitat Corridor**, by implementing visible and convincing pilot actions, creating strategic partnership sand supporting on the policy level.

**Trustworthy collaboration with waterway, energy and forestry** aimed at creating synergies in the implementation of DANUBEparksCONNECTED, which have been at the basis for its long-term valorisation. Indeed, the partnerships built within the project lifetime, the strategic crossover capitalisation and the strategies anchored on policy level have been the main pillars **to ensure the sustainability of the project outputs**.

### Implementation context

The EUSDR even though it recognises the outstanding role of Danube Protected Areas, also notes that they **“often work in isolation and not efficiently enough”**. Moreover, it acknowledged the need for

transnational cooperation and the provision of ecological connections that are essential for overall European environmental health. The **EUSDR PA6 - Biodiversity, Landscapes and Air & Soil Quality** identifies DANUBEPARKS as a key network for "Green Corridors". Also, DANUBEparksCONNECTED rehabilitated riparian habitats and adapted Grey into Green infrastructure. This approach met exactly highlighted target for EUSDR PA6, to "**maintain and enhance ecosystems and their services by established green infrastructure and restoring at least 15% of degraded ecosystems**". PA6 Action "To develop green infrastructure in order to connect different bio-geographic regions" is an appeal for initiatives over large areas; and in the context of the latter DANUBEparksCONNECTED has built ecological connectivity over 5 bio-regions.

The Danube is one single interrelated ecosystem. Its function as an essential European eco-corridor is well known because nature doesn't recognise borders: **only transnational cooperation can restore and maintain habitat connectivity along the world's most international river**. DANUBEparksCONNECTED has tackled issues with very bringing levels of awareness in the Danube countries. The learning process initiated by the project raised awareness among stakeholders and these learning interactions have, in turn, resulted in **improved Danube-wide standards**, such as technical solutions for power lines and marking power lines against bird collision.

Also, DANUBEparksCONNECTED provided for an **intense internal capacity building** and know-how transfer during joint preparation processes, as external experts and strategic partners contributed to raising the capabilities of DANUBEPARKS experts in all WPs.

### Successful implementation aspects and major difficulties

One of the first milestones of the project was the design of **WILDIsland pilot actions**, which improved the habitat quality of islands and their functionality as a stepping-stone in the context of the Danube Wild Island Habitat Corridors. The Pilot Actions aimed at - a) removing Grey Infrastructure, b) adapting navigation infrastructure c) sediment regime-restoration d) manage invasive plants qualify sites to be labeled as WILDIsland - and demonstrating how to successfully create **win-win situations** for different sectors, and test good practices for follow-up activities towards the long-term implementation of WILDIsland.

The creation of the very first Danube-wide detailed inventory of islands, and the subsequent publication of the online tool, has been one of the main successful implementation aspects of the project. The Commitment for the conservation of 147 WILDIsland has been signed by all PAs at the Directors level. It represents the **first agreement signed at the political level regarding non-intervention management on valuable Danube islands**.

Since rivers are high-risk areas for bird collision with electricity wires, the **DANUBE FREE SKY** WP delivered good practices in each country, resulting in a number of pilot actions. The consortium, together with local electricity providers, implemented innovative technical solutions. The related position paper resulted in a Danube-wide follow-up project proposal.

As emerged by the stakeholder consultation, the main difficulties occurred at the administrative level. At the technical level, the consortium was able to overcome all the obstacles in the project, due to the high level of expertise among the project partners.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

*This section presents the results and impacts of the project, how they affect the region and also presents the non-intended effects and afterlife of the project.*

### The general progress of the project area in the domain targeted by the relevant specific objective

#### Specific Objective 1 - Empowering the Network by raising awareness among stakeholder

DANUBEparksCONNECTED has **raised the significance of the Danube eco-corridors**. To this end the project has reached out to key stakeholders and civil society, shared experiences and know-how with the DanubeParks network and involved policymakers, in order to pursue concrete action and implement policies and programmes. Moreover, the project has been presented at PA6 Steering Group Meeting and Conference on ecological connectivity, and the consortium has been invited by the EUSDR PA3 to present the project in April 2019. DANUBEparksCONNECTED continues to be in permanent exchange with the cross-border Interreg project Alpine Carpathian River Corridor, a first pilot project of the ADC Net to boost the ecological connectivity between the Alps, Carpathians and the Danube. The overall DANUBEPARKS'

Network capacity has been increased by the project, and the civil society is aware of landscape restoration. **SO1 was fully achieved.**

### Specific Objective 2 - Danube-wide policy on GI boosted by cooperation crossover sectors

DANUBEPARKS is in a leading role in nature conservation along the Danube. With the support of its partners like EUSDR and ICPDR, DANUBEparksCONNECTED has used a strategic approach to be a policy driver. Green Infrastructure measures have been implemented within DANUBEparksCONNECTED thanks to the integration of other sectors such as waterways, forestry, and flood management in day-to-day operations in Protected Areas. Moreover, cross-sector cooperation has been fostered through **the implementation of pilot actions** such as cross-border grazing, revitalisation of islands or marking of powerlines. Together with Danube STREAM, a Joint process among the waterway and conservation sector has been implemented (2 conferences, Danube Awareness Day, National Meetings). **SO2 was fully achieved.**

### Specific Objective 3 - Long-term eco-connectivity initiated by implementing tangible PILOTS

The DANUBE HABITAT CORRIDOR has been strengthened by DANUBEparksCONNECTED through pilot actions in water, land and air. It provided a **best-practice model for other macro-regions** by initiating follow-up activities in all habitat types. The Danube as an eco-corridor was further developed by good-practice in restoration and management, thanks to the extensive experience of the Network on the ground and the support of cross-sector partnerships. Under this Specific Objective, the Danube-wide inventory of potential WILDilands has been created. The WILDiland online tool is online and has been presented at the cross-sector conference in Kladovo. **SO3 was fully achieved.**

### Direct effects and impact of the project

The project clearly succeeded in boosting the cooperation among the relevant stakeholders, in order to initiate the long-term ecological connectivity along the Danube Area, and bridging the Danube Protected Areas to counteract fragmentation and make the Danube a key eco-corridor. Moreover, WILDiland and its cross-sector process can be used as good practice for other rivers in Europe. Indeed, the outputs delivered for the Danube have been made available, at first, for the tributary rivers, such as Sava and Prut rivers.

Moreover, the consulted stakeholders highlighted that the involvement of partners from non-EU Countries such as Moldova and Serbia, brought very good results and a clear added value to the Consortium. Moreover, the Serbian partner was WP leader and the final conference of the project was hosted by them.

### Non-intended outcomes and project afterlife

No non-intended outcomes have emerged from the stakeholder consultation and the desk research. However, the consulted stakeholder noted Danube Parks is one of the few big networks to be stable in the region, due to the fact that being an association allows them to be more independent from EU Programmes, since financing occurs through membership fees. Also the network aspires to be a key player in the region and involve new partners from fields such as energy and tourism, in order to scale-up the cooperation along the Danube.

## CS 7: DARLINGe

### Part 0. Introduction

Project name (full title and/or acronym)	Danube Region Leading Geothermal Energy
Programme priority axis (number and title)	Priority 3
Programme priority specific objective	SO 3.2 Improve energy security and energy efficiency
Project Lead Partner organisation	Geological and Geophysical Institute of Hungary
Other project partner organisations	Mannvit Planning and Consulting Limited Liability Company; InnoGeo Research and Service Non-profit Public-benefit Limited Liability Company; Ministry of Foreign Affairs and Trade; GEOLOGICAL SURVEY OF SLOVENIA; Local Energy Agency Pomurje; Croatian Geological Survey; Zagorje Development Agency Ltd; Geological Institute of Romania; S.C. TERRATECHNIK S.R.L.; Federal Institute for Geology – Sarajevo; Geological Survey of the Republic of Srpska-Zvornik; University of Belgrade, Faculty of Mining and Geology; Provincial Secretariat for Energy, Construction and Transport; Municipality of Sremski Karlovci



Other organisations involved in or associated to the project (if existing)	Ministry of Infrastructure, Energy Directorate; Association of Municipalities and Towns of Slovenia; City Municipality of Murska Sobota; CROATIAN ENERGY MARKET OPERATOR Ltd.; Ministry of Economy, Entrepreneurship and Crafts; - Ministry of National Development; National Agency for Mineral Resources
Amount of EU co-financing (in €)	2,133,992,98 ERDF + IPA
Amount of public contribution (in €)	363,740.98
Amount of private contribution (in €)	12,846.14
Main objective(s) of the project	The main objective is to enhance the sustainable and energy-efficient use of the still untapped deep geothermal energy resources in the Central and SE-ern part of the Danube Region in the heating sector, especially district heating and individual space heating in settlements and various uses in the agriculture sector (heating of greenhouses and plastic tents, animal husbandries, aquaculture). DARLINGe aims to increase the share of available, but still untapped geothermal resources mostly used for balneological purposes by (1) identifying new areas of possible utilizations where advantageous geological conditions meet heat market demands; (2) expand current (balneological) sites already using thermal water, however at low energy efficiency by introducing additional, more efficient uses both “downstream” or “upstream”; (3) foster reinjection practice which decreases the necessary amount of thermal water to be abstracted. DARLINGe aims to establish the strategic-policy background and a cluster of dedicated stakeholders to achieve these goals, too.
Project Specific Objectives	<ul style="list-style-type: none"> <li>- Increase cascaded geothermal systems and introduce “resource-parks”</li> <li>- Establish transnational management of geothermal reservoirs</li> <li>- Advance stakeholder cooperation to foster geothermal developments</li> </ul>
Project main outputs	<ul style="list-style-type: none"> <li>- 4.00 strategies to improve energy security and energy efficiency</li> <li>- 2.00 tools to improve energy security and energy efficiency</li> <li>- 3.00 pilot actions to improve energy security and energy efficiency</li> <li>- 6.00 documented learning interactions in finalised operations</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Contractual and financial management</li> <li>- Operational management</li> <li>- Capacity building for project partners</li> <li>- Stakeholder consultations</li> <li>- Training activities for stakeholders</li> <li>- DARLINGe data model (common database)</li> <li>- The Danube Region Geothermal Information Platform (DRGIP)</li> <li>- Current utilization schemes</li> <li>- Case studies of good practices and bottlenecks</li> <li>- Heat sector analysis</li> <li>- Regulatory framework, licensing procedures and funding opportunities</li> <li>- SWOT analysis</li> <li>- Transnational Danube Region Geothermal Strategy</li> <li>- Elaboration of a transnational tool-box</li> <li>- Danube Region Geothermal Action Plans</li> <li>- Benchmark evaluation</li> <li>- Testing of the decision tree</li> <li>- Geological Risk Mitigation</li> </ul>

Project duration	30 months 0 days
Start date	01.01.2017
End date	30.09.2019

## Part 1. Project preparation

### The genesis of the project idea/project partnership

#### Description of the problem and why it needs to be solved

In the Danube Region energy supply, especially in the heating sector is heavily dependent on Russian import and contributes to a large extent to greenhouse gas emissions. Both problems are recognised and targeted by the European Union, however solutions require both individual efforts and coordination by member states. District heating systems are key players of the heating sector and have a long tradition in the Central-Eastern European region. Although there is significant potential for renewable resources in the Central and Southern-Eastern region of Europe in the heating sector, there are only a few individual efforts (mostly from cities or larger regions) to incorporate the deployment of renewables into their heating systems. Both a transnational approach that takes into account the regional, cross-border effects, builds on joint advantages and synergies, and the targeting of smaller cities - where the majority of the population lives – are missing from the strategies of individual member states.

#### Opportunities the region provides, reason for transnational cooperation

The Danube region, especially the Central and Southern-Eastern parts have very favourable geological conditions with respect to geothermal energy, which has a potential use in the heating sector. The carrier of geothermal energy is thermal groundwater, which is most commonly utilised by balneology, with subordinate direct-heat applications operating at low energy-efficiency. The project thus aimed to enhance the sustainable and energy-efficient use of the still untapped deep geothermal energy resources in the countries covered by the cooperation (HU, SLO, SRB, HR, BH, RO) in the heating sector – especially district heating and individual space heating in settlements and direct uses in the agriculture sector by:

- applying an innovative and integrative, territorially based approach that analyses the current situation of geothermal utilization from multi-purpose aspects (types of uses, operational issues, energy efficiency, sustainability of production) complemented by case studies of good practices;
- identifying new areas of possible utilizations where advantageous geological conditions meet heat market demands;
- identifying and characterising potential geothermal reservoirs in order to outline prospective future areas of developments;
- expanding current balneological sites already using thermal water at low energy efficiency by introducing additional, more efficient uses;
- overviewing the current regulatory framework, licensing procedures and financing mechanisms in the partner countries;
- complementing the regulatory analysis with an outlook on the main European policies and financial instruments.

One of the main reasons for the need of transnational cooperation is the location of underground geothermal water basins, which are usually shared by more countries, and thus the exploration, characterisation and potential use of these resources require joint cooperation from neighbouring countries. The partnership strongly built on experience gained in other transnational and cross-border projects in which partners of the consortium previously participated. It managed to integrate the outputs from these projects, thus it is a successful example for how project ideas can evolve through time and by participating in subsequent programmes.

Methodology of transboundary geothermal potential assessment and cross-border geothermal models were laid down in the project Transthermal ("Geothermics of the Eastern and Southern Alps") and in GeoMol project ("Assesing subsurface potentials of the Alpine Foreland Basins for sustainable planning and use of

natural resources"). The methodology of outlining a transboundary geothermal aquifer and elaborating a joint strategy for its sustainable management were established in the T-JAM project "Preparation of the joint geothermal aquifer management plan in the Mura-Zala basin", and in the SUDEHSTRA project (Sustainable Development of Hungarian – Serbian Transboundary Aquifer). A multi-lateral transnational cooperation in geothermal resource assessment, joint evaluation of thermal water uses as well as first version of the benchmark evaluation system were elaborated in the Transenergy project "Transboundary geothermal energy resources of SLO, AT, HU and SK". Methods of multi-national capacity building and know-how transfer methods are building strongly on the results of the Geothermal ERANET project. In terms of geothermal district heating we build on experiences of the GeoDH project "Promoting geothermal district heating", especially related to non-technical barriers. Experiences on the use of low-temperature geothermal resources will be considered coming from the GeoSEE project („Innovative use of low temperature geothermal resources in South East Europe"). The database concept is largely based on the project results of DanReGeotherm-DATA "Data support for the enhanced use of deep geothermal energy in the Danube Region". Policy making concepts elaborated in GEO-POWER project (EU policy support system for sustainable supply of Europe with energy and mineral resources) will be evaluated as well. Experiences on how to build effectively a geothermal network will benefit from the results of the GANDOR project.

### **Project's main objective, reasons behind the partners (partnership), how they want to achieve goals**

One of the project's main objectives was to increase the use of geothermal energy and help the penetration of energy efficient cascade systems and matching them with heat-markets (concept of "resource-parks"). For this the project determined the main actors of the heating market and the channels which are used to connect the supply side with the demand. Partners identified the main geothermal reservoirs with the capacity of supplying thermal water for direct use and analysed the potential of matching them with heat-markets. For the efficient use of geothermal energy, end-users need to be sequentially linked according to required utilisation temperatures. This aim was served by the establishment of "resource-parks", where multiple direct utilisation build on synergies of cascaded use (including balneology).

The second objective of the project was to establish a market-replicable tool-box consisting of 3 complementary modules for sustainable geothermal reservoir management (benchmark evaluation of current uses, decision tree to help developers, geological risk mitigation scheme). In order to fully utilise the often shared geothermal reservoirs, project partners elaborated an indicator based benchmark system which can be used to assess sustainable production levels of the basins. Furthermore, a practical step-by-step guide was introduced for project developers with the principle of presenting the most likely occurring questions during the project development from the initial idea until the geothermal system is set up and running. Lastly, a risk mitigation tool was developed, with the purpose of educating the potential users what kind of geological risk mitigation measures can be applied under different circumstances.

The third specific objective was to advance stakeholder cooperation by the establishment of a Transnational Stakeholder Forum to foster geothermal developments and to create a strong geothermal value chain. The Forum was established with the aim of operating throughout and beyond the project lifetime.

### **The preparation of the project**

One of the predecessor projects (TransEnergy) gained the attention of the Ministry for Foreign Policy in Hungary, which later served as a channel for the prospective project partners to connect to the DTP (under development at the time). The predecessor of the Darling-E project first appeared as an EUSDR Seed Money Facility project, under which an overview on the potential of geothermal energy utilisation in 11 Danube Region countries was elaborated, and an initial project concept was prepared and discussed at several SG meetings of the EUSDR-PA2, and at a transnational workshop with 40 participants in 2013.

Later, in 2015 five partners of the Darling-E project consortium were funded to overview the data policy, data availability and data formats relevant for utilisation of deep geothermal energy in HU, HR, BH, SRB, RO. Partners were national geological surveys (and a university from SRB) who are data owner/managers, therefore have the widest possible information about data availability at national levels.

Led by the Geological and Geophysical Institute of Hungary, the consortium included 15 financing partners from 6 countries (HU, SLO, HR, BH, SRB, RO). From each country one partner was a national geological survey or a university owning and managing geoscientific data. This made available for project partners the various databases on the characteristics of geothermal reservoirs from different countries, which otherwise would have been very difficult to collect. The partnership also involved 2 private enterprises, a non-profit private body, a local energy agency, 2 regional governmental agencies, a municipality and a ministry. 7 ASPs supported the work of the consortium consisting of ministries, representatives of cities and industry

representatives. The partnership managed to collect regional knowledge, site specific knowledge and technical-operational knowledge related to the production of geothermal energy under its collaboration.

## Part 2. Project implementation

### History of implementation

After the project got its approval from the DTP the implementation proceeded according to the plan elaborated in the Application Form. For partners which had not participated in such projects before many procedures were new, and it took some time for them to accommodate to the routines such transnational cooperation programmes required. Still, the partnership established a good common ground for an effective working environment and was engaged with the project's aims. The project implementation started with a definitive list of tasks that defined responsibilities and deadlines, which also served as a good basis for monitoring the project. Since one of the project partners did not respond to any e-mails or calls, it was replaced by another partner from the same country already at the beginning of implementation.

### Implementation context

6 work packages were defined by the project, 4 of them concerned the development of outputs and the other 2 related to project management and communication activities. Looking back one of the conclusions that can be drawn, that it is more efficient if the Lead Partner is responsible for communication activities.

#### Capacity building

The capacity building activities included the organisation of workshops with the aim of know-how transfer among the members of the consortium. The presentations of the workshops served as basic materials for e-learning materials. Several stakeholder trainings were organised, including field trips to participating countries.

After the partners constructed the structure of the stakeholder database, all partners could start to collect data of their identified national stakeholders. This resulted in the identification of altogether 954 stakeholders. Out of this database 3 organisations from each country were selected to be representatives in the Transnational Stakeholder Forum (TSF). The TSF held several meetings where among other things they defined the main goals to be reached, monitored the progress of the project, and served with valuable comments on the future work. The TSF also served as a national contact point for consortium members, encouraged their participation at meetings and assisted them in terms of travel logistics. Several field trips was organised during the project, which were documented in a report that comprises the excursion guides of these cross-border field trips.

A training material on the use of the developed tool-box was prepared, which describes in a uniform and user friendly way the use and application of the 3 elements of the tool-box as well as the Danube Region Geothermal Information Platform.

#### Transnational database (Tool)

The Danube Region Geothermal Information Platform (DRGIP) as a main output of the project is a harmonized entry point for all spatially-referenced data gathered during the project and aims their user-friendly visualization. It had an already existing web-based basis (a database) from previous projects which was first overviewed by partners listing their advantages and disadvantages. A software and two cloud infrastructures were created by the Slovenian partner enabling simple and secure use of web and network services within a particular community of users and service providers. One of the cloud infrastructure was used for exchange of digital data and another for archive digital data. The common structure of the database was created ready to be uploaded with all necessary data (mostly from active thermal water users). Finalising the conceptual model required work from all project partners: they needed to decide how to integrate the results from other project activities into the platform. Furthermore the platform had to be compliant with the INSPIRE Directive of the EU. After an agreement was reached on the conceptual framework (theory behind the process of data modelling, mapping of the model, description of tables and code lists) and the platform proved to be in line with all related regulation, the first steps of the architecture development started. As soon as the platform was ready and guidelines for mapping were prepared, project partners from different countries uploaded their data into the database. On WP meetings the concepts as well as the necessary modifications were discussed and then the tool was finetuned.

