



Interreg



EUROPEAN UNION

Danube Transnational Programme

DanubePeerChains



Dear,

Welcome to Handbook "DanubePeerChains Toolbox".

In the Handbook, the key achievements, and outputs of DanubePeerChains are bundled and made available to stakeholders and the general public.

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1. General information about the project

The main objective of DanubePeerChains, therefore, is to empower Labour market Support Organizations (LSO) and Business Support Organizations (BSO) together with their target groups and further local high-potentials (entrepreneurs, SME employees, digitalization specialists) in a joint capacity building and training approach to upskill to high-qualified jobs in the Danube region and to gain sustainable recognition as PEER-level collaboration partners in innovative transnational value chains.

The partnership comprises 14 partners from 9 Danube countries (6 ERDF, 3 IPA) and 5 ASPs (+ENI) in a well-balanced mix of business and labour support organizations, technology transfer centers, vocational/educational institutions, and policy actors. Knowledge will be CAPITALIZED from DanuBioValNet, SmartFactoryHub, DigiTrans (all DTP), InnoPeer AVM (Interreg CE) and S3-4Alp-Clusters (Alpine Space) and UPGRADED with VALUE CHAIN aspects 1) to identify high-potential cooperation fields in digitalized value chains for project target sectors (metal industry, machine building, engineering, electro industry, electronics/robotics, ICT), 2) to introduce this innovative approach in collaborative capacity building measures for LSOs/BSOs, and 3) to upgrade existing technological and business model oriented trainings by integrating the value chain perspective and adapting them for the qualification demand of Danube area target groups. Regional Action Plans and Strategic Recommendations provide contributions to EUSDR PA8, PA9 and national S3 strategies.

	Start date	01-07-2020	31-12-2022	End date	
	Budget in Euro	1.784.455 €			
	Call number	Call 3			
	Priority	Innovative and socially responsible Danube region			
	Specific objective	Increase competences for business and social innovation			

2. Importance of project activities for the Danube region

Challenges caused by digital transformation in the industry and related changes in business models and value chains have tremendous impact on the Danube region countries, particularly on the regional labour markets and the development of human resource qualifications. While in the advanced Danube countries a lack of digital competences threatens innovative SMEs and start-ups by limiting their chances for scale-up and internationalization, in less developed countries the need for catching up in digital qualification of work force and their employing companies is urgent and crucial for economic development.

DanubePeerChains project addresses the challenges of the Danube region partner countries in the qualification of digital upskilled labour force to ensure cross-regional and transnational integration of regional companies by implementing a versatile project approach:

- The cooperation of labour market support organizations with business support organizations are substantially intensified through joint capacity building measures and introduction of innovative methods for the identification of regionally specific labour-market relevant fields with high potential for internationalization and value chain integration based on digital transformation.
- For this purpose, the partnership jointly adapted and exploited already piloted innovative methodologies from reference Interreg projects for the identification of cross-sectoral and transnational high-potential cooperation fields within and at the intersection between the project target sectors.
- Based on the identified regional demand in each partner country and capitalizing on the results of former or ongoing Interreg DTP and other projects, targeted upskilling measures in key dimensions of digital transformation knowledge are implemented for SMEs, their employees and managers, entrepreneurs, and further regional digitalization specialists.
- This DanubePeerChains approach are piloted in all partner regions, including continuous assessment loops to integrate participant feedback.
- At all strategically relevant stages of project implementation, the partnership held consultations with the high-ranked members of the project Advisory board as well as representatives of the relevant EUSDR priority areas (PA8, PA9) to ensure strategic alignment of DanubePeerChains results with EUSDR strategies and the S3 strategies of the partner countries.

