

## TOWARDS AN URBAN REGENERATION MODEL DRIVEN BY CREATIVE INDUSTRIES AND SMART SPECIALIZATION STRATEGIES IN THE DANUBE REGION

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**Rezumat.** Prezenta lucrare analizează contribuția proiectului RESTART\_4Danube la regenerarea urbană din regiunea Dunării, prin consolidarea cooperării și coordonării transnaționale în Industriile Creative și Culturale (ICC) între țările participante. Din această perspectivă, proiectul RESTART\_4Danube are un obiectiv dublu: (i) să întărească legăturile dintre întreprinderi, centre de cercetare și dezvoltare, universități și societatea civilă și (ii) să dezvolte un nou model de regenerare urbană bazat pe ICC, care să fie integrate în strategiile regionale de specializare inteligentă (S3) și să poată oferi dovezi solide pentru îmbunătățirea politicilor publice pentru cercetare, inovare și dezvoltare regională, în sensul unei politici de inovare transformatoare, sistemice, cu un impact care depășește ICC și ecosistemul de cercetare și inovare, pentru ca să producă efecte mai ample în economie, acestea devenind mai sustenabile, inclusiv din punct de vedere social, conform noii orientări a strategiilor de specializare inteligentă pentru o creștere durabilă și incluzivă (S4+).

**Abstract.** This paper analyzes the contribution of the project RESTART\_4Danube to urban regeneration in the Danube Region by enhancing transnational cooperation and coordination in Creative and Cultural Industries (CCIs) among the participating countries. From this perspective, the RESTART\_4Danube project has a two-fold objective: (i) to strengthen the links between enterprises, research and development centers, universities and civil society, and (ii) to develop a new CCI-driven Urban Regeneration model that is rooted in regional Smart Specialization Strategies (S3) and can provide solid evidence for improving the framework conditions and public policies for research, innovation and regional development, in the sense of a transformative, systemic innovation policy, with an impact that goes beyond the CCIs and research & innovation eco-system, in order to produce broader effects in the economy, becoming more socially sustainable, according to the new orientation of smart specialization strategies for sustainable and inclusive growth (S4+).

**Keywords:** Creative Industries, Urban regeneration, Local action plans, Minimum viable result, S4+

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## 1. Introduction

European cities are increasingly aware that Urban Regeneration (UR) strategies should encompass an integrated approach tackling economic, social & environmental aspects, by facing challenges to develop a culture that generates public/private synergies in order to promote SMEs & stimulate creative urban communities in boosting existing economic sectors by fully exploiting the growth potential offered by creativity.

In this respect, project RESTART\_4Danube (RESTART\_4Danube, 2021) addresses the insufficient transnational cooperation & coordination on institutional level combined with the limited innovation capacities of SMEs. In this context, the Danube Region (DR) exhibits low number of patent applications, poor Intellectual Property protection, weak technology transfer activities, limited access to finance capability, but also limited cooperation of SMEs, research organizations, technology parks, incubators, clusters, public organizations & civil society. All these elements hinder the full deployment of the Research & Innovation (R&I) sector in the region, which is a key objective of the Danube Transnational Program (DTP). This is why the project will promote business investment in R&I - focusing on the Creative & Cultural Industries (CCIs) sector, due to its huge growth potential (e.g., this sector creates 5.3% of the EU's total gross value added - GVA).

The project outputs are queued to strengthen the links between enterprises, R&D centers, Higher Education & Research (HER) organizations, public sector and civil society to improve framework conditions & policy instruments supporting the regional & local smart specialization strategies (S3) for a new model of urban regeneration involving CCIs. Through a place-based and quadruple helix approach in the development of LAPs & creative urban service hubs, the project will contribute to improve cross-linkages & to optimize internal synergies between CCIs, R&D & public sector in UR from DR. The pilot actions will strengthen the service, social & eco-innovation capacities of SMEs in the CCIs sector, while supporting the regional S3. RESTART\_4Danube is based on the idea that transnational collaboration between SMEs, R&D & cities – via e.g. study visits, cross-national exchange with LAPs tandems, transnational service offers and requests – is necessary to disseminate good practices, improve local/regional innovation policies, stimulate new business models and thereby spur a strong structural change.