#### State of the art analysis

A state-of-the art analysis was created that provides a detailed description of the geological, hydrogeological and geothermal conditions of the entire project area as inputs for creating geological model horizons as wells

as a set of surface temperature maps which served the basis for outlining potential geothermal reservoirs. The spatial distribution of all these reservoirs were visualised on a map series and their exploitable heat content was quantified using a probabilistic resource estimation method. The author of the report is the Lead Partner, who performed the majority of work, and all project partners contributed to the report with raw data from their national territories. Some project partners also provided input for the characterisation of basement reservoirs and checked the calculation and made the necessary corrections. All partners were involved in the description of good practice cases in their relevant countries.

### Transnational Strategy

In order to have a full range of different views, all partners performed a SWOT analysis of the main topics (reservoirs, current uses, heat market, finances and national regulatory frameworks) from their own perspective. Then each topic inputs was summarized: reservoirs, current uses, heat market, finances and regulatory frameworks. This SWOT analysis was the main input to the Transnational Danube Region Geothermal Strategy, which was conceptualised by the lead partner and discussed among with other project partners. The Strategy has 9 main chapters (geothermal energy framework, policy context, geothermal resources and utilization, operational and technological issues, heat market aspects and economics, social awareness, data policy and research priorities) for which not only other project results, but a huge number of international literature (policy papers, strategy and concept papers in the topic, results from other projects, scientific papers) were collected and assessed. The final document is a scientific and technical material of 79 pages with 40 figures and 10 tables. The tool-box elements were developed and tested, and based on the testing results finalised.

### Transboundary pilots

2 activities served as a basis for pilots: benchmark evaluation and (to a minor extent) testing of the decision tree. For benchmark evaluation data collection from thermal water wells has started on the 3 cross-border pilot areas by all partners being active in this activity. It means that data collection (partly from archives, partly from the utilization database already completed in other project activities. Testing of methodology of the decision tree included the selection of "projects" from the 3 cross border pilot areas representing various stages of development (from preliminary surface exploration of an area to drilling exploration at a concrete site, operational projects, projects under expansion). After a preliminary of selection of the case sites (2 in SLO, 1 in HR, 1 HU, 1 in SRB, and some sites to be finalized in RO and BH), partners started to collect data in fields of economy and environment, technological aspects and geological resources available for these projects. These projects were able to demonstrate what actual steps are necessary to develop a project from exploration to full operation.

During the piloting process a major progress was achieved in the Szeged area, where the lead partner started to develop a numerical flow model for this area in order to study the cross-border impacts of future extended thermal water abstraction scenarios related to the development of the Szeged district heating system. The model results served as main inputs in the risk mitigation scheme.

At the end of this activity the lead partner compiled a report about the testing of decision tree for all the 3 cross-border pilot areas based on partner inputs. Finally, a training was organised for partners about methods of resource assessment, and experts attended a joint field trip and consultation with Serbian partners.

### Successful implementation aspects and major difficulties

The cooperation among project partners progressed mostly according to the plan set out in the beginning of the project. Involving the main data owners of geological data from all the partner countries was essential for developing the data platform in a standard format that can be used by everyone. However, the very different nature of the data in different countries and their standardisation caused some minor delays in the project which was not expected at the beginning. Also the partner changes meant a lot of administrative burden, which had to be dealt with and cost a lot of time and effort from project partners.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

DARLINGe project having on board 15 partners from 6 countries in the Danube Region successfully completed its ambitious goals to foster the sustainable use of deep geothermal energy in the heating sector. It accomplished the development of the Danube Region Geothermal Information Platform (DRGIP), an interactive and user friendly web-portal summarizing all main results, including a web-map viewer and 6 thematic modules.

All 3 elements of the transnational tool-box (benchmarking, decision-tree and risk mitigation) were successfully tested on the 3 cross-border pilot areas. Based on these results Action Plans were elaborated for the 3 pilot areas with recommendations for future developments.

The project prepared a printed project book of 132 pages summarizing its main achievements, as well as 3 printed brochures about the key issues of utilization deep geothermal energy in the region: (1) Geothermal heating, (2) Success Stories, (3) Reinjection.

The Consortium held altogether 7 Stakeholder trainings on the use of the tool-box and the DRGIP. These were followed by cross-border field trips in each 3 pilot areas, with participation from the respective countries' stakeholders. The project Final Conference attracted 105 participants from 7 countries.

The project contributed to the programme specific objective by integrating the very heterogenous databases of participating countries into a single and uniform database which can be used by anyone interested in the utilisation of geothermal energy. The developed tools are supported by training materials, and thorough scientific analyses focusing on both regulation, good practices and technical considerations of utilising geothermal energy. The project also managed to integrate the professional network of participating countries at the very beginning of the project into a close network. The project was a continuation of previous projects and the partners consider the results of the Darling-E project the end of the continuous cooperation in the topic of utilisation of geothermal energy in the Pannon Basin.

## CS 8: NewGenerationSkills

### Part 0. Introduction

Project name (full title and/or acronym)	Unlocking the potentials for business and social innovation in the Danube Region by equipping young people with new generation skills
Programme priority axis (number and title)	Priority 1
Programme priority specific objective	SO 1.2 Increase competences for business and social innovation
Project Lead Partner organisation	Local Government and Municipality of District 11 of Budapest, Újbuda
Other project partner organisations	PRIZMA Foundation for the improvement of employment possibilities, the institution; Municipality of Maribor; NOWA Training Counselling Projectmanagement; akzente - center for equality and regional cooperation; North-West Regional Development Agency; Intercommunity Development Association Cluj Metropolitan Area; Sofia Development Association; Sofia Municipality; DEX Innovation Centre; Institute Mihajlo Pupin; Municipality of Savski Venac
Other organisations involved in or associated to the project (if existing)	Corvinus University of Budapest Small Business Development Centre; City of Graz; City of Belgrade
Amount of EU co-financing (in €)	1,803,002.77ERDF + IPA
Amount of public contribution (in €)	253,125.97
Amount of private contribution (in €)	65,051.04
Main objective(s) of the project	NewGenerationSkills (NGS) aims to create an enabling Youth focused environment, at local level for innovative ideas to grow from ideas to solutions, especially in the field of social innovation. This needs a change of mind-set and improved competences of all relevant actors, i.e.: local youth, companies, education, municipalities and their institutions as facilitators. The project will upgrade existing cooperation mechanisms between quadruple helix actors to create joint local support schemes that will equip local youth with new generation competences and skills. NGS will go beyond the existing support schemes, interweaving innovation and youth entrepreneurship support, with the aim of bridging the gap between education and new generation skills for the labour market. Through organic, community based learning programs, this novel support scheme will reach out to the youth who are motivated, but inadequately skilled to generate new ideas and take the first steps towards entrepreneurship. Through these measures NGS contributes to SO1.2 by creating attractive opportunities for quality work and business: newly acquired skills of the youth can be put into practice both as employees or future intra- or entrepreneurs; municipalities' coordination role ensures that the learning and

	idea generation process is oriented towards solving local challenges; while companies involved will develop a new culture for co-creation of ideas together with the youth.
Project Specific Objectives	<ul style="list-style-type: none"> <li>- Improved innovation management framework</li> <li>- Creating a cooperation based enabling environment for youth innovation</li> <li>- Entrepreneurial skill development of the youth</li> </ul>
Project main outputs	<ul style="list-style-type: none"> <li>- 7.00 strategies for increasing competences of employees in the business sector</li> <li>- 10.00 tools for increasing competences of employees in the business sector</li> <li>- 7.00 pilot actions for increasing competences of employees in the business sector</li> <li>- 29.00 documented learning interactions</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Fulfilment of start-up requirements</li> <li>- Day to day project and financial management</li> <li>- Steering and monitoring project implementation</li> <li>- Local Innovation Advisory Groups as a dedicated cooperation platform facilitating Innovation Labs</li> <li>- Capacity building in innovation management</li> <li>- Action Plans to introduce improved innovation management structures</li> <li>- Transnational exchange of experience</li> <li>- Transnational Model for the Local Innovation Lab Scheme</li> <li>- Creating the transnational DLP -Dynamic Learning Package, a skill development programme</li> <li>- Evaluation and capitalization for sustainability and transferability</li> <li>- Local Innovation Lab schemes</li> <li>- Local testing of the Dynamic Learning Package –DLP for skill development of the youth</li> </ul>
Project duration	30 months 0 days
Start date	01.01.2017
End date	30.06.2019

## Part 1. Project preparation

### The genesis of the project idea/project partnership

#### Description of the problem and why it needs to be solved

In international comparisons innovation in the Central Eastern European region remains relatively low, which can be traced back to a number of reasons. The historical heritage of these countries effects the entrepreneurial potential of the region negatively, that in post-socialist countries a bureaucratic-administrative business culture remains dominant supressing innovation and creativity. In many countries entrepreneurship is still associated with tax evasion, corruption, and criminality. Also, management capacities in the region remain very low, which pulls down productivity and potential long term growth.

The drive for innovation and to become entrepreneurs is especially low among members of the younger generations. 62% of young people in Central and Eastern Europe are not interested in starting their own business, whereas one in five would like to, but consider it too difficult. This problem connects to the educations system which puts a lot of emphasis on lexical knowledge and doesn't encourage risk-taking, or incentivise creative thinking and imagination.

Still, the world changes rapidly, and according to a lot of forecast the change on the job market will even accelerate further, requiring agility and practice orientation. Moreover, the public sector itself needs innovation to effectively answer societal challenges in times of shrinking public spending.

### **Opportunities the region provides, reason for transnational cooperation**

Project partner cities of the project, although differing in terms of innovation capacities, are all front-runners within their region and therefore have valuable experience in tackling various aspects of innovation and youth support. This transnational sharing process is supported by a carefully designed partnership composition: different combinations of quadruple helix actors represented locally cover all relevant and complementary know-how at transnational level. This, matched with the varied local contexts, allows the project to come up with integrated and transnationally viable solutions.

The project architecture builds on a combination of transnational and local actions embedded in a strong transnational framework. The implementation process is under close coordination of the TIAB, a transnational board composed of knowledge providing partners that feed project level methodologies and approaches. Local deliverables are carried out following joint methodologies elaborated by TIAB, so that local findings can be most useful for the whole partnership. Key activities are implemented by adapting transnational concepts and models to the local context and accompanied by continuous knowledge exchange through peer reviewing and exchange visits. Lessons from these local adaptations are built into the finalized transnational materials and in this way contribute to the delivery of transnationally applicable outputs.

In terms of the concrete actions implemented: Each participating city tests the Innovation Lab model demonstrating different but comparable use cases that PPs can learn from. Operational mechanisms and services covered by the local ILs will reflect local contexts in terms of the helix actors involved /TIAB members will be: municipalities, labour market / training organisation (SI, AT), university (SRB, HU), innovation and helix cooperation agencies with links to business sector (CZ, RO, BG), and the already existing initiatives of involved LIAG members that the IL will build on.

### **Project's main objective, reasons behind the partners (partnership), how they want to achieve goals**

The project addresses multidimensional challenges linked to better exploiting youth potentials and addressing skill-gaps in the context of enhanced public and business sector innovation. This necessitates a complex, multi-player (mirroring quadruple helix) project structure, following a logically built flow of actions. Consequently the project will follow the following intervention logic: Bringing together key actors of the quadruple helix having a stake in youth, and in (social) innovation support including improving innovation management capacities of local actors, designing novel transnational tools for youth oriented (social) innovation support (cooperation schemes, foundational and experiential learning tools) through an intense exchange among partners and translating these into local action plans at partner city level, testing the locally adapted set of tools, introduce the findings into transferable transnational tools and into local action plans to be implemented, disseminating results via targeted communication actions, using Danube and EU level network of partners and closely following-up the implementation and delivery of high quality outputs.

The project builds on the following pillars to minimize risks and guarantee high transnational added value and long lasting impact:

- Ensuring high standard outputs: TIAB apply their complementary expertise (e.g. training, (social) innovation, cooperation, gender, etc.) in the rigorous quality control and peer-working process accompanying the delivery of outputs
- Adapting successful methodologies: methods selected by TIAB from academia, business and NGO sector and apply them in planning and capacity building (e.g. mind-mapping, knowledge mapping)
- Cross-sectorial cooperation applied in the Innovation Lab Model: All PPs have an extensive network of actors from the quadruple helix with whom they already cooperate with. These, along with newly identified, high added value organisations representing business, civil society and education will be invited to bring their existing initiatives, knowledge and network into the LIAGs guaranteeing high impact of ILs
- State-of-the-Art methodologies applied by IL: youth support services will combine foundational and experiential learning through applying new methods (peer-learning, self-reliance) and bring compatible actors with mutual interests together (brokering, mentoring, match-making)
- Lasting Danube cooperation: innovative ventures of the youth have the potential to and should cross national borders for a larger market, cooperation and financing outreach. IL will open the door for them, through a strong set of transnational components included in the Transnat. IL Network, curated by TIAB.



- Transferability of outputs: validating the transnational tools in diverse urban contexts through piloting will contribute to transferability, whereas networking, e.g. with EUSDR PAs will guarantee that project outputs are absorbed by the right audience

### The preparation of the project

The LP has coordinated the preparation of the project, assisted by external expertise. Although no preparatory partner meetings took place during the preparatory phase, Partners have been carefully selected according to their relevance to the project and have been intensively involved in the project preparation. Both the EoI and than the AF were submitted duly. During the 2nd Phase all partners expressed their commitment to the project by signing the Partnership Agreement. Upon receiving notification of approval of the project by the Danube Transnational Programme Monitoring Committee, the LP took the necessary steps for the signature of the Subsidy Contract and coordinated this process with the JS and with all partner.

### Part 2. Project implementation

#### Capacity building

The project objectives are supported by the setting up the Local Innovation Advisory Group (LIAG) at each partner location where relevant stakeholders can provide inputs and suggestions for the project outputs and elaborate the Local Action Plans jointly. A Guideline for the identification of stakeholders was delivered and all PPs prepared their list gathering local stakeholders from the quadruple helix actors, established its LIAG and appointed a manager to coordinate operations (and to be a member of the TIAB). Partners selected the regional Good Practices based on the well-defined methodology elaborated by the LP. The aim of this analysis was to map the local innovation ecosystems, with a special focus on the situation of youth.

#### Framework improvement

Partners prepared an evaluation report of the pilot activities which highlights the successes but also the obstacles and shortcomings revealed by the pilot implementation, and lead to improvement of the initial concepts for the final DLP and Innovation Lab (IL) Model. Considering the facts detailed in the report, a set of revisions for the DLP and the IL concept were elaborated by IPA-PP1 which consists recommendation for the improvement of initial Transnational Innovation Lab Model. The LP also elaborated a Sustainability Report defining the necessary framework conditions and steps for ensuring the continuity of the TILN, outputs developed and piloted during the project. Within the last period, the main achievement was the finalization of the Transnational Guidelines for Danube Cities, serving as an important instrument of transferability. The Guidelines support municipalities and innovation actors outside the partnership who are potentially interested in applying the IL Model.

#### Pilot implementation

The Innovation Lab (IL) offers a physical and / or virtual community, a collaborative space for creating and developing innovative ideas for youth through the acquisition of appropriate training, mentoring and technology. Following the model and in line with the local circumstances, each set up their own IL with a concrete service portfolio, including a training. As a result, altogether 4322 young people were reached during the programmes provided by the local ILs, additionally 686 students took part at the DLP Trainings and their side programmes. It is important to mention that Újbuda, Graz, Maribor, Sofia and Stari Grad could involve high school students not just juniors from higher education. During Transnational Idea Fair (held on 4 June 2019 – D.5.2.3) organised by Újbuda youth had a chance to present their ideas on the spot in two ways: in a pitch and conference stalls.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

Despite the programme aims to help the 15-29-year-old ones, 90 percent of the presented Good Practises targets as the youngest age group the 18-year-old youngsters. It seems that only the topic of competence development dealt with grammar school students (15-18-year-old youngsters). This fact clashes with the international tendency, according to which we should start developing necessary attitude, skills and personality (altogether competences) even in kindergarten, but not later than in primary school.

Most of the Good Practises suppose the motivation, initiative and proactivity of the youngsters, involved in the different programs. This approach can more or less be understood as the effectiveness of a project depends on the activity and the internal motivation of participants at the beginning. However, target groups were not as motivated as expected, which can depend on a lot of factors: for example the lack of supportive parental background (e.g. first-generational intellectual), the lack of financial conditions (e.g. no money for financing studies or the founding of a new business), psychical deviancies (e.g. self-assessment problems or lack of selfconfidence), and cultural specialities (e.g. the appreciation of physical work or some

intergenerational job in the family). These were factors which should be taken into account in such projects in the future.

## CS 9: DanubeBioValNet

### Part 0. Introduction

Project name (full title and/or acronym)	Cross-clustering partnership for boosting eco-innovation by developing a joint bio-based value-added network for the Danube Region
Programme priority axis (number and title)	Priority 1
Programme priority specific objective	SO 1.1 Improve framework conditions for innovation
Project Lead Partner organisation	BIOPRO Baden-Württemberg GmbH (DE)
Other project partner organisations	ClusterAgentur Baden-Württemberg (DE), Anteja ECG (SI), PROUNION (SK), Romanian Cluster Association (RO), Association of Business Clusters (BG), National Cluster Association (CZ), Upper Austrian Chamber of Commerce / Upper Austrian Food Cluster (AT) Ministry of Economy, Trade and Relations with Business Environment (RO), Ministry of Entrepreneurship and Craft (HR), Ministry of Education, Science and Sport (SI), Croatian Wood Cluster (HR), Institute for Economic Forecasting (RO), Business Upper Austria – OÖ Wirtschaftsagentur GmbH (AT), Innovation Center of Faculty of Mechanical Engineering (RS)
Other organisations involved in or associated to the project (if existing)	Montenegro Vine Cluster (ME), Ministry of Finance and Economics Baden-Wuerttemberg (DE)
Amount of EU co-financing (in €)	1,948,975.34 ERDF + IPA
Amount of public contribution (in €)	197,391,90
Amount of private contribution (in €)	146,544.93
Main objective(s) of the project	The main objective is to facilitate eco-innovations in the bio-based industry by improving framework conditions and making better use of clusters, potential and diversity of the Danube region
Project Specific Objectives	<ul style="list-style-type: none"> <li>- Development of Joint Bio-based Industry Cluster PolicyStrategy (JBICS)</li> <li>- Development and implementation of new cluster services to support SME</li> <li>- Establishment of new value chains for bio-based industry</li> </ul>
Project main outputs	<ul style="list-style-type: none"> <li>- Joint Bio-Based Industry Cluster Policy Strategy</li> <li>- Cluster and VC mapping as an analytical tool</li> <li>- StressTest Tool &amp; Synchronised BIIE Scheme</li> <li>- Open Space Innovation Arena Tool</li> <li>- Pilot actions for closing bio-based value chains</li> <li>- Action Plan</li> <li>- New Cluster Management Services</li> <li>- Cluster managers trained in new cluster services</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Project start and closure</li> <li>- Financial management</li> <li>- Project coordination and controlling</li> <li>- Project quality management</li> </ul>

	<ul style="list-style-type: none"> <li>- Drafting of the Joint Bio-Based Industry Cluster Policy Strategy</li> <li>- Cluster and VC mapping as an analytical</li> <li>- Open Space Innovation Arena Tool</li> <li>- Pilot actions for closing bio-based value chains</li> <li>- Action Plan</li> <li>- New Cluster Management Services</li> <li>- Cluster managers trained in new cluster services</li>   <li>- Internal communication</li> <li>- External communication</li> </ul>
Project duration	<b>30 months</b>
Start date	<b>01.01.2017</b>
End date	<b>30.06.2019</b>

## Part 1. Project preparation

### The genesis of the project idea/project partnership

The transition from a fossil-based to a bio-based industry is one of the **main challenges identified in the Danube region** and addresses some of the main challenges identified in the Danube region. The dependency on fossil-based resources must be reduced to achieve climate change targets and reduce GHG emissions. Moreover, eco-innovations must be supported to boost regional development, by **diversifying the local economy and creating new employment opportunities**. In this context, the development of new bio-based value chains from primary production to consumer markets needs to be accomplished, by connecting enterprises from different regions and industries.