3. Project main outputs

In order to achieve the set of the goals within the DanubePeerChains project, a well-balanced mix of business and labor support organizations, technology transfer centers and policy actors, as well as vocational/educational institutions were implementing a set of various activities in order to reach defined project outputs, such as are:

- ✓ Capacity building methodology for Labour support organizations and Business support organizations.
- ✓ Mapping of competences in key knowledge fields of digitalization.
- ✓ DanubePeerChains strategy and Policy recommendations as contribution to EUSDR / S3 strategies.
- ✓ Regional Action Plan document for each partner region.
- ✓ Training programme to qualify entrepreneurs, SME employees.
- ✓ Digital Transfer Toolbox.
- ✓ Transnational benchmark analysis of labour market incl. identification of qualification and support demand.
- ✓ Profiles of selected target value chains in digitalization.
- ✓ Summary report on implementation of trainings for entrepreneurs and SME employees in partner region.
- ✓ Summary report on Implementation of LSO/BSO workshops in partner regions.
- ✓ Summary report on Transnational pilot projects on transformative activities defined.

4. T1 Framework conditions for digital value chains - Chamber of Commerce and Industry of Slovenia

By mapping regional and transnational competences relevant for the digital value-chain creation, the WP T1 provided new insights into the existing knowledge on one hand, into the thematic strengths and weaknesses and corresponding demands of the transnational know-how and knowledge transfer on the other, and all together it addresses the needs for upskilling of regional companies and their employees, thus setting up the framework for the digital value-chain creation in the Danube region namely establishing structures to contribute to the facilitation of cross-border capacity building and cooperation through facilities such as cooperation platforms, knowledge transfer, and project development for cross-border public services (PA10).

Within the *Thematic Work Package Framework conditions for digital value chains*, the following conclusions have been drawn - digital transformation is now also impacting the strategic level of business processes. Not only agile management methods are becoming more commonly applied also in SMEs, digital transformation has had an impact on the establishment of new networks and cooperation, including the level of openness for international engagement. Furthermore, readiness for change, agility of employees, transfer activities (flexible transition of experts between industry and institutions of knowledge) and level of collaboration with the industry have been assessed as the most important for the future (next 3-5 years).

The mapping and the analysis of the three transnational value chains (mechatronics & electronics and automation, mechanical engineering, wood processing) provided a visionary goal for the whole project and regions involved guiding all following project activities, particularly the development and piloting of a value-chain oriented capacity building and training programme, as well as development of action plans for establishing labour-market relevant cooperation links. The performed analysis has identified clusters as relevant regional players and stakeholders as well as the existing and necessary support instruments and the trade needs and threats.

5. T2 Toolbox for capacity building of L/BSO and specialists/entrepreneurs trainings - Business Upper Austria

Thematic Work Package Toolbox for capacity building of L/BSO and specialists/entrepreneurs trainings focused on the development of a comprehensive capacity building and training toolbox for Labour market support organizations (LSO), Business support organizations (BSO) and SME employees and entrepreneurs, respectively.

DEVELOPMENT OF DANUBEPEERCHAINS CAPACITY BUILDING METHODOLOGY FOR BSO+LSO

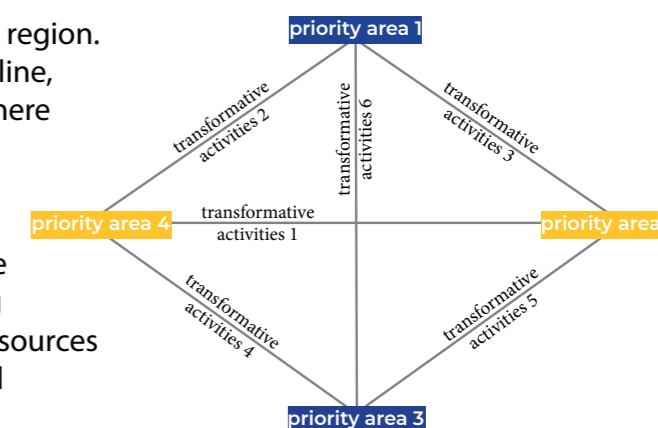
Development of the so-called Danube Diamond Methodology at the DanubePeerChains partnership level, build on the Synergy Diamond, was the first activity within the *Thematic Work Package Toolbox for capacity building of L/BSO and specialists/entrepreneurs trainings*. The Synergy Diamond is a tool that facilitates the identification of transformative activities. It can be used in a regional as well as in a cross-regional context. The tool is based on the presumption that transformative activities mainly emerge between present priority areas and through increasing industrial convergence. By placing existing priority areas (e.g. outlined in the Smart Specialisation Strategy) on the corners of the Synergy Diamond, Transformative Activities can be identified along the linkages.