The Danube region possesses huge biomass resources, knowledge and technologies for green chemicals, biopolymers, bio-based materials and has strong application sectors (like biopharma, automotive, medical devices, advanced packaging). However due to a **missing holistic transnational approach**, the actors in the bio-based industry operated in a disconnected way and could not properly benefit from the potential, as the transnational **Value Chains (VC)** were not established. The variety of the Danube region is an added value since multi-level stakeholders from the above mentioned sectors are needed to cooperate transnationally according to their competencies. Moreover, before DanubeBioValNet, **Smart Specialisation Strategies of region (S3)** related to bio-based industries of the Danube countries were not aligned, and **no country can really succeed buy acting alone**, even though they have to implement S3 strategies individually. It was therefore clear that in order to generate new bio-based innovations and products framework, the transformation within the Danube regions had to be improved on a policy level.

DanubeBioValNet's main objective was **to facilitate eco-innovations** in the bio-based industry by improving framework conditions and making better use of clusters, potential and diversity of the Danube region, by acting on three levels: policy, clusters, enterprises. Clusters, as the representatives of many enterprises, were chosen as the most suitable environment to boost industry cooperation and create new value chains, because they are sustainable partners that can guarantee the upgradeability in industry, sciences and politics dimensions. To achieve its objective the project consortium drafted the **Joint Bio-Based Cluster Policy for the Danube Region (JBCS) and the related Action Plan**, in order to provide practical solutions to harmonise bio-based cluster policies and improve the impact of clusters as an enabler for innovation and transnational cooperation. Moreover, the project aimed at developing and implementing **new business services for cluster organisations** to support enterprises, by creating "cluster toolbox" which has been elaborated to enable clusters to implement services for benefit of SMEs.

Another objective of the project was to **map the VCs that are most relevant for the Danube region**, develop several Pilot Actions to establish, and strengthen the appropriate VCs across the Danube region by matching key actors, closing innovation gaps, bringing in missing partners and implement tools to help SMEs and academia exploiting the innovative advantages of value chains. This has been backed by the new

proposed policy interventions and the JBCS (and related Action Plan) that improve the framework conditions for bio-based industry innovation.

The DanubeBioValNet project **capitalises from previous European projects**, like Clustrat, ClusterCoop, European Cluster Excellence, Poly4Eml that provide a systemic approach to stimulate the industrial transformation towards the bio-based industry by using clusters. The approach of the project focused on the optimization of bio-based VCs, the improvement of the cooperation among partners and regions, and the identification of gaps. The consortium has also adopted a **multi-level stakeholder approach**, to allow lagging behind regions in the Danube Region to be connected with hot spots of innovation in Europe and be integrated into the new bio-based value chains driven by eco-innovations.

### The preparation of the project

As emerged from the consultation with the project partners, the formation of the partnership has been described as a semi top-down approach, capitalizing on **the already existing inter-cluster structures**. The DanubeBioValNet partners shared the same view on future the developments in terms of climate protection and the necessity to reduce the dependence on fossil resources and reorient the value chains and value systems towards renewable resources.

The Lead Partner BioPro (Germany), after the definition of the project idea, has involved the clusters organisations, exploiting their previous experience and reinforcing the already-in-place network, because approaching companies in the Danube Region individually, would have been an impossible mission. However, the added value of the project was that it has been able to attract not only cluster or bioeconomy specialists, but also National Ministries, which were aware of cluster funding policies. The DanubeBioValNet's consortium demonstrated that **clusters are powerful structures** to pursue industrial transformation in accordance with climate change measures.

The Danube Transnational Programme came out as the **perfect platform** to proceed with the ideas and the concepts that the Partners have developed in previous projects. The experience with the DTP Programme bodies was really efficient and collaborative. DanubeBioValNet has been described by the Lead Partner as one of the greatest cases when it comes to the relationship with the Programme bodies. Moreover, the consortium has gotten the recognition, from both the Joint Secretariat and Managing Authority, already at the early stages of the project, that they were achieving something really important for the Danube Region. Also from the interaction with the Ministries and Project Partners, it was clear that the **Project would have had a central role in developing the region further on**.

The decision process of what kind of activities and outputs the project would deliver was a completely democratic process, according to the expertise and willingness of the partners. The preparation of the project as very smooth, carried out in an **outstanding collaborative spirit**, in which every partner could learn from the others: this was the strength of the project in the planning phase. Moreover, each partner could freely choose with which clusters, technologies, and economic strengths of the individual regions, they preferred to enter into the project.

The project was able to involve the **right mix of stakeholders** into the implementation. According to the interviewed partners, Clusters are one of the best organisational structures you can involve in a project, as they have the possibility to consult their partners or members in case the project is looking for good practices, suggestions or structured feedback. The consortium could also count on very reliable partners who helped to arrange direct access to the clusters and set up direct communication lines, already at the beginning of the project.

## Part 2. Project implementation

### History of implementation

After the Kick-off meeting the allocation of resources was very smooth and in a full collaborative spirit. The consortium was able to allocate the available resources at their best, in order to attain the project objectives. Also, working with cluster organizations, gave the project many benefits: when it comes to leading and co-leading of work packages, the consortium did not settle, they could count on the best of the best to drive optimum performance. At the early stage of the project, the Consortium invented the idea of the **Brain Trust**, which implies that a group of consortium members was much more than the sum of the individual deliverable, thus much more than what an individual partner could do.

At the beginning of the project, the consortium pursued an **analysis of the status quo in the partner regions**. The output of the analysis allowed a better understanding of the state-of-the-art of the value chains and cluster development in bio-based industry in the Danube region. Furthermore, the **cluster mapping**

aimed at identifying the regional agglomerations, strengths as well as competences in industry and academia. Since the bio-based VCs are strongly interconnected, the cluster mapping provided a good picture of the clusters that can act as nodes within the Biobased Value-Added Network, as well as identifying the cluster initiatives with the highest potential. Additionally a **VC mapping has been conducted** at partners' and the wide Danube region level, in order to define the existing VCs in each region and their characteristics: main stakeholders, their position within the VC, gaps, cross-cutting bottlenecks, innovation barriers, missing links and/or key stakeholders. These mapping studies, as confirmed by the interviews with the Project Partners, were clear excellence. They represented the basement for all further developments, as these mapping processes proceeded in every country and region of the project simultaneously.

The project also carried out a StressTest exercise which contained on one side a structured policy benchmarking of the current status of cluster policy and its implementation, whereas on the other side, the StressTest provided for mutual Policy Learning activities. The Joint Bio-Based Cluster Policy for the Danube Region (JBCS) turned the findings of the StressTest exercise into a common strategy and an Action Plan. It put on paper common gaps, weaknesses and actions for improvement and how better framework conditions can contribute to building value chains (VC). The JBCS also contained a policy agenda towards a harmonised transregional coordination of the eco-innovation system for a bio-based industry in the Danube region, as well as a proposal for the alignment of national & EU funding schemes.

In order to support cluster actors to become more innovative and competitive, DanubeBioValnet provided a Cluster Tool Box to support SMEs in bio-based industries. The implementation of cluster services along bio-based value chains brought advanced and lagging behind regions to mutually cooperate and improve the cohesion of the Danube region. In addition, the importance of cluster organisations will be even more obvious to SMEs, boosting the impact of cluster organisations on the long run. Moreover, the development of the Open Space Innovation Arena Tool (OSIA) served the project's objectives by improving the institutional and infrastructural framework conditions. The overall goal was to facilitate cooperation across regions and sectors with a focus on bio-based innovations. OSIA brought different actors along three VC Pilot actions (Phytopharma, Bio-based Packaging and Eco-Construction) providing a trustful surrounding to create innovations and business ideas. OSIA matched the actors with dedicated needs (challengers) together with those having solutions (problem solvers) according to the gaps of the value chains in the Danube Region.

### Implementation context

DanubeBioValNet had strong links with the EUSDR and it was linked with the PA8 – Competitiveness of enterprises of the EUSDR, since setting up new value chains across regions and creating new eco-innovations improved the competitiveness of enterprises in the Danube Region. Also, since SMEs cooperate trans-regionally along value chains, the project contributed to a higher degree of territorial integration and trans-national investments. Moreover, the project had close ties with the working group “Cluster Excellence” under PA8, as it exploited clusters as tools to facilitate trans-regional cooperation among SMEs. Furthermore the project has also contributed to the PA2 – Sustainable Energy bringing a clear added value to the targets of the Danube Biomass Action Plan. Also, contributions to PA7 – Knowledge Society occurred through the development of new vocation training schemes/curricula according to new requirements in Bioeconomy

As regarding the implementation of the project, it was facilitated by the high degree of commitment of the project partners and the great combination of synergies between public and private entities. The project partners included ministries, cluster organisations and associations, business support organisations, consulting firms and research institutes. The following partners were the most important in terms of relevant knowledge and expertise resources BIOPRO Baden Württemberg, Cluster Agentur Baden Württemberg and Anteja ECG. Also, as confirmed by the Project Partners, the presence of the private sector was really decisive for the success of DanubeBioValNet. Clusters are joint organizations that support private activities in in the EU regions and countries: having clusters means having thousands of companies in the backyard of the project, which showed an outstanding commitment during the project.

### Successful implementation aspects and major difficulties

As emerged through the consultation with the project partners, DanubeBioValNet, thanks to the participation of ministerial partners which were very active in the project, acquired very high awareness and attention in the region. It was clear from the beginning that DanubeBioValNet would have been a disruptive project. However, the project witnessed some unevenness in the consortiums, because the countries which possessed well-established cluster driven policies had a clear advantage compared to those countries that did not focus so much on cluster development

Among the successful implementation aspects of DanubeBioValNet, the mapping activities delivered important information about the current bio-based supply/demand chains in the Danube Region, including

the missing links, in addition to illustrating the most promising areas for cooperation. The VC mapping involved also other countries outside the partnership, and strong links with other initiatives and projects (like BBI) have been pursued to ensure replicability in other organizations.

Another successful implementation aspect was the development of the Joint Bio-based Industry Cluster Policy Strategy (JBCS). The JBCS pointed out how to use and align common cluster policy approaches to strengthen the role of clusters as facilitators for transnational and cross-sectoral cooperation in the bio-based industry. The corresponding Action Plan was based on the results of cluster and value chain mapping and pointed the priority areas and the policy implementation mechanisms. Moreover, transnational cluster cooperation has been intensified along value chains through the new cluster support services and cluster toolbox. The Pilot Actions and the Open Space Innovation Arenas have been another milestone of the projects as they provided test and demonstration environments for stimulating eco-innovations in practice.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

#### The general progress of the project area in the domain targeted by the relevant specific objective

DanubeBioValNet reached all the specific objectives, and it has been described as a visionary project, as it went far beyond the objectives of the project application. Also, the elements of innovation like the Brain Trust, which allowed the developments of ideas and their synchronisation across the Danube region, were even more important.

#### Specific Objective 1: Development of Joint Bio-based Industry Cluster Policy Strategy (JBCS)

The development of the Joint Bio-Based Cluster Policy across the Danube Region was crucial in order to set up proper framework conditions. The JBCS developed policy recommendations and specific actions to be carried out at the transnational level, based on the analysis of Smart Specialisation Strategies of regions (S3) and the current status of regional cluster policies. It also provided for a mutual learning process, whereas the better alignment of S3 cluster policies boosted coordination and eco-innovation systems for bio-based industries in the Danube region.

#### Specific Objective 2: Development and implementation of new cluster services to support SME

Clusters in the EU play a key role in facilitating cross-sectoral, cross-regional networking in bio-based industries. The specific objective was to develop and implement new business services for cluster organisations, to support enterprises to match and innovate towards eco-innovations since Clusters in Danube regions are in a various level of development and capacity. A cluster toolbox has been elaborated to enable clusters to implement services for the benefit of SMEs.

#### Specific Objective 3: Establishment of new value chains for bio-based industry

The value chain mapping revealed innovation gaps, missing partners and policy interventions needed in the Danube region. Under this Specific Objective, 3 biobased VC with high potential have been established in the phytopharmaceutical, bio-based packaging and eco-construction fields. Moreover, Open Space Innovation Arenas brought together enterprises and innovation actors to create VCs related eco-innovations.

#### Direct effects and impact of the project

The project partners stated that they managed to make the cooperation smarter and sustainable. Interreg projects are successful environments where you can start cooperation scenarios. However, it has been also argued that the current models are not sustainable and there must be other models of continuity programs that allow successful approaches to be carried over a longer period and capitalize what has been achieved.

Moreover, it has also been noted that to start follow-up projects and continue success stories is not a smooth process, as there are administrative and bureaucratic barriers. When the consortium applied for the follow-up project GoDanubio, they had to justify towards the Programme bodies that they are going to apply for a second time, with the risk of killing the results of DanubeBioValNet.

For what concerns the impact on non-EU partners from the Danube, the consortium hosted partners from Serbia and Montenegro, but they also would have liked to have Ukraine on board. The partners from Serbia and Montenegro were very active especially in industries like wine and tourism. Wine manufacturing and tourism both have a big impact on bioeconomy, and on the other hand bioeconomy can have a big impact on those industries, paving the way for a win-win situation.

## Non-intended outcomes and project afterlife

One non-intended outcome of DanubeBioValNet was the outstanding impact on the open space region, bringing together a variety of private and public entities, which realized already from the beginning the high impact of the project on the region. According to the project partners, such an impactful consortium, which is in a position to deliver more than a single project, should be institutionalised. A sort of metasphere between the operational programme and projects is missing. Their aim is to become promoters of projects, to implement Green Deal aspects into the Danube region. In such a way, they would collaborate and capitalize their results together with other areas in the EU, such as Northern Europe.

As a next step, the consortium has already started the GoDanubio project, which will help other regions to start understanding and implementing the so-called multi-level government scheme for the bioeconomy, and will lead hopefully to an institutionalisation of the consortium.

## CS 10: DANUrB

### Part 0. Introduction

Project name (full title and/or acronym)	DANube Urban Brand - a regional network building through tourism and education to strengthen the "Danube" cultural identity and solidarity
Programme priority axis (number and title)	Priority 2
Programme priority specific objective	SO 2.2 Foster sustainable use of natural and cultural heritage and resources
Project Lead Partner organisation	Budapesti Műszaki és Gazdaságtudományi Egyetem
Other project partner organisations	Slovak University of Technology in Bratislava (SK); Vienna University of Technology (AT); OIKODROM - the Vienna Institute for Urban Sustainability (AT); Center for Heritage Interpretation (BG); National Institute for Research and Development in Tourism (RO); National Tourism Cluster "Bulgarian Guide" (BG); The National Institute for Research and Development in Construction, Urban Planning and Sustainable Spatial Development URBAN-INCERC (RO); Vukovar-Srijem County (HR); GPS City Guide Kft (PocketGuide) (HU); Xellum Advisory Ltd (HU); Hungarian Contemporary Architecture Centre (HU); Pest County Municipality (HU); Human Resources Development Agency (BG); University for Continuing Education – Danube University Krems (AT); Municipality of Sturovo (SK); Municipality of Esztergom (HU); "Ion Mincu" University of Architecture and Urbanism (RO); University of Novi Sad, Faculty of Technical Sciences (RS); University of Belgrade (UNIV) - Faculty of Architecture (RS)
Other organisations involved in or associated to the project (if existing)	Municipality of Krems (AT); Office of the Provincial Government of Lower Austria, Department for Arts and Culture (AT); Federal Chancellery of Austria, Dept. for Cultural Heritage and Art Restitution in the Division for Art and Culture (AT); Bratislava region (SK); City of Komárno (SK); Tourism Association of Komárom (HU); Municipality of Dunaújváros (HU); Council of Paks city (HU); Backa Palanka Municipality Development Agency (RS); Tourism Organisation of Vojvodina (RS); Tourism Board of Smederevo (RS); Municipality of Golubac (RS); Municipality of Silistra (BG); Regional Administration Vidin (BG); Ruse Regional Administration (BG); Giurgiu Municipality (RO); National Authority for Tourism (RO); Calafat Municipality (RO); Travel Focus Association (RO)
Amount of EU co-financing (in €)	2.298.26,38 ERDF + IPA
Amount of public contribution (in €)	371,286.20
Amount of private contribution (in €)	34,290.42
Main objective(s) of the project	<ul style="list-style-type: none"> <li>- Creation of a DANUrB Cultural network along the Danube</li> <li>- Creation of a Strategy to boost transnational cultural development</li> <li>- Creation of new thematic routes on the Danube cultural promenade</li> </ul>
Project Specific Objectives	<ol style="list-style-type: none"> <li>1. DANUrB CULTURAL NETWORK for a cross-European cultural space</li> <li>2. DANUrB STRATEGY for a transnational cultural development program</li> <li>3. DANUrB TOUR for new thematic routes on the Danube cultural promenade</li> </ol>

Project main outputs	<ul style="list-style-type: none"> <li>- The DANUrB Strategy</li> <li>- Spatial system of the Danube Cultural Promenade</li> <li>- DANUrB thematic cultural tours</li> <li>- DANUrB tours accessible in PocketGuide App</li> <li>- Branding of the "Danube Cultural Promenade"</li> <li>- DANUrB research platform for common knowledge</li> <li>- Implementation of the Danube Cultural Promenade</li> <li>- Dissemination of the DANUrB Strategy to stakeholders</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Project start and closure</li> <li>- Financial management</li> <li>- Project coordination and controlling</li> <li>- Project quality management</li>   <li>- Creation of a DANUrB research platform between research institutions involving local enterprises</li>   <li>- Creation of a common methodology and model to research spatial and cultural aspects of DANUrB</li>   <li>- Creation of a conceptual structure for an effective DANUrB strategy</li>   <li>- On-site research of urban-cultural potential and selection of heritage to be valorized</li>   <li>- Connecting cultural stakeholders and cultural institutions into a urban-cultural network</li>   <li>- Making visible the connections between communities and settlements by the Danube</li>   <li>- Pilot actions to discover the urban-cultural potentials of unused heritage with local communities</li>   <li>- Workshops to define the scales of spatial studies and planning needed for the DANUrB strategy</li>   <li>- Experience on spatial studies and exemplary cultural-heritage developments on upper-Danube region</li>   <li>- Implementing the needs and visions of local/regional stakeholders into the strategy</li>   <li>- Writing and publishing of the DANUrB Strategy</li> </ul>
Project duration	<b>30 months</b>
Start date	<b>01.01.2017</b>
End date	<b>30.06.2019</b>

## Part 1. Project preparation

### The genesis of the project idea/project partnership

The Danube region has been, throughout history, **one the major European artery** connecting cultures, commerce and travellers. Today the cultural element and the surrounding environment testify all these rich connections in all settlements along the Danube, but their communities are still isolated one from the other, not fostering a better cultural understanding between the different nationalities present in the region. The large capital cities are preferred tourist destinations, and many tourists often connect their visits (Vienna, Bratislava, Budapest). However, these cities **do not brand themselves together as one destination**. As an example, cruises along the Danube are the only successful tourism products connecting this chain of urban cores, but without a common strategy, they work only through isolated business models, insignificantly impacting the economic and cultural cohesion in the region.



On the other hand, smaller towns benefit even less from their spatial-cultural position, often having fewer cultural and economic attractions and possibilities to offer than large cities. Therefore, the limited development capability and sustainability of the “rural-urban” areas along the Danube represents quite a big challenge in the region. In smaller towns, the elements of cultural heritage **are not enough attractive to contribute to socio-economic progress**. The lack of modern knowledge and practices - in cultural and municipal development, smart urban planning, and community placemaking - becomes an additional challenge. Therefore, in other words, local culture and heritage are mostly treated without greater vision in the Danube region

DANURB aimed at revealing **the underused cultural heritage** and the organized resources from a spatial point of view along the Danube, connecting them to form viable cultural collaborations and thematised tourism products according to a coherent spatial-cultural strategy. Therefore it aimed at rebranding the previously overlooked local resources to a unified cultural destination, bringing better access to culture for locals and better economic outputs, based on the increased interest of visitors, the creation of additional employment, and promoting self-sustainability for the areas along the river. This link is based on a strategic approach, which is developed and applied through a **project-specific valorisation methodology of the cultural heritage**. The common valorisation methodology allows a better understanding of culture and heritage and supports, at the same time, sustainable development.

Such objectives contributed to the programme’s specific objective, by fostering socially and economically sustainable use of cultural heritage and resources in a specific spatial unit of the Danube Region (connected chain of settlements). The Strategic planning and the specific tools brought a visible change in the cultural use and economic valorisation of the heritage resources, as well as the revival of cultural traditions of the towns involved. Moreover, the project consortium strongly built its work on local identity and domestic targets, as well as international tourism. The result of the project has **empowered the global visibility of the Danube area**, thus contributing to improving the quality of life and wellbeing of local citizens.

### The preparation of the project

The common problem that led to the project’s application was the need to **create a comprehensive network**, connecting all the relevant actors and communities along the Danube River and unify them into a single tourism destination. The aim was to establish the network and the cross-cultural platform within the lifetime of the project but aiming at a much longer future perspective. The basis of DANURB was laid down in the two years of preparation between universities and research institutes that brought the project idea into an application.

These institutions invited NGOs and enterprises, municipalities and tourism-related regional institutions joined the DANURB partnership, as the implementation of **the cultural network could not be achieved without local stakeholders and communities**. The idea, in other words, was to turn this collaboration into a joint alliance for the Danube Cultural Promedane, establishing a strong operation system of partners in the Cultural Network promoted by DANURB, with a high level of international experience but also deeply rooted at the national and local level. As a result, the cultural network has **effectively connected large national and research institutions** and interdisciplinary expertise with related regions, towns, communities, and individuals.

Such collaboration between scientific work, cultural production and community involvement being quite rare (particularly in the Lower Danube); however, the 7 countries along the Danube have ensured that local heritage sites can be treated as successful places, by adopting an interdisciplinary and multi-level approach, combined at the same time with the right mix of top-down and bottom-up initiatives.

## Part 2. Project implementation

### History of implementation

The project has been jointly developed, as emerged from the desk research, by the representatives of all project partners, as the DANURB platform and the cultural network are based on the idea **to take in consideration the priorities of all stakeholders and exploit their specific knowledge**. Since the early stage, the project has been coordinated in such a way to ensure that all partners have the necessary resources to work on project management, dissemination, research and actual implementation of the project. Moreover, no activities have been performed by the partners singularly, and all work packages have been based on joint cooperation; local and regional partners, universities, enterprises and cultural NGOs have jointly worked on tools, pilots and strategy of the project.

The first output of the project has been the creation of the **DANUrB Research Platform**, which has been the basis to achieve the subsequent Specific Objectives of the DANUrB project, as it represented an interdisciplinary research group from the different countries and from different disciplines, which together define all research and implementation activities in the DANUrB cultural space. The narrow cooperation among the 13 partners laid down the skeleton of the platform: universities and research institutions, municipalities, professional organisations, cultural NGOs, tourist experts, and business enterprise were at the core of the project. The Research Platform provided learning and exchange opportunities that have been given during the entire length of the project (but aiming at long-term perspectives), along the entire Danube region from the Upper Danube to the Lower Danube. Good practices and innovative methods have been transferred from the upper to lower regions, empowering the valorisation of the cultural heritage

The creation of the **Danube Cultural Promenade** has been another milestone of the project implementation. The great potential of this Promenade is that **less developed regions can learn from more developed ones within the same Cultural Network**, so development and knowledge can flow along the Danube, speeding up cultural-economic development in those regions without such connective elements. The challenges concerned not only the creation of the theoretical platform but also its implementation for the targeted users, as the Cultural Promenade can only be sustainable and profitable if the local communities are **aware of the common values they share with the other communities along the Danube region**. Moreover, the analysis of the spatial system of the Danube Cultural Promenade through GIS mapping has been crucial in connecting the spatial, cultural and socioeconomic aspects, defining the potentials and possibilities of the Danube cultural and heritage morphology.

The main output of the project was the **DANUrB Strategy**, which collected all the knowledge researched and turned it into a strategic action plan to valorise the underused cultural heritage of the Danube Cultural Promenade. The Strategy stimulates the development of the local and interregional cultural life, aims at increasing the identity and the living standards, as well as boosts the tourism industry in such a way to avoid conflicts with local communities, in order to guarantee the sustainability of the cultural heritage settlements. The dissemination of the Strategy has been also of crucial importance for its durability, as all stakeholders - at all levels - had to share the vision of the Strategy and understand fully the benefits they will have from the implementation. On-site pilot actions have been delivered to discover the urban-cultural potentials of the under-used heritage of local communities. Even though the DANUrB programme could not implement the Strategy, it provided for tools to implement it as well as pilot programs to explore its potential.

### Implementation context

DANUrB aimed at strengthening the Danube cultural identity by fostering transnational cultural ties between the settlements along the Danube and foster the exploration of the unused cultural and social capital of the regional network. Such goals are in full accordance with the targets of the EUSDR action plan. The main objectives of the project are the most relevant to the PA3 – Culture and Tourism of EUSDR. On the other hand, key activities of the project, such as fostering cultural ties between towns and re-branding of cultural heritage, were strongly related to the area of Knowledge Society, therefore the DANUrB project has been strongly recommended by the Steering group of PA07 – Knowledge Society. Moreover DANUrB contributed to the EU Cohesion Policy as it fostered job opportunities in the cultural and tourism sector and helped social cohesion in the regions where the risk of poverty, social exclusion and unemployment are among the highest in the EU.

Moreover, the high transnational approach was the key success of the project. **Universities and Research Institutions** build the methodological basis and guided the research and the development of the DANUrB Strategy. Also, they were responsible of the transnational character of the project, as the realisation of the partnerships and the cultural network started from the existing transnational connections among research institutions. **Municipalities** were also fundamental actors in supporting the realisation of cultural networking. They provided the necessary data for the making of the strategy and for the GIS mapping of the urban-cultural spatial systems. Furthermore, they have been in charge of ensuring the positive spillover effect of cultural heritage on all the local communities. **Enterprises** involved in the tourism sector contributed with their knowledge and market experience, as they were the key actors implementing the DANUrB Strategy key and beneficiaries of the successful implementation of the project. The added value of **cultural NGOs** laid on the ground that they could bring specific experiences and bottom-up approaches from the cultural field. More in detail, they realized the onsite pilot programmes and ensured the transfer of international knowledge to local stakeholders.

### Successful implementation aspects and major difficulties

As emerged from the desk research, the DANUrB project was implemented according to the plan. However, some unexpected difficulties have been reported during the project implementation. One of the main

challenges regarded the translations in different languages of communication materials and the actual communication between the involved partners and local stakeholders, in the process of designing the on-site art and temporary installations, used to make usable and attractive the underused cultural heritage.

Moreover, the interpretation of the whole Danube as a real spatial unit became problematic, due to the fact that daily **physical cooperation between borders proved to be very difficult** from the Middle Danube, due to the administrative procedures of border crossing, and nearly impossible on the Lower Danube, because of the deficiencies of both longitudinal and transversal traffic infrastructures.

On the other hand, **the intense collaboration**, despite the difficulties, among project partners from different backgrounds **was one of factors that facilitated the successful implementation of DANUrB**, as they were highly motivated by the need to come up with a new and extensive model to exploit common cultural heritage resources. Indeed, the DANUrB cooperation was initiated in the belief that only such transnational and highly professional interdisciplinary consortium is able to find the right tools and strategies that can valorise and empower the settlements along the Danube.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

#### The general progress of the project area in the domain targeted by the relevant specific objective

##### Specific Objective 1 – DANUrB Cultural Network for a cross-European cultural Space

The intense dialogue and collaboration between research and cultural institutions, municipalities, private enterprises and civil society built a strong basis for strong future development in the cultural field, through the accomplishment of a durable DANUrB Cultural Network. The platform has been tested and disseminated in 7 countries and 20 towns across the Danube, throughout many strategy meetings, exhibition openings and workshops. In which the project partners discussed with local stakeholders what is needed to be able to use the platform and strategy effectively for heritage valorisation processes. **The SO1 has been fully achieved.**

##### Specific Objective 2 - DANUrB STRATEGY for a transnational cultural development program

The main idea behind DANUrB Strategy was that the unexplored cultural heritage assets can become engine of economic development and sustainable cultural life, once valorised. Such valorisation process is successful only if these cultural heritage assets and the stakeholders involved are linked in a Cultural Network, giving extra value to the singular sites by creating joint narratives, organizing these into thematic routes to attract also outside visitors. Therefore DANUrB only works with a interregional approach. Throughout many strategy events, the targeted stakeholders were given by the project partners the necessary explanations about the usage of the Strategy, its benefits and the methodology behind it. The partners also showed how the use of the strategy is put in application throughout the DANUrB pilot programs. **The SO2 has been fully achieved.**

##### Specific Objective 3 - DANUrB TOUR for new thematic routes on the Danube cultural promenade

The realisation of the Specific Objective 3 laid on the ground that creating thematic tours and integrating them into a well-known tourist media - the PocketGuide app – has proven effects on boosting utilization of the cultural resources. It has also been demonstrated that the PocketGuide application is the best tool to reveal stories, connecting the DANUrB region. DANUrB has implemented 12 tours, and created 12 Pocketguides, many more than the 3 offered in the original application form. At the end of the project, all tours have been live and functional and will be available on the PocketGuide app free of charge for at least 5 years. As an additional value, the associated partners to the project, towns and related tourism offices can incorporate the Pocketguide tours in their own web pages or applications, where no installation of the original app is needed. Therefore the DANUrB tours are usable to improve tourism for all related stakeholders, offering these for free to all tourists who access their websites and platforms. **The SO3 has been fully achieved.**

#### Direct effects and impact of the project

Through the three specific objectives - Cultural Network, Strategy and Tours - DANUrB raised awareness on the hidden heritage, strongly related to the Danube, and completed an educative process of giving valorisation tools to local stakeholders for the effective building of a common Danube identity. The consortium demonstrated to the stakeholders and municipal actors of the towns involved how their heritage related to the Danube could help their social and economic well-being, tourism attractiveness, and interregional connections if being valorised strategically, connecting their heritage to similar assets all along the river. Also, the project partners have completed the online DANUrB Platform where all the stakeholders along the Danube can work together related to heritage assets. The project demonstrated on the final dissemination events in 7 countries to all the project stakeholders how they can work together and exploit the functionalities of platform, and how to use the Strategy and the Tours.

The research methodologies prepared are transferable to other decentralized regions with cultural and geographical connections. The methodology of the DANUrB platform has been elaborated in a simplified way, to be usable in other regions. The collaboration methods between universities, private institutions, NGOs, local enterprises, business organisations and municipalities are transferable, as such entities are the stakeholders in most regions with similar problems of cultural heritage valorisation. However, the exact composition of the partnership, the exact tasks of local research and the differences in the development stages of the different regions along the Danube are quite unique, therefore the project has unrepeatable aspects within its research partnership.

### Non-intended outcomes and project afterlife

During the data collection activities no non-intended outcomes have been identified. However, it has emerged that the DANUrB partners made further steps to develop and keep alive the DANUrB Cultural Network. The Consortium has submitted several applications for the third DTP call and they already won an ERASMUS+ Project (DANUBIAN SMCs), guaranteeing that university partners will continue to work together and further develop the Danube Cultural Promenade

## CS 11: JOINTISZA

### Part 0. Introduction

Project name (full title and/or acronym)	JOINTISZA - Strengthening cooperation between river basin management planning and flood risk prevention to enhance the stats of waters of the Tisza River Basin
Programme priority axis (number and title)	Priority 2
Programme priority specific objective	SO 2.1 Strengthen transnational water management and flood risk prevention
Project Lead Partner organisation	General Directorate of Water Management (OVF)
Other project partner organisations	Ministry of Foreign Affairs and Trade (HU); National Administration "Romanian Waters" (RO); Ministry Water and Forests (RO); National Institute of Hydrology and Water Management (RO); Water Research Institute (SK); Regional Environmental Center for Central and Eastern Europe (HU), International Commission for the Protection of the Danube River (AT); Global Water Partnership Central and Eastern Europe (SK); World Wide Fund for Nature Hungary; Jaroslav Černi Institute for the Development of Water Resources (RS); Public Water Management Company "Vode Vojvodine" (RS)
Other organisations involved in or associated to the project (if existing)	Secretariat of the Carpathian Convention (SCC) (AT); Interior Ministry of Hungary (HU); Tisza River Basin Water Resources Directorate (UA); State Agency of Water Resources of Ukraine (UA)
Amount of EU co-financing (in €)	1,854,824.52 ERDF + IPA
Amount of public contribution (in €)	279,595.75
Amount of private contribution (in €)	47,726.26
Main objective(s) of the project	- Update the Integrated Tisza River Basin Management Plan - Improve the integrated river and flood risk management planning

	- Strengthened Stakeholder involvement in the Tisza River Basin
Project Specific Objectives	(SO1) Better integrated river and flood risk management planning at TRBscale (SO2) Strengthened Sectorial and Stakeholder involvement
Project main outputs	- Updated the Integrated Tisza River Basin Management Plan - Improved GIS database - Characterisation report - Report on significant pressures relevant for the TRB - Pilot 1: Urban Hydrology - Pilot 2: Drought and Climate Change
Key activities implementing the project	- Project start and closure - Financial management - Project coordination and controlling - Project quality management  - Data Collection and characterization of the basin - Assessment of surface waters (SW) and ground waters (GW) - Joint Tisza Survey Manual - Evaluation of the SWMIs and proposal of effective measures - Status assessment relevant for the TRB  - Internal communication - External communication
Project duration	<b>30 months</b>
Start date	<b>01.01.2017</b>
End date	<b>30.09.2019</b>

## Part 1. Project preparation

### The genesis of the project idea/project partnership

The Tisza River Basin is the **largest sub-basin in the Danube River**, with a total extent of 157,186 km<sup>2</sup>. It is also the longest tributary of the Danube (966 km), and the second largest by flow, after the Sava River. The Tisza River Basin has provided livelihood for many through mining, agriculture, forestry, energy production etc. The large exploitation over the last 150 years has caused serious problems to the Tisza basin's waters. Metal mining was a permanent activity on the upper-middle Tisza stretch resulting in higher values of several heavy metal compounds in the river water and sediment. Moreover, pollution from organic substances, municipalities and urban settlements, as well as hazardous substances from industry **pose the Tisza River Basin under serious threat**. In several cases, changes in land use and river engineering have reduced the length of the Tisza River (but also its tributaries) and modified the natural structure of the river and resulted in the loss of natural floodplains and wetlands.

The severe floods over the past years have highlighted the problem of the inundation of landfills, dump sites and storage facilities where harmful substances are stored; and **toxic substances can be transferred into the water posing a clear threat to the environment**. The specific hydro-morphological characteristics of the Tisza River, as well as the pressures to put in place flood protection measures, became significant in all the riparian countries (Hungary, Slovakia, Serbia, Romania, Ukraine), to **close a transboundary co-**

**operation agreement and secure integrated management of the Tisza River Basin.** The need for strong cooperation has also been stated by the **EUSDR** in the PA 4 - Action 2 aiming at “greatly strengthen cooperation at sub-basin level”, as the Tisza River sub-basin has very special challenges, which needs strong cooperation between countries on the shared river basin.

The JOINTISZA Project focused on the interactions of two key aspects, the River Basin Management (RBM) and flood protection, considering the relevant stakeholders who have a pivotal role in the Tisza RBM planning process. The **first specific objective** of the project was to further improve the integration of the water management and flood risk prevention planning and actions in the next RBM planning cycle, in line with the relevant EU legislations (Flood Risk Directive and Water Framework Directive), which led to an updated Integrated Tisza River Basin Management Plan (ITRBMP). Moreover, the five Tisza countries strengthen their commitment towards the updated ITRBMP, by signing a **Memorandum of Understandings** in September 2019, which marked a great success for the JOINTISZA project.

The **second specific objective** was to better facilitate stakeholder involvement from two sectors (river basin management and flood risk protection planning) into the overall integrated river basin management planning process. Two pilots have been carried out under this specific objective, outcomes of which were embedded in the updated management plan: 1) Urban Hydrology; 2) Drought and Climate Change, utilizing the Shared Vision Planning (SVP) method, which focuses on a bottom-up approach in stakeholder involvement and using modelling processes in the decision-making. Also, a specific case study on the simulation of dike failure with transboundary effect has been issued, as well as the Joint Tisza Survey

### The preparation of the project

The problems that were affecting the Tisza River Basin were well known by all the partners involved in the project long before the submission of the JOINTISZA proposal. Also, as emerged during the interview with the project partners, water management is a very small area in which water administrations, research institutes, universities, and business organisations know each other well from past projects and activities, therefore the formation of the JOINTISZA consortium was a natural process. The Danube Transnational Programme was considered by the Lead and Project partners the **best programme and the best platform to implement the project and enhance cooperation among the five riparian countries**, due to the high transnationality of the Tisza River Basin. Moreover, the project consortium has not requested budget for the project preparation, considered that the first part of the project preparatory process has been supported by the EUSDR PA4 Technical Assistance Facility via ICPDR budget.

As emerged during the stakeholder interviews, the Project Partners have actively contributed to the project design from the early beginning and the proposal is based on their ideas/feedback. The overall project has been developed with the contribution of the participating partners and all relevant countries of the Tisza River Basin. Also, the Project Partners jointly contributed to the development of the specific WPs and their deliverables/outputs, as the prerequisite of the project development is the content-wise cooperation between participating partners. Moreover, **the distribution of roles and responsibilities happened on a voluntary basis**, as most of the partners were proactive and willing to lead the WPs they were more interested in. Moreover, the consortium has been assisted by several experts from academia and national ministries who had a determinant role in the drafting process of the application.

The fruitful cooperation among the Project Partners since the preparation stage has allowed the project to introduce many innovative approaches in the Tisza River Basin, such as integrating flood management objectives into the River Basin Management Planning process; applying **Shared Vision Planning (SVP)** to involve stakeholders; setting up ground for drought and climate change issues in river basin management planning; improving method for urban hydrology management purpose; simulation of dike failure with transboundary effect; and preparing a manual for Joint Tisza Survey.

The relationship with the DTP Programme Management, especially with the Joint Secretariat, has always been supportive since the early stage of the application process. However, as emerged during the interview with the Lead Partner, **the awarding process was way too long**, as it took more than 1 year from the submission of the proposal to the outcome notification.

## Part 2. Project implementation

### History of implementation

As a first step towards the achievement of the River Basin Management Plan, the focus was to collect and analyse the surface water-related information and improve the **GIS database**, which would be integrated into the management plan. It ensures homogenised data collection for the tributaries of the Tisza River larger than 1000 km<sup>2</sup>. In the data collection process, attention has also been paid to the significant water

management issues, such as pollution by organic substances, pollution by nutrients, pollution by hazardous substances, and hydro-morphological alterations. The participating countries/partner institutions deliver data to the GIS database. Therefore the tool and the related information base are being utilised by the five Tisza riparian countries, also representing a basic tool for further data analysis. The ICPDR's DanubeGIS system ensures data collection and based on the data creates the basis of maps preparation on the **level of the Danube and Tisza River Basins for ICPDR reports.**

To better understand the ecological conditions of the Tisza River and the reasons for the changes in the last 10 years, it was necessary to conduct a deep examination along with the whole river sectors which was possible throughout the Joint Tisza River. The aim of the preparation of the **Joint Tisza Survey** and the results of the realization of the survey were the exploration of the actual hydro-ecological condition of the Tisza River, identification of reasons for water quality changes, studying the tributary streams' effect, to study the quality of water from the Tisza countries, deepening the cooperation among the five Tisza-countries water management organizations, respectively promoting the common thinking in a **'One river-basin platform'** and the support of finding the possibilities of problem-solving. To realize the Joint Tisza Survey, it was necessary to prepare the Joint Tisza Survey Guidance Manual, which contained the accurate programme description and timeframe to carry out the hydro-ecological condition revelation.

Moreover, **urban sites** are the second last water consumers after agriculture in the Tisza River Basin. The JOINTISZA project provided for urban hydrology pilot activities, that have been tested in two pilot areas in Hungary and Romania, to get a deeper insight into major water management issues in urbanized areas, and develop an **oriented spatial decision support tool for urban water management.** The pilot activities supported the river basin water resources assessment and thus contributing to **improving integrated transboundary management plans** (therefore to the achievement of SO1), where urban areas have significant impacts. Indeed, Water quantity is identified as one of the most significant water management problems in Tisza River Basin due to the over-abstraction of groundwater, increase in irrigation and surface water, abstraction, together with key integrated water management issues (excess water, droughts, and climate change).

Another important issue that the JOINTISZA consortium addressed throughout the implementation of the project was the integration of the **Floods Risk Management Plan** into the TRBMP and comply with the EU Water Framework Directive and the Flood Directive, by addressing all the aspects to flood risk management, focusing on prevention, protection, preparedness, public awareness, recovery. Moreover, the **simulation of dike failure with transboundary effect** and the consequences of a possible dike failure on the HU-RO border have been investigated by the Hungarian Partner.