The *Diamond* is a visualization tool to facilitate the identification of Transformative Activities, based on the following structure:

- The base shape is a rhombus.
- Each corner represents a priority area of the region.
- The corners are linked with each other by a line, symbolizing the linkages between them, where Transformative Activities can emerge.

The *Diamond* tool supports regions:

- to analyze their areas of specialization in the context of Transformative Activities (existing potentials, capacities and entrepreneurial resources vs. new technologies, challenges, trends and markets).
- to identify opportunities for structural transformation: e.g. new combinations and synergies.
- better target cross-regional collaboration that can create synergies.



DEVELOPMENT OF THE DANUBEPEERCHAINS TRAINING PROGRAMME TO QUALIFY DIGITALISATION SPECIALISTS FROM SME / ENTREPRENEURS

The goal was to develop a training programme for entrepreneurs and SME employees with the aim to enhance their know-how in digitalization topics and to become digitalization specialists.

The online trainings (EN language) that were developed within this project had a clear focus on the value chain aspect in different branches and economies.

The trainings are following:

- Sustainability challenges and opportunities in the wood and furniture industry



- Enhancing competitiveness through transnational value chains



- The importance of digital lean and augmented reality technology for a successful digital transition of businesses and education



- Additive manufacturing



TRAINING EVALUATION AND IMPACT ASSESSMENT GUIDELINE

To improve the trainings for SME employees and entrepreneurs, as well as the BSO+LSO capacity building, an assessment was performed, which was developed by the task leader, University of Belgrade. It was decided to choose an approach that combines an academically relevant but also practically feasible set of evaluation questions for the assessment.

SUSTAINABLE TRANSFER TOOLBOX

In the end of this project, the developed tools and measures were transformed into a final ready-for rollout version.

Based on this upgraded training programme, a guideline on how to implement these trainings by SME trainers outside of the project partnership, was developed. Similarly, the developed capacity building programme with its Danube Diamond methodology was revised according to the findings and feedback during piloting and the related assessment of quality and impact and upgraded to a final transfer package that is ready for use by BSOs and LSOs beyond partnership.

For sustainable use on a more strategic level of innovation ecosystem actors with the aim to contribute to EUSDR as well as RIS3, a TRANSFER TOOLBOX was created, consisting of:

- training methodology to qualify digitalization specialists from SME/industry;
- DanubePeerChains Diamond methodology for BSO+LSO;
- transnational value chain oriented transformative activities.

6. T3 Pilot Action Implementation - Zagreb Innovation Centre Ltd.

Thematic Work Package Pilot Action Implementation aimed at testing the capacity building and training methodologies with local target groups from all partner regions and share learnings at project partners level for improving the usability and impact of the Digital Transfer Toolbox.

Labour market and business support organisations as well as sectoral agencies were involved in the peer-level capacity building activities in each participating region/country. Together with representatives from “higher educations and research” this group was involved in the definition of transformative value-chain oriented projects, which bridges the gap from intermediaries to well-established companies and entrepreneurs. Company employees and entrepreneurs are involved in the upskilling pilots (in presence and online) to generate digitalisation specialists. Additionally, unemployed persons are encouraged to attend the trainings, in order to upskill them, and better integrate them into the labour market, which shall contribute to the decrease of skilled labour.