Also, the Project Partners made a **comparative analysis between the Shared Vision Planning (SVP) method in stakeholder involvement, and the approach adopted within the FLOODRISK Project**, whose overall objective was to develop stakeholder-oriented flood hazard and flood risk maps for the transnational Danube River floodplains, to provide adequate risk information for spatial planning and economic development activities. The Shared Vision Planning (SVP) has been tested throughout the second pilot action, which investigated the climate change-induced drought and flood-related issues, as well as how to optimize the available water resources according to the ecological and irrigation water demands, focusing on the smaller portions on the Tisza River Basin.

### Implementation context

The implementation of the project was facilitated by a high level of commitment from the Lead Partner, the Hungarian General Directorate of Water Management (OVF) promoted by more ministries of the Tisza countries and EU Danube Region Strategy, since this project, **as one of the flagship projects of the EUSDR PA 4 and PA5**, could solve the target "to greatly strengthen cooperation at sub-basin level". A strong Project Management Unit was behind the success of the project, which comprised the Project Manager, the Financial Manager and the Communication manager, together with their respective teams.

The project management could not be successful without the active contribution of each partner, assisting the Lead Partner in keeping a **high level of collaboration within the consortium** and helping to resolve financial and communication issues. Also, as emerged during the consultation with the Project Partners, the Lead Partner acted as an effective and efficient interface between the Management Authority, Joint Secretariat and Project Partners and maintained a high level of coordination. The overall sound management of the implementation process has been supported by the technical departments and Project and Investment Office of the General Directorate of Water Management in Budapest, and by Tisza Office hosted in the Middle Tisza Water Directorate in Hungary.

The consortium was able to maintain a high level of cooperation despite the premises were not the most straightforward ones. Since the project had to deal with river management issues, it had to deal with a highly international environment by definition, and these countries seldom have some tensions among them. Therefore it was not easy to get all the riparian states at the same table and deliver solutions that are suitable to all of them. Different countries might have **different approaches especially when it comes to river basins**, because there is a huge difference in the concerns of upstream and downstream countries.

### Successful implementation aspects and major difficulties

The project's main output, the Integrated Tisza River Basin Management Plan has been approved on a high level which took place on meeting 26 September 2019. A Memorandum of Understanding has been signed by the Tisza countries, which means the ratification of the guidelines of the ITRBMP. In other words, it means that the **ITRBMP will be at the basis of many policy decisions in the Tisza River Basin area**, and this marks an outstanding success for the JOINTISZA project, as now transboundary issues are treated at common level by all the Tisza countries.

As emerged during the interview with the Lead Partner, what has been achieved is a **historical milestone**, as until not many years ago nobody could have thought that these countries would sit at the same table. The cooperation among the water management authorities has reached unprecedented levels compared to the past, as now there is a **well-established communication routine** which happens regularly throughout many means of communication. Moreover, the results of the good cooperation and the **outputs of JOINTISZA are transferable** and could be used to address the water management issues in other sub-basin such as Sava and Prut River, as well as the Danube Delta.

Regarding the project difficulties, the Project Partner did not report significant issues in the implementation of the project. All the project issues were solved with the active support of all the project partners, as in the occasion of the withdrawal of the Ukrainian partner, which activities had been taken over by the Lead Partner, causing slight delays to the project. However, as emerged during the interview with the project partners, the national First Level Control (FLC), especially in the Hungarian case, was quite bureaucratic and inflexible, focused more on paperwork than on the achievement of the projects' objectives, nevertheless the project partners successfully managed to overcome all the administrative barriers.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

#### The general progress of the project area in the domain targeted by the relevant specific objective

##### Specific Objective 1: Better integrated river and flood risk management planning at TRBscale

The project has harmonized the **national water and flood risk management strategic documents** in the Tisza River Basin area countries and the plans towards the development of an integrated transboundary management plan. The first specific objective was to update the ITRBMP with special emphasis on integrated approach of river basin management and flood risk protection planning. The updated plan included an integrated **Joint Programme of Measures to enhance good status of waters**. During the project, all partners from the Tisza countries were involved in the steps of creating the ITRBMP through the individual work packages. Therefore the final product, the ITRBMP, is **jointly accepted as a guidance document** for the policy decision in these countries when it comes to the Tisza River Basin.

##### Specific Objective 2: Strengthened Sectorial and Stakeholder involvement

The second specific objective aimed at better **facilitating the stakeholder involvement** from two sectors (river basin management and flood risk protection planning) into the overall integrated river basin management planning process utilizing the Shared Vision Planning method. The outputs of the pilot action on Drought and Climate Change contributed to the second specific project objective, by strengthening the **approaches and cooperation among the relevant actors** involved in the river basin management planning process. This was achieved by facilitating dialogue to find common solutions, as well as by promoting the participation of different types of stakeholders in the planning and implementation of ITRBMP.

Furthermore, the cooperation with relevant international organisations and NGOs was a further asset towards fulfilling the second specific objective, as they offered a further option in further involving the aimed target groups. The Lead Partner organized a basin-wide stakeholder meeting in Szolnok (Hungary) held in May 2019, where all the countries and relevant sectors attended the event, and the stakeholders have also had the chance to have their say through an online questionnaire. The feedbacks and different aspects that emerged from the stakeholders were taken **into consideration at the moment of the finalization of the ITRBMP**.

#### Direct effects and impact of the project



The immediate direct effect of the JOINTISZA project is the development of the ITRBMP, which will be at the basis of future policymaking in the fields of climate change adaptation, environmental risks and water resource management. Moreover, the project **strengthened the cooperation among Tisza countries to an unprecedented level**, in line with the EUSDR's PA 4 which aims at "greatly strengthen cooperation at sub-basin level". The improvement of the GIS Database within the project will be utilised by the concerned Tisza countries for analytical and ICPDR reporting purposes, but also to comply with the requirements of the EU WFD, which ask for a mandatory revision of achieved water status every 6 years. Moreover, the outputs of the JOINTISZA project, as recognised good practices, **will strongly contribute to the Implementation of the EUSDR's PA 4 in other sub-basins along the Danube, such as Danube Delta, Sava and Prut Rivers.**

### Non-intended outcomes and project afterlife

During the interview with the Project Partners, no significant non-intended outcomes emerged. For what it comes to the project afterlife, they reported that at the beginning the project partners did not have a sound understanding of each other, but after the project's kick-off, cooperation and trust raised step by step reaching outstanding levels, so that all the partners thought of a follow-up project, even before the end of JOINTISZA.

## CS 12: DriDanube

### Part 0. Introduction

Project name (full title and/or acronym)	Drought Risk in the Danube Region
Programme priority axis (number and title)	Priority 2
Programme priority specific objective	SO 2.4 Improve preparedness for environmental risk management
Project Lead Partner organisation	Agencija Republike Slovenije za okolje (SL) Slovenian Environment Agency (ARSO)
Other project partner organisations	EODC Earth Observation Data Centre for Water Resources Monitoring GmbH (AT) Global Change Research Institute CAS (CZ) Hungarian Meteorological Service (HU) Vienna University of Technology (AT) Szent Istvan University (HU) Slovak Hydrometeorological Institute (SK) National Meteorological Administration (RO) Centre of Excellence for Space Sciences and Technologies (SL) Global Water Partnership Central and Eastern Europe (SK) Faculty of Agriculture, University of Novi Sad (SE) Republic Hydrometeorological Service of Serbia (SE) Institute of Hydrometeorology and Seismology (MN) Republic Hydro-meteorological Service of Republic of Srpska (BA)
Other organisations involved in or associated to the project (if existing)	Administration of the RS for Civil Protection and Disaster Relief (SL) The State Land Office (CZ) Agricultural Station/Forecasting and Warning Service of Serbia in plant protection (SE) Environment Agency Austria (AT) Austrian Federal Ministry of Agriculture, Forestry, Environment and Water

	Management (AT) International Commission for the Protection of the Danube River (AT) Ministry of Agriculture (HU) Ministry of Environment and Energy (HR)
Amount of EU co-financing (in €)	1,678,537.50 ERDF + IPA
Amount of public contribution (in €)	243,022.50
Amount of private contribution (in €)	53,190.00
Main objective(s) of the project	DriDanube aims to improve capacity of the region for drought emergency response and enhance preparedness for drought management by introducing recently developed monitoring and risk assessment tools.
Project Specific Objectives	<ul style="list-style-type: none"> <li>• Improvement of drought monitoring by operational innovative service</li> <li>• Unification of drought risk assessments</li> <li>• Proactive drought emergency response</li> </ul>
Project main outputs	<ul style="list-style-type: none"> <li>• Strategy to improve drought emergency response</li> <li>• Drought User Service with manual</li> <li>• Methodology for drought impact assessment</li> <li>• Methodology for drought risk assessment</li> <li>• Pilot implementation of Drought User Service</li> <li>• Training of trainers for Drought User Service</li> <li>• Training on use of Drought User Service – impacts</li> <li>• Training on use of Drought User Service – risk</li> <li>• National end users seminars</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>• Project start and closure</li> <li>• Financial management</li> <li>• Project coordination and controlling</li> <li>• Project quality management</li> <li>• Data Collection and characterization of the basin</li> <li>• Assessment of surface waters (SW) and ground waters (GW)</li> <li>• Joint Tisza Survey Manual</li> <li>• Evaluation of the SWMIs and proposal of effective measures</li> <li>• Status assessment relevant for the TRB</li> </ul>
Project duration	<b>30 months</b>
Start date	<b>01-01-2017</b>
End date	<b>30-09-2019</b>

## Part 1. Project preparation

### The genesis of the project idea/project partnership

#### *Context, local needs and project objectives*

Climate change caused a gradual but consistent rise in temperature, increased evapotranspiration and an unfavourable distribution of rainfall also across Danube countries. These factors increased the occurrence of drought, which is becoming more frequent, more intense and no longer only associated with the summer months. In recent years such as 2003, 2007, 2012, 2015 and 2017, significant parts of the Danube River Basin were affected by drought, which had a negative impact on various water-dependent economic sectors, on vegetation and on the aquatic environment. Severity and frequency of drought can lead to water scarcity situation, while overexploitation of available water resources to meet various water needs can exacerbate the consequences of drought.

Despite extensive damages in the last decades, drought continues to be managed as a crisis situation, by implementing emergency procedures and urgent measures. However, this approach usually fails to achieve the most sustainable solutions. Existing national drought management practices revealed a number of shortcomings, summarised in the table below:

Drought Monitoring	Drought response
<ul style="list-style-type: none"> <li>• <b>Regionally diverse drought monitoring in terms of the type of drought that is monitored, variety of indices used for it and consensus on used approach for early warning to public.</b></li> <li>• <b>Thresholds for agricultural drought and especially for hydrological drought, crucial for efficient early warning, are in most countries either not in place or agreed upon at country level.</b></li> <li>• <b>No systematic and regular collection of drought impacts to complement drought monitoring.</b></li> <li>• <b>Early warning is mostly carried out when first signs of drought impacts have already occurred.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Lack of cooperation between relevant national institutions as well as across vulnerable different sectors, especially before and during drought development.</li> <li>• No clear inter-institutional scheme of data, responsibility and communication flow, resulting in neutralising the institutional response before, during and after drought.</li> <li>• Existing crisis-oriented drought policies support the adoption of reactive drought response that mainly deals with the treatment of drought impacts.</li> </ul>

At the time of project preparation, the drought management was reactive, dealing mainly with losses and damages, cooperation between key actors is missing and formal legislation mostly does not exist. Proactive approach on the other hand counts on drought prevention, mitigation, vulnerability reduction, planning and preparedness. Focus hence shifts from recovery to protection, i.e. from crisis management to risk management.

In this context, the Slovenian Environment Agency (ARSO) – who was already involved in projects in the frame of the Transnational Programme for South-East Europe. Thanks to its previous experience and to the networking effect given by the DMCSEE (Drought Management Centre for Southeastern Europe) initiated the procedure to set-up the DriDanube projects. Indeed, many issues connected to drought impacts are shared by the countries in the region and are still subject of common work among regional institutions: warnings in cross-border regions, impact data collections and archive, proactive policy for drought mitigation.

The main objective of DriDanube project is to increase the capacity of the Danube region to manage drought related risks. The project aims at helping all stakeholders involved in drought management become more efficient during drought emergency response and prepare better for the next drought.

#### From project idea to programme application

The project proposal followed the idea to upgrade the existing activities and previous project results in drought monitoring and management, and to fill the still-present gaps in those fields in the area of Danube basin. Whole preparation process took about a year. Identification of most important tasks to be included in the project were discussed within existing networks (DMCSEE and IDMP). An informal group of representatives of both networks was formed to prepare a draft project application for the first phase and identification of potential partners. After success of the first phase application, several meetings were organized on expense of potential partners in order to prepare full application.

In the preparation phase, THE Project Leader successfully tried to include some of the key stakeholders as Associated Strategic Partner and at the beginning of the project, partners prepared stakeholders' lists (per country). Recognised key stakeholders were later actively involved in the project via participating at the project conference, workshops, filling in questionnaires for the end users of the project results. The project preparation started at the final workshop within the Integrated Drought Management Programme (IDMP) in April 2015 in Bucharest, Romania. The workshop brought together 45 participants from 15 countries and 40 different organisations, among them core DriDanube partners (GWP CEE, ARSO, TU Wien, CzechGlobe), WMO, Joint Research Centre, Wageningen University (coordinators of Drought R&SPI project) and others. At the workshop possibilities for joint follow up activities of projects IDMP CEE and DMCSEE were explored. Main outcome of the workshop was identification of the main areas which should be address by the new project (improvement of drought monitoring with application of remote sensing data, drought risk assessment, strengthen culture of preparedness). As continuation LP and WP leaders (EODC, TU Wien, CzechGlobe, OMSZ, GWP CEE) met on the project preparation meeting in the beginning of October 2015 in Vienna where basic structure of the DriDanube according to the Danube TP was prepared.

No major issues were faced during project preparation. Effective communication amongst project partners ensures a smooth submission of the application. The administrative burden could be smaller, but it is manageable.

## Part 2. Project implementation

### Implementation history and main outputs

The project implementation was divided into 6 Work Packages plus some horizontal tasks such as project management and reporting. According to their expertise, each partners led a specific Work Package.

The first phase of the project was the development a user service for drought monitoring and early warnings, implemented on one of the most advanced available infrastructure for Earth Observation Data Processing, namely the EODC SIDP (Science Integration and Development Platform). The WP leader EODC Earth Observation Data Centre for Water Resources Monitoring GmbH coordinated the design of a web-based user service for targeted users (national and regional meteorological and emergency response authorities). It has been developed and it still operates on one and the same cloud platform, enabling access to large volumes of satellite data sets with high spatial resolution and precision and the seamless transfer of service prototypes into operations.

The next step concerned the creation of a user-friendly interactive interface: Drought Watch, an open interactive web application which enables more accurate and efficient drought monitoring and early warning for the entire Danube region. The key approach was to make this interface accessible by every relevant stakeholders. Indeed, after a trial phase, the visible part of the interface was upgraded following the user experience guidelines for modern web application and feedback received from users. Short videos and online manuals were also provided.

The tool process Earth Observation data from remote sensing satellites and second, by integrating data from the network of on-field reporters. Spanning across 10 countries, the network consists of more than 1000 farmers and forestry experts who report their observations on the state of soil, vegetation or even loss of yield on their specific location weekly throughout the year.

Subsequently, Global Change Research Institute CAS coordinated partners effort in the delivery of the WP4 – Drought Impact Assessment. This WP focused on development methods allowing quick and efficient assessment of drought impacts during the ongoing drought episode. This is combined with the retrospective analysis of relationship between past drought intensities and reported impacts. WP4 activities focused on forecasting the impacts of possible droughts and integrating a network of impact reports.

The final output of this WP was the publication of an Impact Assessment guide – available online. The adopted methodology for drought impact assessment consists of national reporting networks (NRN) and system for data collecting and processing. NRN is based on engaged reporters using common standard protocol and multi-language online questionnaires. Automatic evaluation system each week carries out data processing and drought impact maps preparation. The system has been developed and programmed in collaboration with the partners. Reporters are mainly agricultural farmers, winegrowers and foresters. Thanks to this approach, this methodology encouraged stakeholders to further cooperate and to share valuable information enhancing the transnational dimension of the project. Indeed, the delivery of this Impact Assessment contributed to the achievement of project's objective 2 "Unification of monitoring tools and cross-border coherence of near real-time impact assessments".

Once the Impact Assessment methodology was defined, the project partners – under the leadership of Hungarian Meteorological Service – started developing the risk assessment. The first step was collecting experiences in national drought risk assessment and preparing national reports. As it appeared clear that there was not an homogenous approach, the project partners have decided to prepare a methodology based on EC recommendations, based on a tailored algorithm and an indepth analysis of extreme rainless periods (droughts) as defined by the Zelenhasic-Todorovic method. Transcending the importance for the project itself, the key result of this WP can be used as basis and e.g. included in appendices in national strategies and action plans to reduce vulnerability and exposure to water scarcity and drought. The easiest application is the damage compensation among the today existing policies.

Finally, the most significant output of the project was the development of a new Drought Strategy in the Danube Area, helping key actors in the region to switch from reactive to proactive drought management approach. From prevention and early response to measures to mitigate drought impacts and evaluation process afterwards, the strategy describes the optimal drought management model, determining who is doing what and when, ultimately to prevent getting into further stages of worsening drought. This document – directly addressed to policy makers – propose the following actions to ensure a proactive approach to

drought issues in the Danube area:

- Initiate political will and call for coordinated legal approach
- Encourage collaboration and partnerships
- Search for resourcing
- Develop and adopt a national strategic document on drought management
- Form a drought impact inventory managed by national authorities
- Put results into practice
- Support knowledge sharing and awareness raising
- Establish water-related learning curriculums

### Successful implementation aspects and major difficulties

The project leader identified the following factors as crucial to deliver a successful implementation:

- A good, detailed and well foreseen work plan with all crucial milestones, available at the beginning of the project already
- Regular and clear-instructions communication with WP leaders and other partners
- Well prepared Communication strategy of how to involve stakeholders, available at the beginning of the project already
- Enthusiasm of partners to achieve the project goals (they recognised the importance of the project for their organisation, country, wider society).

Project leaders described partners as very cooperating and responsive. Even though some issues emerged (i.e. poor communication), but it was solved thanks to intermediate one-on-one skype meetings. Other issues concerned financial reporting. Because of GDPR, lead partners could not see the details of project partners' eMS reports, while at the same time we were responsible for the correct financial reporting at the project level. In case something was incorrect after second level control, it was really difficult to find the source of the miscalculation. Lead partners had to communicate this with the concerned partner and then redirect the information to the Joint Secretariat. This procedure was perceived as burdensome.

Similarly, some issues were also faced with dealing with the eMS. When it was too busy, it was not functioning during the day-time and some input went lost. JS officers were contacted but no practical solution was provided. At the end, the only alternative left to the lead partners was to input the reporting during night-time.

Finally, workload and administrative issues were rather demanding and time consuming, at least for an institution based in Slovenia, such as the lead partners. Simplification of reporting procedures would be helpful for project implementation as a relatively big share for planned staff costs were spent just for administrative work.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

#### The general progress of the project area in the domain targeted by the relevant specific objective

According to the project progress report, all three specific objectives (: 1 - Improvement of drought monitoring by operational innovative service, 2 - Unification of drought risk assessments, 3 - Proactive drought emergency response) were achieved.

By doing so, the project contributed to the achievement of several EUSDR objectives. DriDanube project was included in Thematic Pole 4 - Water management of DTP Capitalisation Strategy together with other projects - partners closely collaborated with other projects (CAMARO-D, DanubeSediment, JointTisza, Danube Floodplain, DAREFFORT, SIMONA projects) - presentation of the results at the projects' events to additional group of stakeholders, connected activities on Pilot action area.

The project concept was fully in line with Action plan of EUSDR PA5 "Environmental risks" and contributes to the EUSDR PA5, Action 4:

- to strengthen cooperation among drought response authorities (early warning system, drought management);
- harmonisation of regional drought risk assessment methods and measures with commonly set standards of risk mapping in the region;
- comparable data/information system on extreme events integrated into the Drought User Service (also remote sensing datasets);

- common Strategy to improve drought emergency response.
- And to the EUSDR PA4, Action 12:
  - organisation of the projects' events to strengthen general awareness and improve preparedness for environmental risk management.

The project also had visible impacts in the region. In particular, the Project Leader highlight these changes in Slovenia:

- Drought Watch tool and drought indices included in it are very beneficial additional tool for drought monitoring in the country
- National reporting network (NRN) on drought impacts that was established during the project is still operating (drought reporters are still involved in the reporting from the fields); important additional information in operative work of Slovenian Environment Agency (LP)
- The Danube Drought Strategy, presenting guidelines on how to establish a proactive drought management, acts as a very good foundation to bring together drought-involved institutions and establish improved cooperation. The document is worked on to be adjusted to Slovenian specific national characteristics and formally implemented as National Action Plan.
- At the project's workshops and conferences connections, communication were established or strengthened among all key organisations involved in drought monitoring and management in the country.

Moreover, the project also had important learning impact besides the Danube region. The presentation of DriDanube at one of the international meetings encouraged a consortium of Alpine region to work on the same issue and successfully apply for a sibling project but on Alpine terrain. As for other countries, we are not really aware of all the benefits, but if we take into account the situation in drought monitoring and drought management in all countries involved in the project, we think that they benefited from the project the same way as Slovenia, especially regarding Drought Watch and Danube Drought Strategy. As far as we know about NRNs, they are still operating at least in Czech Republic (established before the project, show case), Slovakia, Croatia, Hungary and Serbia.

### Direct effects and impact of the project

The project contributed to better cooperation of relevant stakeholders involved in drought monitoring and management in all partners' countries - cooperation improved due to several events in person with the aim to connect relevant stakeholders in each country.

Danube Drought Strategy could be a fundamental strategic document/guidelines on drought management at regional level and also could be adjusted and upgraded to national action plan at national level.

Drought Watch was recognised as a potentially very useful tool by several private companies and institutions, for their everyday work, but it should be further developed with better spatial resolution of different drought indices. There are also initiatives to expand a display of different drought indices over the entire Europe and to be connected/integrated with other platforms, tools dealing with drought issues.

National Reporting Networks, consisting of engaged individuals using common cross-border-standardized protocol for the estimation of near-real-time drought impact, greatly contribute to a systematic collection of data on the impacts of drought on the agricultural land, with its added value in regular collection of impact information data rather than post-drought assessment. They can be used as an alternative to other legal-based systems of drought impact assessment, and can be integrated into governmental compensation aid scheme (already in process of legislation-integration in Czech Republic).

With involvement of non-EU countries in the project, the programme financed and fostered sharing knowledge between EU and non-EU countries in the project specific fields (drought monitoring, management); when developing outputs (tool as Drought Watch, the Strategy) also needs of non-EU countries were taken into account and as such it could be more efficiently implemented/ used in these countries. Drought risk and maps were prepared also including data from non-EU countries, ensuring the outcome maps are relevant for the non-EU countries as well. They also benefited from establishing National Reporting Networks on near-real-time drought impact assessment, the creation of drought impact databases.

### Non-intended outcomes and project afterlife

During events organized in the frame of the project, new connections and cooperation possibilities were identified - also outside Danube region (e.g. network for preparation of alpine drought observatory).

Within the development of Danube Drought Strategy in cooperation with relevant decision-making stakeholders, needs for the change on the policy level was expressed by all involved and the ideas how to improve the current status were discussed in most of the DriDanube countries, further improving the existing drought management approach based on the Strategy.

## CS 13: EDU-LAB

### Part 0. Introduction

Project name (full title and/or acronym)	New Danubian Governance in Labour market Relevance of Higher Education (EDU-LAB)
Programme priority axis (number and title)	WELL-GOVERNED DANUBE REGION
Programme priority specific objective	SO 4.1 Improve institutional capacities to tackle major societal challenges
Project Lead Partner organisation	European Foundation for Education (DE)
Other project partner organisations	Technical University of Sofia (BG), Bulgarian Industrial Association (BG), Municipality of Vratsa (BG), Knowledge at Work Foundation (HR), Kecskemét College (HU), German Business Club Transylvania (RO), Lucian Blaga University of Sibiu (RO), Technical University of Košice (SK), German-Slovak Chamber of Industry and Commerce (SK), Automotive Industry Association of the Slovak Republic (SK), University of Maribor (SI), Regional Development Agency of Northern Primorska Ltd. Nova (SI), Mechanical Engineering Faculty (University of Sarajevo) (BA), LiNK Mostar, Association for Entrepreneurship and Business LINK (BA), Department for Development and International Projects, Government of Zenica-Doboj Canton (BA), Institute Mihajlo Pupin, University of Belgrade (RS), Chamber of Commerce and Industry of Serbia (RS)
Other organisations involved in or associated to the project (if existing)	Ministry of Education, Science and Sport (SI), Ministry of Science, Education and Sports (HR), Ministry of Human Capacities (HU), Danube Rectors' Conference (BE)
Amount of EU co-financing (in €)	2,148,875,54 ERDF + IPA
Amount of public contribution (in €)	159,592.48
Amount of private contribution (in €)	219,620.88
Main objective(s) of the project	EDU-LAB mainly aims at improving institutional capacities to increase the labour market relevance of higher education with a view to retain more young talents studying and working in the Danube region. EDU-LAB addresses 3 fields with major societal challenges: <ul style="list-style-type: none"> <li>- Education systems and policies</li> <li>- Labour market policies</li> <li>- Demographic change and migration</li> <li>- More attractive employment opportunities will be crucial to encourage young talents - future top performers - to stay in the Danube region.</li> </ul>
Project Specific Objectives	<ul style="list-style-type: none"> <li>- Enhance cooperation between business, HE and public authorities</li> <li>- Encourage further development of Higher Education Acts</li> <li>- Foster the creation of more professionally-oriented study programmes</li> </ul>
Project main outputs	<ul style="list-style-type: none"> <li>- Policy recommendation for model implementation</li> <li>- Danubian Charta for young talents</li> <li>- Action Plans for pilot activities</li> <li>- E-learning courses for stakeholders</li> <li>- State of the art: exchange of good practices</li> <li>- Triple helix in action for a new governance model</li> <li>- Vertical clearance sensor system</li> <li>- Training on new governance model</li> <li>- Coordination Points for new governance</li> <li>- Training on new governance model</li> </ul>
Key activities implementing the project	<p>Project start and closure</p> <p>Steering Committee (SCOM)</p> <p>Internal communication management</p>

	Financial Management <ul style="list-style-type: none"> <li>- Quality assurance</li> <li>- State of the art: existing governance models</li> <li>- Design of tools: development of e-learning courses for stakeholders</li> <li>- Stakeholder dialogue developing a new Danubian governance model</li> <li>- Develop strategy how to implement the new Danubian governance model</li> <li>- Revision+amendment of e-learning courses</li> <li>- Training and capacity building</li> <li>- Action Plans</li> <li>- Pilot activity in Slovakia</li> <li>- Pilot activity in Bulgaria</li> <li>- Pilot activity in Serbia</li> <li>- Lessons learned</li> <li>- Developing the Danubian Charta</li> <li>- Prepare the signing of the Danubian Charta</li> <li>- Danubian Charta at Closure event</li> <li>- Start-up activities including communications</li> <li>- Project coordination</li> </ul>
Project duration	<b>30 months</b>
Start date	<b>01-01-2017</b>
End date	<b>30-06-2019</b>

## Part 1. Project preparation

### The genesis of the project idea/project partnership

#### Context, local needs and project objectives

One of the gravest societal problems the Central and Eastern European countries of the Danube Region face is **the emigration of their skilled workforce to Western Europe**. At the time of project conception (2016), the scale of emigration from the region since the fall of the Iron Curtain has been almost unparalleled in history. The EU accession of some of these countries in 2004 and 2007 exacerbated this process. The people leaving their countries mostly for Germany, Italy, and Spain tend to be **younger and better educated than the general population** both of the country of their origin and of their destination. Emigration reduced the supply of skilled workforce and put more pressure on the already stretched social insurance systems of these countries by increasing the dependency ratio. **The emigration of the skilled workforce is also among the main impediments before economic convergence between the EU-15 and new member states**. Without skilled migration economic growth would have been significantly higher in the region. In the Central and Eastern European countries of the Danube Region the loss in cumulative GDP growth between 1995 and 2012 ratio varies from 7 percentage points in Slovenia to about 3 percentage points in Hungary. Whereas in Croatia, Romania and Bulgaria the lost potential growth output during the same period amounted to approx. 14, 10, and 8 percentage points, respectively.

The **reduction of skill mismatches**, aligning education and vocational training with employers' needs would not only increase labour productivity but help reduce structural and youth unemployment, which are among the main drivers of emigration. One of the priority areas of the European Union Strategy for the Danube Region (EUSDR) is the **Priority Area 9 (PA9) People and Skills**, which sets policy goals in education and training, labour market and marginalised communities. The PA9 directly contributes to EU 2020 targets in employment (75% employment rate), education (reduction of school dropout rates below 10%; at least 40% of 30-34 years-olds attaining tertiary or equivalent education), and poverty and social exclusion (at least 20 million fewer people in or at risk of social exclusion).

To overcome these challenges – which are perceived as urgent also by local stakeholders - **The European Foundation for Education (EFE)** - a non-profit educational organization operating on a European level - **initiated the project EDU-LAB, as Lead Partner**. This project was conceived as an instrument to pursue a specific mission, namely creating better professional chances for young people by creating a systematic connection of educational offers with labour market needs.



EDU-LAB aimed at **improving institutional capacities to increase the labour market relevance of higher education** with a view to retain more young talents studying and working in the Danube region. EDU-LAB addresses 3 fields with major societal challenges:

- Education systems and policies
- Labour market policies
- Demographic change and migration

#### From project idea to programme application

The Project Leader is The European Foundation for Education (EFE) which has a long-lasting experience in developing and supporting educational programs in the fields of STEM and e-learning. EFE was established by Dr. Wolfgang Shuster (former Mayor of Stuttgart) who has always been engaged in projects and initiative aimed at combating youth unemployment and opening up better chances for young people. He is convinced that the key to sustainable economic development is education and training, both a good general education and a good vocational qualification.

Thus, the participation in **EDU-LAB is fully consistent with EFE goals and objectives**. Indeed, the essence of EDU-LAB, namely linking education to employment, is exactly what EFE is promoting throughout Europe. By initiating EFE, the main purpose of Chairman Prof. Dr. Wolfgang Schuster was to strengthen the idea of linking education to employment in order to:

- open up better professional chances for young people;
- increase the work-based component of educational offers;
- improve the competitiveness of companies and
- strengthen the regional economic development.

By initiating EDU-LAB and participating in the project, **EFE was able to further raise awareness for linking theory and practice**, especially in the Danube region. Furthermore, EFE could leverage its experience in **enhancing the stakeholder dialogue** and it seized the opportunity to know different points of view which on the long run will help to better initiate and customize educational offers in Europe. Finally, leading EDU LAB was an **opportunity to broaden and deepen the scope of its theoretical and practical knowledge**, benefitting enormously from the existing knowledge and long-term experience in Stuttgart and of its support organisation KBW.

**EFE played a pivotal key role in creating a partnership network characterized by transnational, intersectoral and multilevel cooperation.** The ERDF and IPA partners as well as ASPs come from 10 countries: Bulgaria, Croatia, Germany, Hungary, Romania, Slovakia, Slovenia, Bosnia and Herzegovina, Serbia and Belgium. **Local partners were contacted and selected according to their experience in youth education and their knowledge of specific local challenges.** For instance, Chamber of Commerce and Industry Associations were pivotal to bridge between higher education and industry, proposing and adapting solutions to the specific national contexts. Universities (such as Technical University of Sofia, Lucian Blaga University of Sibiu, Technical University of Košice) were involved as their role in promoting dual education is essential. Finally, also NGOs (such as Knowledge at Work Foundation) played their part in increasing awareness and creating a stakeholder network interested in dual education and bridging the gap between higher education and youth employment.

According to EFE Project Manager, **the added value of having such broad and diverse partnership network is the best way to make the bigger European picture more visible.** The participating partners have been facing very similar challenges such as brain drain or lack of institutional capacities to create sustainable responses. Most importantly, creating results through transnational cooperation makes it sure that these results can be easily transferred and adapted to different national contexts.

**EFE role in finding the suitable local partners for the delivery of EDU-LAB is acknowledged by several project members which praised the pro-activeness of EFE during the application stage.** Indeed, project partners were asked to fill in their specific tables in the application form while the rest had been delivered by EFE. As one project partner explained, the description of project activities was rather broad to allow possible changes during the implementation. **This flexibility proved to be a success factor.**

#### **The preparation of the project**

**EDU-LAB is organized over the transfer of know-how, the development of a new governance model, capacity building, pilot actions and development of a “Danubian Charta for young talents”.** In order to achieve the project objectives EDU-LAB focused on involving higher education and its relevant stakeholders. Thus, project preparation started as early as 2016 with a broad partners consultation in Bosnia. One of the first challenges to be faced by the Project Leader was the replacement of Project Manager as Ágnes Sebestyén stepped in to replace a colleague on maternity leave. **Interviewed project partners agreed in describing the role of Project Coordinator as essential,** both during project preparation and implementation. A good practice highlighted by project partners is the constant communication between partners and lead partners ensuring the creation of a team spirit which turned out to be a key success factor.

Project partners also highlighted that DTP rules requiring that only the Project Leader reports to the Programme Management Bodies as positive factor. **Thanks to the effective coordinative role of EFE, project partners knew to whom they need to address their concerns and how to deal with them.** Finally, the flexible approach proposed in the application allowed project partners to redefine project activities according to local needs and circumstances. All the above-mentioned factors guarantee a smooth project preparation phase.

**The innovative approach of EDU-LAB consists in focusing on higher education.** Generally, young people attend primary and secondary school and in the large majority study at University. Furthermore, young people as well aim at achieving an internationally recognised degree. Therefore, **EDU-LAB concentrates on higher education providing - in the course of the Bologna Process - internationally recognised Bachelor and Master degrees.** - focusing on developing a new governance model in labour market relevance of higher education by new impulses and solutions adapted to the need of companies and societies of the Danube region.

It has been scientifically approved that the practice-orientation of education positively correlates with the employment rate of graduates. Several studies (Bertelsmann Stiftung, Cologne Institute for Economic Research) show that functional solutions have to be developed according to the existing needs of the world of work. Therefore, **EDU-LAB concentrates on linking education to employment** by focusing the work of EDU-LAB at the same time as a laboratory combining the horizontal and vertical as well as transnational stakeholders in a triple helix. EDU-LAB has a real transnational, multilevel and intersectoral character and strong result-oriented approach.

## Part 2. Project implementation

### History of implementation

**The project kicked off with a conference in Stuttgart in March 2017.** During this event, the legal representatives of project partners signed the document entitled “Our commitment to develop chances for young people”, symbolizing their long-term commitment to improve professional chances of young people in the Danube region by linking education to employment in a sustainable way. One of the project partners highlighted the **enthusiasm around this event as every partner was very willing to propose solutions** and initiative to achieve project objectives.

The very first activity of the programme was the **development of e-learning courses for stakeholders who want to take steps in order to better link higher education to employment.** The e-learning courses were based on a variety of good practice examples from the Danube Region. By pointing out successful models for the alignment between higher educational offers and the needs of the business sector, stakeholders will be motivated to look for their own solutions and find out what legislative and institutional bottlenecks they need to overcome at national and regional levels. The following e-learning ELCs were developed:

- Encouraging the further development of Higher Education Acts
- Fostering the creation of more professionally- oriented study programmes
- Enhancing professional training (train the trainers) in companies
- Strengthening the regional economic development

The four e-learning courses are addressing all three relevant stakeholder groups of the EDU-LAB project: educational institutions, businesses and national public authorities. **The e-learning courses enable a joint transnational learning process which results in improving institutional capacity and brings an added value for the users.**

The courses were designed through transnational cooperation, integrating contributions from partners from eight Danube Region countries. **The responsible project partner for this activity was Institute Mihajlo**

**Pupin** (IMP). The ELCs are placed on the IMP platform (<http://jpo.imp.bg.ac.rs/edu-lab/>) and can be accessed for free. Each e-learning course is divided into themes/modules and sessions. The materials are in the form of PowerPoint presentations, videos, pdf document and concept maps.

The second key activity was the **development of the New Danubian Governance Mode**. Through this innovative approach, project partners aimed at **develop sustainable structures for the implementation of practice-based study programs**, and thus to improve professional chances for the young generation. The New Danubian Governance Model specifically **addresses the macroregional problem of skilled-workforce emigration** by offering practical solutions for making higher education more labour market relevant and praxis-oriented. Developed in an interregional co-operation the New Danubian Governance Model is both regional in its goals and means and at the same time tailored to specific local contexts. Furthermore, the multi-stakeholder nature of its development - being a joint effort of education ministries, higher education institutions, as well as employers and employers' organisations and chambers –**the new governance model offers a road map of implementation for every key actor both on the levels politics, policies and projects.**

The model was based on the outcome of a joint transnational learning process about how to improve institutional capacities which will bring added value for all stakeholder groups in the Danube region. Indeed, **two transnational stakeholder workshops** with more than 100 internal and external participants each were organized in 2017 and 2018 in Maribor to develop the New Danubian Governance Model, including the Policy guide “How to start Implementing the new Danubian Governance model” focusing on how to:

- incorporate a combination of theory and practice into tertiary education,
- develop a life-long learning system in a systematic and sustainable way,
- create law amendments that enabled incentivize the systematic cooperation between universities and companies in the field of teaching and research,
- boost university research and practice-oriented study programs through cooperation,
- establish systematic cooperation between higher education, business, state/local administration and the civil society

In order to enhance a closer linkage between higher education and labour market needs in the countries of the Danube Region, **pilot activities took place between October 2017 and April 2019**. The goal of the pilot activities was to test the feasibility of the policy recommendations and tools developed in the project phases.

- **Pilot activity in Serbia:** The Chamber of Commerce and Industry of Serbia (CCIS) joined the project funded by the European Union which aims to improve professional chances of young people in the Danube region and better link education to employment in a sustainable way and reduce the emigration of Serbian citizens or even to regain them. The EDU-LAB project investigates the conditions and ways to make this ambition feasible.
- **Pilot activity in Bulgaria:** EDU-LAB project we have established that the Bulgarian legislator and the Ministry of Education would support a sound and effective proposal for the introduction of professionally oriented higher education study programme and the legal framework defining their scope, specification and implementation.
- **Pilot activity in Slovakia:** the EDULAB project through its Slovak project partners – the Automotive Industry Association of the Slovak Republic and the German-Slovak Chamber of Industry and Commerce – supported and facilitated the creation of new professionally oriented study programs in Slovakia.

The final, and arguably most significant, output of the project was the “**Danubian Charter for Young Talents**”. This policy instrument was created to synthesize the recommendations developed and tested by the EDU-LAB partnership to be signed by EDU-LAB partners and stakeholders at the final EDU-LAB event in May 2019 in Zagreb as a symbolic declaration of the long-term commitment to the joint goal: offering better chances to young people in the Danube Region through linking education to employment. It is accessible and available for any countries facing similar challenges like those of the Danube region; it is to inspire the triple helix cooperation as spelled out in the New Danubian Governance Model. The Danubian Charter can be signed by any organisation or initiative committed to its principles and recommendations.

## Implementation context

According to all partners involved, **the implementation of the project was characterised by a proactive and effective cooperation**. This was mostly due to the role of the Project Leader which acted as a catalyser for the success of the project. Project leaders acknowledged that **Cooperation with stakeholders from different sectors is quite challenging**. Representatives of different sectors have different institutional structures, approaches, methods, operate at a different pace and there are huge differences in the time they need to react to societal challenges. However, EDU – LAB goal was precisely to bring stakeholders together to make them realise that sustainable change can be only achieved through cooperation. In order to keep project partners updated and on board, EFE organised frequent online meetings to inform partners and to discuss possible solutions to the challenges faced during project implementation.

Furthermore, **project partners highlighted that the project had an extremely positive impact on capacity building**. Indeed, this transfer of knowledge and good practices are especially valuable for some countries (especially the less developed) due to the need for a change in the relation between higher education supply and labour market demand. As described by one project partner (Foundation Knowledge at Work):

“Each time we invited our stakeholders to an event, we enlarged our common understanding of the topic, and our relationships deepened. Each stakeholder who participated in EDU-LAB stakeholder events recognized the value of the broadening of perspectives which the quadruple helix approach provides, especially in an international context”.