PILOT ACTION IMPLEMENTATION OF DANUBE DIAMOND FOR LSOS + BSOS

Regional capacity building workshops with labour and business support organisations have been implemented in all partner regions facilitated by local PPs using the Danube Diamond methodology to enable LSO/BSO employees and other multipliers for identifying potential fields of value-chains cooperation. These workshops provided an opportunity to develop new activities in joint learning interactions to strengthen cooperation between regional LSOs and BSOs.

The elaboration of these transnational pilot projects bridges the gap between LSO/BSO on the one hand and companies on the other hand, by joining forces for improving transnational cooperation and thus fostering the economic impact.

PILOT ACTION IMPLEMENTATION FOR DIGITALIZATION SPECIALISTS AND ENTREPRENEURS

Matching of training needs and partner training expertise, based on the results of the analysis developed in the work package Framework conditions for digital value chains, the partnership elaborated the regional qualification demands as well as the necessity of transnational cooperation to provide the know-how in technology, organizational management and digital business models on the supply side.

In practice, this deliverable supported the exchange of vocational experts between project partners with advanced knowledge and capacities in the knowledge fields of technology, organizational management, and digital business models and those project partners the lack of knowledge and capacities, thus emphasizing transnational character of specialist trainings. It also revealed how

countries/regions can benefit from the know-how of experts in a neighboring country and invite these experts to the training sessions or other events.

LOCAL PILOT TRAININGS TO QUALIFY DIGITALIZATION SPECIALISTS/ ENTREPRENEURS

Through 10 partners region, the 20 local trainings for digitalization specialists were implemented. The upskilling approach of digitalization specialists is split into local trainings for company employees and entrepreneurs, adapted to the regional needs according to analysis results. The participants have been upskilled in the fields of technology, organizational management and digital business models in the value-chain context.



7. T4 Transnational Strategy Roadmap and Regional Action Plans – ConPlusUltra

Within thematic work package Transnational Strategy Roadmap and Regional Action Plans, the main activities, besides the involving high-ranked experts from academia and industry, business support organizations and labour market institutions, i.e. establishment of Advisory Board, were:

SYNOPSIS OF RIS STRATEGIES IN THE PROJECT REGION

As a basis for the strategic project work the partnership prepared an overview of the strategic framework related to the advancement of the regional labour market institutions for the ongoing digital transformation and the upskilling of SMEs for enhanced digital value chain cooperation. As a final result the partnership developed a set of transnational recommendations in the final strategy document.

ACTION PLANNING AT PARTNER REGION LEVEL

Within DanubePeerChains, several analyses were conducted to understand the labour market characteristics and needs of the different sectors in addition to the higher strategic priorities identified by decision-makers. These analyses form the basis of Regional Action Plans, which will define concrete support measures to utilize each partner region's respective value chain potential. This potential is seized by proposing actions, which allows for the upgrading of qualifications of regional companies through the upskilling of staff to boost the digital transformation of regional economies. Altogether, the planned actions supported the integration SMEs into regional and transnational digital value chains. During and beyond project implementation, the Action Plans is shared with regional policymakers and relevant stakeholders as a basis for the discussion and implementation of targeted policy measures in the partner countries and across the Danube region.

8. Useful links

- The Digital Economy and Society Index (DESI)
<https://digital-strategy.ec.europa.eu/en/policies/desi>
- OECD Economic Surveys
<https://www.oecd.org/economy/surveys/>
- Smart Specialization Platform. Strategies for research and innovation-driven growth
<https://s3platform.jrc.ec.europa.eu/>
- Strengthening Strategic Value Chains for a future-ready EU Industry: report of the Strategic Forum for Important Projects of Common European Interest
<https://ec.europa.eu/docsroom/documents/37824>
- The final transnational strategy recommendations and the regional action plans of the partner Danube regions
<https://www.interreg-danube.eu/approved-projects/danubeppeerchains/outputs>



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