### Part 3. Project’s achievements, impacts, its contribution to programme specific objectives and afterlife

According to the project final progress report, all activities were implemented as scheduled in the approved AF. The excellent joint spending performance of over 90% also reflect the great cooperation within the partnership and the efficiency of the implementation. Highlights and main achievement are the following:

1. The final conference of the project entitled “Better Chances for Young People” was organized as a two-day public event in Zagreb on 16-17 May 2019. It was attended by more than 100 relevant stakeholders from the Danube Region
2. The Danubian Charter for Young Talents was signed by more than 50 partners and stakeholders as a symbolic sign of their engagement to assuring the sustainability of project results
3. The lessons learned from the implemented pilot activities in Bulgaria, Serbia and Slovakia were finalized and published in full length on the project website offering a valuable tool for stakeholders
4. An EDU-LAB publication was printed presenting all tools, policies, pilot activities and the lessons learned from the project Finally, being the Pole Leader of DTP Thematic Pole 9 “Educational Governance”, the management team of EFE attended and organized several capitalization events including the 8th EUSDR Annual Forum in Bucharest, where EDU-LAB was presented as one of the 5 most successful DTP projects.

### The general progress of the project area in the domain targeted by the relevant specific objective

#### Specific objective 1: Enhance cooperation between business, HE and public authorities

The final conference of EDU-LAB, entitled “Better Chances for Young People in the Danube Region” took place on 15-17 May 2019, organized by the Knowledge at Work Foundation and the European Foundation for Education in Zagreb, Croatia. The first day of the final event was attended by more than 170 participants from 10 countries across Europe, representing academia, businesses, policy makers and civil society. The Danubian Charter for Young Talents, one of the main outputs of EDU-LAB, was signed during the ceremony. The document formulated recommendations on enhancing the labour market relevance of higher education, in line with the European Commission’s recommendations for improving the quality of education. A representative of each partner of the EDU-LAB partnership consortium as well as stakeholders, such as representatives of ministries responsible for education and businesses signed the document during the final conference.

#### Specific objective 2: Encourage further development of Higher Education Acts

A new law on dual higher education was adopted, with EDU-LAB partners Chamber of Commerce and Industry of Serbia and Institute Mihajlo Pupin having actively contributed to drafting the document. The Serbian EDU-LAB partners IMP and CCIS were asked to join the committee in charge of the development of the new higher education act on professionally oriented higher education to be introduced in Serbia. The law is expected to be adopted by the National Parliament by the end of 2019 and the results of EDU-LAB as well as recommendations prepared within the project should be taken into consideration and incorporated where

possible. The process was presented by the representatives of the ministry at the conference organized within the framework of the Serbian pilot activities entitled “Dual Education in Higher Education - Challenges and Possibilities“ on January 15th 2019 in Belgrade.

### Specific Objective 3: Foster the creation of more professionally-oriented study programmes

The first accredited professional Bachelor`s programme was launched in 2018 Slovak University of Technology in Bratislava. This year, the second year begins with more companies joining in as partners of the programme. Even an EU-call from Slovak Ministry of Education with financial support towards public universities for further establishing such professional bachelor programs was implemented

#### Direct effects and impact of the project

Whilst the overarching impact of EDU – LAB – more specifically the effects of the Danube Charter – are likely to be visible only in the longer run, pilot projects could be used as a proxy to define expected impact in the related policy field.

#### Impact of Pilot Actions in Slovakia:

- Legal and normative changes in higher education supporting the accreditation and implementation of professionally oriented bachelor programs
- Clear ambition of the Ministry of Education to motivate universities to implement professionally oriented bachelor programs and implementing a structural change in favour of a higher number of bachelors leaving for jobs and lower number of students continuing their studies at master level
- Support scheme financed from EU structural funds for preparing and implementing professionally oriented bachelor programs as well as to support practically aligned education
- Pro-active communication of employers’ representative bodies with government and representatives of higher education on necessary progress in the field
- Development of the labour market and the higher education sector based on facts, data and international benchmarking

#### Impact of Pilot Actions in Serbia:

- Changes to the Labor Law/ adding a new Article 200 of the Labor Law and adoption of a special law which refers to work-based practices.
- **Key benefits for companies:** establishing close cooperation with universities, making better insights into study programs, development of new and innovative ideas, providing support for the implementation of appropriate projects
- **Key benefits for universities:** new and attractive study programs for students; new and attractive study programs for students;
- **Key benefits for students:** Dual studies increase students’ competences, employability and their greater competitiveness in the labor market; opportunity to be up-to-date with the newest technologies;

#### Non-intended outcomes and project afterlife

As previously described, the most evident non-intended outcome is the networking and cooperation effect amongst the involved partners. The strength of this cooperation and the pivotal role of the Danube Charter – which lays down principle for future actions – lead to the conclusion that project follow-ups are rather likely in the next programming period.

## CS 14: Danube Strategy Point (DSP)

### Part 0. Introduction

Project name (full title and/or acronym)	Danube Strategy Point – A Secretariat for the Danube Region
Programme priority axis (number and title)	Priority 4
Programme priority specific objective	SO 4.2 Support to the governance and implementation of the EUSDR
Project Lead Partner organisation	City of Vienna (EU-Funding Agency Ltd.)

Other project partner organisations	Ministry of Regional Development and Public Administration of Romania; Ministry of Foreign Affairs of Romania;
Other organisations involved in or associated to the project (if existing)	
Amount of EU co-financing (in €)	3,133,751.10 ERDF
Amount of public contribution (in €)	553,014.91
Amount of private contribution (in €)	
Main objective(s) of the project	To strengthen the implementation of the EUSDR through the establishment of a EUSDR Strategy Point to facilitate the information flow between key EUSDR actors
Project Specific Objectives	<ul style="list-style-type: none"> <li>- To enhance communication and visibility of EUSDR and support the EUSDR stakeholders (Presidency, PACs, NCs) in the implementation of the Strategy, by also increasing the capacity of the PACs and non-EU countries in implementing the strategy</li> <li>- To strengthen the internal and external horizontal coordination of the EUSDR on cross-cutting issues between PAs and NCs or the embedding of existing financing instruments</li> <li>- To support evidence-based decision making by supporting the development of the monitoring and evaluation framework of the Strategy</li> </ul>
Project main outputs	<ul style="list-style-type: none"> <li>- 7.00 Number of documented learning interactions</li> <li>- 2.00 Tools for strengthening institutional capacities and supporting transnational multilevel governance</li> <li>- 1.00 EUSDR monitoring concept</li> <li>- 1.00 EUSDR evaluation concept/plan</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Organizational and technical support for the EUSDR Presidency</li> <li>- Provide support for the NCs and PACs in organizing Steering Group meetings/workshops/seminars based on needs</li> <li>- Information regarding projects relevant for the EUSDR</li> <li>- Facilitate the involvement of all relevant stakeholders (including all relevant DGs) in the Steering Group and Priority Area Coordinator meetings</li> <li>- Managing the internals of DSP (project- and finance management)</li> <li>- Facilitate the contact with the Managing Authorities of the ESIF instruments and other European Funding (such as EC directly managed funds) and institutions (e.g. EIB)</li> <li>- Provide support for strategic projects</li> <li>- Facilitate a regular exchange between PAs on content issues, thematic coordination and proactively stimulate exchanges between related PAs through thematic meetings, events, etc.</li> <li>- Further development and implementation support of an EUSDR monitoring concept in close cooperation with the NCs, European Commission and appropriate experts</li> <li>- Further development and implementation support of an EUSDR evaluation concept in close cooperation with the NCs, European Commission and appropriate experts.</li> <li>- Draft proposals for adapting the Strategy's measures, targets, actions and its administrative structure in cooperation with NCs, PACs and the European Commission according to the results of the evaluation</li> <li>- Assistance for PACs in reporting upon their request</li> <li>- Encourage the exchange of experiences between implementers and stakeholders of MRS and other relevant programmes, e.g. INTERACT and</li> </ul>

	<p>ESPO.</p> <ul style="list-style-type: none"> <li>- Needs assessment, training and technical support for PACs and their activities (development of projects, project management, media relations, contact with project promoters, support the inclusion of civil society, promotion of multi-level governance).</li> <li>- Enhancing capabilities for the implementation of the EUSDR in the non-EU countries by sharing good practices and providing assistance in promoting project development</li> </ul>
Project duration	40 months 0 days
Start date	01.09.2018
End date	31.12.2022

## Part 1. Project preparation

### The genesis of the project idea/project partnership

The EUSDR needed a secretariat, a Danube Strategic Point, which - in close cooperation with the Presidency, the Commission and other stakeholders – serves as an organizational backbone of the Strategy, which makes proposals for improving the performance of the Strategy, its visibility, its output and governance. The political ownership in any case has to be taken by representatives of the participating countries, the National Coordinators and responsible politicians.

There were some areas where EUSDR needed to be developed and better coordinated which made the establishment of the DSP necessary, such as:

- the visibility of EUSDR was rather low, a narrative of the strategy and success-stories had to be communicated
- a new Communication Strategy was necessary to define responsibilities, tools and the target groups for each of the tools
- efficiency and frequency of addressing the European Institutions, funding institutions and other players in the Danube Region had to be improved since they are important for the leverage of synergies in promoting, funding and developing the Danube Region
- the internal cooperation between PACs, between PACs and NCs, between Presidencies and the practitioners of EUSDR was rather low, a more integrative approach was necessary, especially to support non-EU countries
- Presidencies needed support in the communication and organization of Annual Forums to bring the substantial objectives of the EUSDR on the agenda by thematic means but also as market places of projects and a socializing event for EUSDR stakeholders
- the internal communication had to be improved by internal communication channels
- the adjustment of the EUSDR to the forthcoming new MFF 2020+ was due because the Action Plan was endorsed in 2011, and the management bodies wanted a revised Action Plan of EUSDR that can have a strategic impact on the operational programmes
- this made also the establishment of a new monitoring system necessary because basis for the revision of the Action Plan was a functioning reporting and monitoring system.

The City of Vienna and the Ministry of Regional Development and Public Administration of Romania became the lead partner and project partner of the project, respectively. Beforehand, both countries were experienced in coordinating Priority Areas. Vienna was one of the regions promoting a Danube Region Strategy from the very beginning of preparations. The Romanian Ministry for Regional Development has great experience in managing ESIF programmes and structures, including a secretariat. Both Vienna and the capital of Romania, Bucharest have an excellent connectivity to the Danube Region.

In regards to the application process, the project partners had a good experience. The call for DSP was not their first call and they followed the procedures of a normal call. The documents were elaborated by the JS/MA, with close contribution from NCPs. Unlike other projects, they had a list of pre-defined actions and how the expected results should be achieved. This document was published on the website, and it was very clear. The deadlines were also respected. There was a conditions clearing part after the evaluation, they were more efficient after that, because it clarified some more aspects of the project. In the beginning, they had a couple of questions and they always received clear answers in time.

The DSP is an observer in the MC, and the discussion within the programme taskforce was to have more flexibility in the future, and the easing of burdens, have longer running periods for the projects, PACs and the DSP. This would definitely be something that would reduce the administrative burden and it would also give more continuity toward the projects. When they prepared the project at the DSP, they were concentrated on 2-2,5 years, the longer period would give greater flexibility. Another part that was discussed is that probably there will be less money for the PACs and the DSP, so the question of DTP having 20% less money in the next period is on the table.

## The preparation of the project

The activities and task that the DSP had to get involved in were pre-defined the EUSDR NCs. During the preparation of the application, the project partners had meetings to discuss the tasks and the knowledge of each partner. Nobody took on board activities that they would not have been able to carry out. These tasks and the responsibilities and roles of each partner were laid down in the Application Form and they did not diverge from that. They had 8 people, one is the coordinator with the overall responsibility, a capacity building officer in Romania, taking care of all the capacity building activities, 2 pillar officers, 1 in Vienna and 1 in Romania who basically split the priority areas in half, a communication officer based in Bucharest, responsible for both the internal and external communication, 2 project officers, dealing with all the technicalities and the mother institutions and national legislations, and also providing the secretariat function for both parts. The core is the City of Vienna and the Ministry for Regional Development in Romania. The presidency also joins the partnership, formally they are part of the DSP to conduct the annual forums, because the financing is being done through DSP.

## Part 2. Project implementation

### History of implementation

The project started in September 2018 and lasts until December 2021. For staffing DSP, a Recruiting Committee of three persons was established: DSP-Coordinator, leader of Bucharest office and a representative of the TRIO (BG). The Kick-off for cooperation of the two offices of DSP was the joint staff meeting aside the Annual Forum in Sofia. Internal management and operational structures became mature in the first period.

Within the process of the Revision of the EUSDR Action plan, next to a review of the corner stones as included in the current Action Plan, potential future cross-cutting issues were identified by PACs. First results came out of the associated survey launched in 2018, based on the Guidance note of the Bulgarian presidency. The survey has shown high potential in the cooperation among the PAs on cross-cutting issues. As regards activities towards funding bodies, DSP started modes of mutual exchange with programme bodies or INTERACT, e.g. also by participating in specific meetings/events.

Due to the time pressure and the interplay of the revision of the Action Plan, an evaluation plan was drafted in November 2018 and was discussed in a workshop with EC, a survey was conducted to gather the views of the NCs with regards to evaluation and monitoring in the EUSDR context, a workshop for a new reporting template was held. For the evaluation of the EUSDR, NCs decided to set up a Steering Group "SG DANUVAL".

As MRDPA is responsible for the elaboration of the EUSDR Communication Strategy, the DSP Bucharest office prepared the first Draft Communication Strategy, which was presented at the NC-PAC meeting in December 2019, and the Communication Plan 2019, which was endorsed at the NC meeting in February 2019. As regards the website ([www.region-danube.eu](http://www.region-danube.eu)), after taking over its management, the actions were first directed towards better structuring the content, gathering and uploading the missing files, removing the obsolete articles and links, updating the contact lists. MRDPA is now regularly updating the website by publishing information on the latest developments in the region. A special attention was driven towards the social media accounts as well. In January 2019, a new format of the EUSDR calendar was launched.

Main achievements of Reporting Period 2 included the Operational Evaluation of the EUSDR published in and the Consolidated Input delivered to the EC in July 2019 as a basis for the first draft of the new EUSDR Action Plan. Next to putting together the Consolidated Input, DSP provided facilitation to EUSDR stakeholders along the entire revision process. Cooperation with Interact intensified and first cross-MRS meetings were held (e.g. on the Strategic Framework for ESIF in March 2019 and on PAC level a cross-MRS meeting in the energy field was held in April 2019 in Vienna). These efforts and events already formed a good basis for further cross-MRS activities. On the level of communication one highlight is the contract for



the new EUSDR website which was to be launched in autumn 2019. Also the drafting of the EUSDR Communication Strategy was brought forward considerably.

For the third period, it started with major personnel changes: Mr. Lichtner took over the management of DSP. 3 positions were filled from September 2019: Pillar Officer, Evaluation Officer, and Project Officer. Due to the new team, a large part of WP Management was staff training and team building on the go. DSP supported EC and the Presidency in the final part of the revision of the Action Plan until December 2019 and elaborated the EUSDR Implementation Report 2016-2018, published in February 2020. The Pillar Officers launched a needs assessment on the cooperation of stakeholders within each PA and its SG.

In monitoring and evaluation, the new Evaluation Officer continued with the proposal for the monitoring and reporting system for the PAs. Regarding communication, the redesign of the EUSDR website was successfully completed and the websites, including all modules, and went online in November 2019. The EUSDR Communication Strategy was further developed. Croatia took over the Presidency in November 2019. DSP supported the Presidency in drafting two position papers on the improvement of governance structures and on the Embedding of the Strategy in EU funds 2021-2027. DSP provided further support by coordinating ongoing and future tasks and activities as well as through several written procedures on behalf of the Presidency and by coordinating/preparing the Presidency for 2021. Collaboration with EC mainly focused on finalising the Action Plan and the preparation of the first MRS week in Brussels in February 2020 which DSP actively contributed to. DSP directly supported NCs and PACs in their tasks as well as on behalf of the Presidency and EC. The Pillar Officers attended all SG meetings held within this period (except PA 8 & PA 9). Finally, DSP joined Interact meetings for joint activities and a common vision of all 4 MRS.

In the fourth period, DSP faced the challenge of adapting to the COVID-19 lockdown. In this context, DSP contributed to keeping the Strategy going by providing two online meeting tools and offering them to EUSDR stakeholders (for SG meetings and networking meetings), also providing technical support and training. Also the NC meeting held under the Croatian Presidency in May 2020 took place online with technical support from DSP and DSP finalised the Rules of Procedure of NCs and the EUSDR Governance Architecture Paper on behalf of the Croatian Presidency. Furthermore, DSP co-organised with Interact the 2. Meeting of Chairpersons of the National Coordinators groups (Trio Presidencies) of MRS and the EC in June 2020.

The most important and pressing issue DSP was concerned with in this period was the process of Embedding EUSDR into EU funding programmes for the upcoming programme period 2021-2027. NCs were asked to screen the suggested strategic topics for their feasibility and suitability with regards to embedding on the national level in consultation with their Programming/Managing Authorities. As for Monitoring & Evaluation, the EUSDR Monitoring Concept was adapted in accordance with the EC's questionnaire for the reporting on the four MRS and in accordance with DTP (PAC project reporting to DTP). The final tool is to significantly lower the administrative burden of the PACs and complies with the need to have information on the PAs' achievements at a glance.

Cooperation with Interact was brought forward by DSP's engagement in many Working Group meetings and sub-group meetings on cross-MRS cooperation and DSP continued coordination with and MRS support of ESPON. A training session for PACs was prepared for the next reporting period. Progress was also achieved in the elaboration of the EUSDR Communication Strategy. Another major task was the update of all EUSDR SG members lists which DSP initiated and coordinated.

## Implementation context

As the secretariat, DSP has worked closely with the managing bodies of EUSDR. The DSP does not contribute directly to finding projects in the region. They mainly work with PACs and NCs and support them in processes that can lead to projects. For example, the DSP worked with PACs and NCs on developing a guide for strategic projects. They also support the organization of the Annual Forum and help the countries that struggle with the administrative burden of transnational projects, or simply do not have previous experiences with these kind of projects. Thus, they gave support to non-EU countries as well.

## Successful implementation aspects and major difficulties

The project was prolonged for one more year, and with this extension, they were able to carry out every activity according to the plan. What became clear during the implementation is that the secretariat is necessary for the coordination of the Strategy. There were no major problems during the implementation. Their success was based on three factors: first, was the efficiency of internal communication, they were open to new suggestions both within the DSP and with other bodies of EUSDR as well; second, their staff was experienced and prepared; and third, the duties of the DSP were defined well and they were clear from the beginning of the project.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

#### Direct effects and impact of the project

The DSP has directly affected the efficiency of the EUSDR governance by improving the internal and external communication, building the monitoring system, etc. The DSP was established to deal with the problems that EUSDR previously faced and was successful in improving these conditions.

They were able to reach the targets that they set out. The region is also indirectly benefitting from DSP. Since the DSP supports the governance, and that becomes more efficient, they can concentrate more on their activities and targets from the Action Plan. The region also benefits from the external communication. With newsletters, they keep them updated in social media. Generally, the EUSDR is becoming a more and more important source of information on what is happening in the region.

#### Non-intended outcomes and project afterlife

One of the activities that needed to start was the one relating to embedding. When the list of activities was set up, it was not possible to preview all the needs of the strategy. They started contributing a lot more to this aspect than expected and helped in setting up networks of managing authorities, developed an embedding tool.

Right now, networks seem to be durable. The managing authorities are taking the lead in organizing meetings, two meetings were already organized which is a sign that there was need to what the DSP was doing and the participants also have a proactive approach.

## CS 15: Effective Enforcement Actions against Sturgeon Trafficking - EAST

### Part 0. Introduction

Project name (full title and/or acronym)	Effective Enforcement Actions against Sturgeon Trafficking - EAST
Programme priority axis (number and title)	Priority 4
Programme priority specific objective	SO 4.2 Support to the governance and implementation of the EUSDR
Project Lead Partner organisation	World Wildlife Fund for Nature Danube-Carpathian Programme Bulgaria
Other project partner organisations	WWF - World Wildlife Fund for Nature Hungary
Other organisations involved in or associated to the project (if existing)	WWF DCP Romania; Chief Directorate Border Police
Amount of EU co-financing (in €)	40,831.87 ERDF
Amount of public contribution (in €)	6,866.25
Amount of private contribution (in €)	339.38
Main objective(s) of the project	N/A
Project Specific Objectives	N/A
Project main outputs	N/A
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Chain mapping of illegal trade of sturgeon caviar and other sturgeon products, including analysis of risk against reward</li> <li>- Compilation of relevant legal gap analysis, recommendations and literature review on the current state of implementation of legislation</li> <li>- Compilation of relevant other project and identification of potential synergies and replication of activities</li> <li>- Analysis of existing IT solutions for innovative application in fighting wildlife crime and sturgeon trafficking</li> <li>- Collection and analysis of good practices and success stories for fighting wildlife crime</li> <li>- Consortium meeting of potential project partners for development of the new</li> </ul>

	<p>project</p> <ul style="list-style-type: none"> <li>- Meetings with stakeholders and target groups representatives</li> <li>- Project proposal development</li> <li>- Analysis of funding sources and recommendations for main project development</li> <li>- Roadmap and timeline for application with the main project proposal</li> </ul>
Project duration	12 months 0 days
Start date	01.09.2018
End date	31.08.2019

## Part 1. Project preparation

### The genesis of the project idea/project partnership

#### Description of the problem and why it needs to be solved

The European Union has recognized that wildlife trafficking is one of the most profitable types of organized crime in the world. Its high revenues are incentives for people to contribute to nature degradation and the near extinction of valuable species, such as sturgeons. Although the EU had adopted the EU Action Plan Against Wildlife Trafficking, implementation of existing legislation is still lacking and varying from country to country.

The area of the Lower Danube and the Black sea basin is both a place of origin and of transit of illegal sturgeon caviar and meat and includes both EU members and non-member states. This territory has some of the last remaining self-sustaining populations of wild sturgeons in Europe. At the same time, countries in the Black sea – Danube basin have been struggling with corruption and organized criminal networks.

#### Opportunities the region provides, reason for transnational cooperation

The region provides an opportunity for conservation and rehabilitation of the remaining populations of wild sturgeons in Europe. The complex issues of organized criminal networks, border control and limiting the influx of illegal wildlife products entering the EU market, cannot be addressed by the Danube and Black sea countries when working separately. A joint approach and better cooperation leads to more effective law enforcement and curbing of wildlife trafficking in general. For the main project, potential partners include national law enforcement authorities, NGOs and other relevant stakeholders from the countries in the region, including but not limited to Bulgaria, Romania, Serbia, Ukraine, Georgia. On an international level, World Sturgeon Conservation Society, U4 Anti-Corruption Resource Centre and Wildlife Justice Commission were also planned to be approached for partnership, input and feedback on the project concept.

Another benefit of the transnational cooperation is that a wide range of stakeholders and target groups – such as border polices, customs agencies, national judiciary associations/organizations, national and international law enforcement agencies and platforms – are involved through consultation and existing channels of communication which were established by related projects, such as Life for Danube Sturgeons. These groups also benefit from information exchange meetings.

### The preparation of the project

The Lead Partner have been working on similar topics for seven years, and this was the first time an opportunity for seed money was available. Since it was a smaller project, only the most important stakeholders were involved. The main goal of the project was to give an extensive overview on the illegal wildlife (and more particularly sturgeons) trafficking and trade and propose adequate solutions.

The decision about the roles and responsibilities of project partners was based on the needs of the project and the knowledge, professional experiences and capacities of the project partners. They found the project preparation process relatively easy, and it took little time to prepare the application.

## Part 2. Project implementation

### History of implementation

In September EAST project team was appointed by the Lead Partner. Orders and terms of references were prepared describing the specific role of each member. The internal communication was held through live and virtual meetings. For WP Management, TORs for four reports were prepared by the project partners and subcontractors were hired, following the financial guidelines. Contracts were prepared for the external experts and companies charged with the researches and the translation needed for the project deliverables.

WWF Bulgaria took the main part in the preparation of the reports describing the current situation of the wildlife trafficking in the region. The terms of references were prepared and the best experts were chosen to execute the reports. The contracts were prepared and their proper accomplishment was ensured. Under this WP, WWF Hungary/TRAFFIC provided its specialist knowledge/input as well as review of reports:

- illegal trade in caviar to assist with the study on chain mapping of illegal trade of sturgeon caviar and other sturgeon products;
- compilation of relevant legal gaps and analysis and literature review on the current state of implementation of legislation;
- compilation of relevant other projects and identification of potential synergies and replication of activities;
- analysis of IT solutions for innovative application in fighting wildlife crime and sturgeon trafficking.

WWF Hungary/TRAFFIC actively contributed to the compilation of the terms of references for the activities/consultants, providing advice on methodological approaches to be taken. Concerning the intensity of cooperation, WWF Hungary/TRAFFIC ensured continuous coordination with the lead partner, WWF Bulgaria as well as with Associate Partner, WWF Romania. WWF Hungary/TRAFFIC also contributed to delivering the reporting requirements under the project, printed and displayed the project poster and accomplished successfully the FLC procedure.

WWF BG managed the preparation of a report about the good practices in wildlife trafficking prevention and fighting. They also organised several consortium meetings and meetings with stakeholders. Potential partnerships and needs have been discussed with representatives from national institutions in Bulgaria in September 2018. In December a virtual meeting was held for presenting the possible funding sources and brainstorming on the concepts for the future project proposals. An intensive two-days meeting was organised in May 2019 with representatives of WWF BG, WWF RO, TRAFFIC. Consulting and support was also provided on behalf of WWF Central and Eastern Europe. The same potential partners also attended the next meeting later in May 2019 together with representatives of EUFJE. During these meetings the concepts for three project proposals were created. Two of them were later developed and submitted. WWF Hungary/TRAFFIC assisted by providing examples of good practices and success stories for fighting wildlife, for example through highlighting lessons learnt from tackling illegal trade in European Eels, by participating in the virtual consortium meeting, by participating in regular calls/teleconferences with various stakeholders, and by actively contributing to the development of the project proposals developed under this project and submitted to donors - both by actually writing sections of the proposal and by providing review comments on text drafted by others.

For example, for the development of the proposal to DG JUST, WWF Hungary/TRAFFIC provided information on existing training materials on illegal wildlife trade in the EU, including those targeting the judiciary, such as those by the Academy of European Law, as well as contacts to other stakeholders involved in training targeting the judiciary, such as the European Institute of Public Administration and the European Judicial Training Network.

WWF BG took the main role in preparation of detailed mapping in the possible funding sources. Numerous EU funding opportunities and private foundations were reviewed and an exhaustive data set was created. Based on donor requirements, previous experience and relevance of our strategic goals to the funding program, every possibility was researched and prioritized. Given the funding resources analysis three major donor opportunities were estimated as a priority for the consortium and studied furthermore i.e. Internal Security Fund – Police (ISF), Justice Programme (JUST) and LIFE programme. After the donors were chosen two project proposals were created and detailed roadmaps for the application process were prepared by the leading partner:

- The LIFE programme deadline for proposal was 19<sup>th</sup> June. There was a concept note developed, titled “Successful Wildlife Crime Prosecution in Europe” and submitted on time. The overall project objective is to discourage and thus ultimately reduce wildlife crime by increasing the number of successfully prosecuted offences. The project is 3 years long.
- The JUST programme deadline for proposal was 27<sup>th</sup> June. The consortium developed a project proposal, titled “Justice for Wildlife - Online Video Course on EU Legislation Concerning Wildlife Crime”. The project aims to increase the capacity of the judiciary (judges and prosecutors) in all EU

member states to successfully prosecute and adjudicate wildlife crime cases. The project is 2,5 years long. WWF Hungary/TRAFFIC assisted with the analysis of possible funding sources as well as with the recommendations for the concepts to be developed into funding proposals and also with the drawing up of roadmaps and timelines for the application processes.

### Implementation context

During the preparation of the application and the project preparation itself, they were in contact with the MA/JS and a policy officer of the DSP. While they received every support they needed and the relationship was smooth, the interviewee did not recall any difficulties that would have necessitated the stronger cooperation between project partners and EUSDR management bodies.

### Successful implementation aspects and major difficulties

The project started 6 months later than planned when the revised Application form was approved. Due to delays with the signing of the contract, some activities were started slightly later than originally planned, but the outputs were delivered on time.

Difficulties encountered in collecting reliable data, especially on caviar production and trade. This was partially addressed by conducting interviews with few producers. The sample size is small but indicative, and the statements and conclusions are not easily verifiable. As much as possible, the information will be cross-checked at a later stage of the project with available official sources such as CITES, TRAFFIC studies and other available literature. The necessary conclusions will be made based on the results.

A second issue is the availability of data in English and resources for translation. Partially this was overcome by the involvement and feedback of experts, part of the Life for Danube Sturgeons project. Some translation costs were included in EAST. Before the announcement of the ISF program, a project proposal was under preparation with clear structure and idea for collaboration. The concept was with focus on the process of investigation of wildlife crime cases and with the active involvement of the relative institutions. Although, the team was preparing for upcoming calls under the ISF program, after the annual programme was announced, there were found no appropriate calls to apply for. The EAST project team has explored other opportunities for financing such a project, however non were identified at this point. The interest for such a project by the target groups and relevant organizations and it is of high priority for WWF to develop further the concept and proposal once an opportune funding source becomes available.

Overall, their project was successful because they could include the relevant partners who had preliminary knowledge about the gaps they needed to fill in order to prepare for other project calls.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

#### Direct effects and impact of the project

The Seed Money Facility helped focus their resources on project development, which is a rare opportunity, they would not have been able to finance these kind of activities without it. They found that working on a LIFE project proposal is incredibly difficult, and the availability of SMF is low, meaning DTP was vital in achieving the results.

#### Project afterlife

They submitted two project proposals, one for the LIFE programme and one for the JUST programme. Although they did not manage to get financed in the latter, they are looking for other ways to fund the planned training project.

## CS 16: PA 09 People & Skills

### Part 0. Introduction

Project name (full title and/or acronym)	PA 09 People & Skills
Programme priority axis (number and title)	Priority 4
Programme priority specific objective	SO 4.2 Support to the governance and implementation of the EUSDR
Project Lead Partner organisation	Federal Ministry for Labour, Social Affairs and Consumer Protection
Other project partner organisations	L&R Social Research; KulturKontakt Austria; Ministry of Health, Labour and

	Social Protection
Other organisations involved in or associated to the project (if existing)	Federal Ministry for Education; Ministry of Education, Culture and Research
Amount of EU co-financing (in €)	299,984.07
Amount of public contribution (in €)	52,938.38
Amount of private contribution (in €)	-
Main objective(s) of the project	To ensure the implementation of a stable and effective governance system for EUSDR PA9
Project Specific Objectives	<ul style="list-style-type: none"> <li>- To enhance coordination between PA's actors and to encourage involvement of key stakeholders in the PA activities.</li> <li>- To facilitate the on-going and development of future projects initiatives for the PA, specifically project generation, partner(s) search and identification of funding opportunities for the PA's stakeholders</li> <li>- To support communication and growing visibility of the PA and dissemination of PA's achievement.</li> </ul>
Project main outputs	<ul style="list-style-type: none"> <li>- 14.00 documented learning interactions</li> <li>- 1.00 policy measures undertaken</li> </ul>
Key activities implementing the project	<ul style="list-style-type: none"> <li>- Management Activities</li> <li>- Steering Group Meetings</li> <li>- Dissemination and Communication</li> <li>- Policy Development of the PA</li> <li>- Preparation Workshops</li> <li>- Study/Report</li> <li>- Elaboration of the policy recommendations</li> <li>- Cooperation and Coordination of the PA</li> <li>- Implementing of Stakeholder Conferences</li> <li>- Implementing of Thematic Workshops/Working Groups</li> </ul>
Project duration	36 months 0 days
Start date	01.01.2017
End date	31.12.2019

## Part 1. Project preparation

### The genesis of the project idea/project partnership

In the last five years before the Danube Transnational Programme has begun, the activities of PAC9 have already contributed to overcome the challenges of Priority 9 of EUSDR such as deepening the ownership and involvement of Danube Region Countries and relevant stakeholders, raising the awareness about EUSDR, and strengthening the know-how on how to use relevant EU-funds. Thus, the application for the PAC project came naturally.

### The preparation of the project

During the project preparation phase, all partners were involved in the development: they defined their future activities in meetings, made common decisions about the responsibilities for the implementation of the activities, and worked together on the budget. They defined the responsible partner for each activity, but agreed that all activities will be coordinated by all partners. This means that in each organization, at least one person was responsible for the implementation of the defined activities and there was a continuous

coordination between the involved persons (via meetings, e-mail, phone). Regarding the decision on their key activities, they saw it as somewhat predefined, because they were aware of the outputs the strategy is meant to deliver.

The main challenge during project preparation was the translation of their strategic approach to concrete activities. Since most of the time, they are working in a collaborative way, the creation of working packages and delegating them to one partner was not always a realistic option, but in the end, they succeeded in harmonizing the two approaches. Another difficulty was the disparity of experience between the project partners in creating such applications, but they were also able to overcome these challenges through their collaborative way of working.

## Part 2. Project implementation

### History of implementation

The project defined the following specific objectives:

- To enhance coordination between PA's actors and to encourage involvement of key stakeholders in the PA activities
- To facilitate the ongoing projects and the development of future project initiatives for the PA, specifically project generation, partner search and identification of funding opportunities for the PA's stakeholders
- To support the communication and growing visibility of the PA and the dissemination of the PA's achievements

In the first period of project implementation, Priority Area 9 achieved essential progress. They organized two Steering Group meetings, one in Vienna, and one in Chisinau. They organized the International Stakeholder Conference in close cooperation with all partners and brought together the relevant stakeholders to discuss about the future of work and the effects of automation and digitalization on the labour market. They also started to develop the Danube Region Monitor to increase the evidence-base for Danube Region policy-making. Two thematic workshops were organized: one to create a network of ESF Managing Authorities in the Danube Region, and one to implement a Roma Participation Partnership. PA9 also co-organized an Erasmus+ eTwinning conference which aimed at increasing the transnational cooperation among teachers.

During the second period of project implementation, two Steering Group Meetings were organized in close cooperation with all involved partners. The meetings were successful with regard to the knowledge exchange, the development of new projects (esp. within the framework of the 3rd call of the DTP), the revision of the Action Plan, the fostering of cooperation and the adoption of the work plan. One stakeholder conference was also organized to bring together relevant stakeholders for the revision of the Action Plan. PA9 published a folder of the relevant projects. In this period, 5 thematic workshops were organized: a network meeting of ESF Managing Authorities in the Danube Region, a conference on "Learning, teaching, exchanging – school cooperation in the Danube Region", a workshop on the topic "Early School leaving and NEETs across the Danube Region – towards new regional perspectives", a workshop on "Empowering people with disabilities through employment support" and a workshop called "Creating a more efficient labour market in the Danube region". PA9 project partners participated at EUSDR-Meetings on national as well as on EUSDR-level.

In the third period of project implementation, they organized two Steering Group Meetings and one stakeholder conference, the topic of which was building partnerships for future skills. One workshop was held to discuss the results of the study "Danube Region Monitor", and the study with policy recommendations was also published in this period. PA9 also published a Folder, and held the 5<sup>th</sup> meeting of the ESF Managing Authorities in the Danube Region. They organized two thematic workshops, one called "Solving future skills challenges in the Danube region", and one called "School cooperation in the Danube Region: Experiences and future actions". Finally, they continued to participate in EUSDR-Meetings.

### Implementation context

The implementation of the project was smooth, the project partners had sufficient capacities themselves to carry out the planned activities without the need for major help or intervention from the programme management bodies. Nevertheless, they received the necessary support during the application phase. Regarding the Danube Strategy Point, the necessary flow of information exists between the two bodies through mutual attendance of meetings, and the PAC gave input, feedback and suggestions for the topics that the DSP was working on at the strategic level. Their relationship was not intense with the pillar officer, but they had a good working relationship with the Vienna office.

## Successful implementation aspects and major difficulties

Generally speaking, the implementation of project activities went smoothly, cooperation between the project partners was successful. Several factors facilitated the successful project implementation, primarily the long-term experience and dedication of project partners, and the effective distribution of responsibilities and activities.

The main problem within the project activities was the delay of the contract, because of the involvement of an ENI-Project Partner and the necessary adoption of the Programme Documents. Because of the delay, organisational changes in the ministries in Moldova and elections in Austria some activities (especially dissemination activities) were postponed to 2018. After the establishment of FLC, Moldova could also organize a conference, thus, they think that the inclusion of ENI-countries also proved to be successful.

### Part 3. Project's achievements, impacts, its contribution to programme specific objectives and afterlife

#### The general progress of the project area in the domain targeted by the relevant specific objective

The project was successful in reaching its specific objectives. The first objective was enhancing coordination between PA's actors and encouraging involvement of key stakeholders in the PA activities. Over the whole project period all planned Steering Group Meetings, the Stakeholder Conference and the Thematic Workshops were organized, and resulted in strengthening the communication and cooperation of involved stakeholders.

The second objective was to facilitate the ongoing projects and the development of future project initiatives for the PA, specifically project generation, partner search and the identification of funding opportunities for the PA's stakeholders. PA9 provided information for initiating new projects via website and e-mail, and organized thematic workshops and stakeholder conferences.

The third objective was to support communication and grow the visibility of the PA, as well as the dissemination of PA's achievements. To achieve this objective, the website was continuously updated to raise public awareness and to inform the target groups of PA9 about ongoing activities and developments. Furthermore, the relevant stakeholders were informed via newsletter. The planned roll-up and the folder were produced within the reporting period.

#### Policy development and project generation

The objective of Work Package 3, the Cooperation and Coordination of the Priority Axis, was to bring together the relevant stakeholders to intensify the know-how exchange in the Danube Region and to initialize new project ideas. Therefore, stakeholder conferences and thematic workshops were organized in close coordination with all involved partners to enhance the cooperation. For example, ERDF PP1 organized the 5th Network Meeting for the ESF MAs in the Danube Region on 8 and 9 October in Sofia, in close cooperation with PA10. The seminar aims at identifying policy areas and necessary factors for successful transnational cooperation in the European Social Fund Plus 2021-2027 in the Danube Region. Another good example was the stakeholder conference in 2018 titled "The Future of Priority Area 9 Investing in People and Skills in the Danube Region", where nearly 100 representatives from European institutions, Ministries of Education, Labour and Social Affairs, stakeholders in education, training and employment and experts and researchers attended to share good practices and to exchange views on where further action and innovative projects are needed. This also gave feedback regarding the future of PA9 whether they should continue with the current framework or it is time to think about new topics.

The "Danube Region Monitor", a study which documents the development of indicators related to PA9's targets, was finalised in 2019, following one final workshop to discuss the results and develop recommendations. PA9 built upon a network of relevant stakeholders (especially policy makers and statistics-experts) from EUSDR Countries by the support of the Steering Group Members. The activities around the workshop included the invitation management, drafting of the agenda, selection and invitation of speakers and participants, organization of a venue, moderation, reporting etc. Within this workshop relevant results of the chosen indicators in the fields of education and labour market were discussed. The contractor finished the draft of the report during the summer months of 2019 and ERDF PP1 and ERDF PP2 collected the corrections and feedback from all partners. The final report was finished in autumn 2019 and published on the website of PA9. The analysis conducted in this study follows the targets of PA9 and provides related conclusions and policy recommendations. The interviews also mentioned that policy inputs are generated in other ways as well. They mentioned an example from Slovakia, where they took over a guideline for socio-economic enterprises and used it as an input for their regulation.



Project partners also found the Seed Money Facility to be a good instrument for supporting the development of smaller projects. They brought the information about the Seed Money Facility to relevant stakeholders and supported them in case of questions. Their only concern was about the timing, namely the fact that PA9 had to give a confirmation whether a project should potentially be supported without knowing the finalized version of the project. They thought that this approach could lead to some mismatches or lower-quality projects later on.

### **Direct effects and impact of the project**

Their project outputs contributed to Specific Objective 4.2 by enhancing the cooperation among both project partners and relevant stakeholders, and building capacity for a well-governed Danube region. DTP was essential from a financial point of view and as a framework as well, because making the regular exchange of information and networking possible is important for the success of the project. The project partners thought that it was a learning experience for them as well, and they found the 3-years long project length to be sufficient.

### **Project afterlife**

The project was successful in the inclusion of ENI-countries, both on the project partner level and on the level of relevant stakeholders which means that the network of PA9 was enlarged as well. Most of the project partners already had existing working relationships before the start of the project and they continued to work on the topics after the project officially ended.

# Annex IV: Sources

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