The project's main objective is to improve framework conditions & policy instruments supporting the regional & local smart specialization strategies (S3) for a new model of UR involving CCIs, addressing the untapped potential of CCIs & the limited cooperation of SMEs, HER organizations, technology parks,

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incubators, clusters & civil society. By generating several studies and thematic papers, the project partnership is addressing improvement of policy dialogue & public governance in Innovation & Technology Transfer, in order to have a stronger orientation towards business-to-business markets. The project will address insufficient capability of SMEs to adapt to innovation by supporting CCIs via implementation of 5 Local Action Plans (LAPs), complemented by innovative & place-based public policies in 5 cities involving quadruple helix actors & local stakeholders.

One innovative aspect of the project methodology lies in the mentioned partner collaboration for design and implementation of LAPs in “tandems”, by involving, each of them, i.e. one local or regional public authority & another local partner (other type of organization). In this respect, the five LAPs that are designed and implemented at pilot level in five middle-sized cities from Romania, Croatia, Slovenia, Hungary and Bulgaria, highlighting particular local aspects and specific challenges, but having also a transnational (in Danube region) dimension, especially as a result of participation of several SMEs covering international markets and experts / stakeholders from different countries participating in different events, e.g. workshops and study visits, organized in the partner cities implicated in the project. As a natural result, the exchange of good practices and the debates, taking place in the mentioned events, will facilitate the emergence of new ideas for collaboration and will stimulate innovation in the field of business models for UR in the DR.

More concretely, the Romanian municipality of Craiova will develop new spaces for experimentation, innovation and entrepreneurship in the CCIs sector, creating opportunities for artists & firms to meet in cultural & creative quarters, while also taking into account challenges associated to environmental protection issues.

The Croatian city of Rijeka will develop a sustainable regeneration of industrial buildings as a key factor for creating a more sustainable city in social, environmental & economic components, with lower costs compared to new buildings, but taking care of the energy efficiency and zero-emissions strategic targets included in EU Climate Action & Green Deal.

For a modern transit-oriented development (TOD), Maribor municipality in Slovenia will develop the modern concept of urban progress for the roll-out of walkable, mixed-use, sustainable communities around rail stations, by creating places in which people would love to live, work and play.

With a great care for traditions, refurbished heritage buildings from Hungarian Vas County will adapt the classic use of historical buildings to modern concepts of new creative hotspots & places of networking & communication among artists

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and creative entrepreneurs, very much technologically based on the digital transformation process.

Finally, in Bulgaria, Green Urban Regeneration in Vratsa will be focused on transforming small scale urban parks, or other natural green areas, into cultural and creative spaces. Today, focusing more on digital technologies (e.g. cloud and edge computing, advanced artificial intelligence, Internet of Things (IoT), machine learning), some of traditional CCIs, such as media, entertainment, telecoms, could be reconfigured, in combination with some new / modern financial services, and, in this new competitive landscape, they will match the challenges for adoption of some new organizational forms and new business models in the Danube region UR process.

Moreover, all levels of governance (local, regional, national & European) are covered and will be brought together in different activities. The project will therefore be able to count on a strong public involvement, which will ensure the project's capacity to improve framework conditions & policy instruments. Though the LAPs will reflect local specificities, assets & challenges, they will all have also a strong transnational dimension. The exchange of good practices & discussion of challenges will foster news ideas & cooperation & allow access to new business models for UR.

Another innovative aspect of the project consists is the entwinement between the DTP & other funding instruments. The project will mainly serve as incubator of innovative ideas, whereas the full implementation will depend on structural funds or other future financing programs. The planned study visits & implementation of the concept of follower cities, replicating parts of the above mentioned LAPs will allow testing the implementation & transfer of practical ideas stemming from regional social communities.

The project envisages the attaining of three major specific objectives, presented, in a synthetic manner, in the project logic diagram (see Figure 1), revealing the global concept of RESTART\_4Danube approach. Detailing some information about the three envisaged specific objectives, we reveal some of the activities that will support their planned realization and the assumed outputs of the project.

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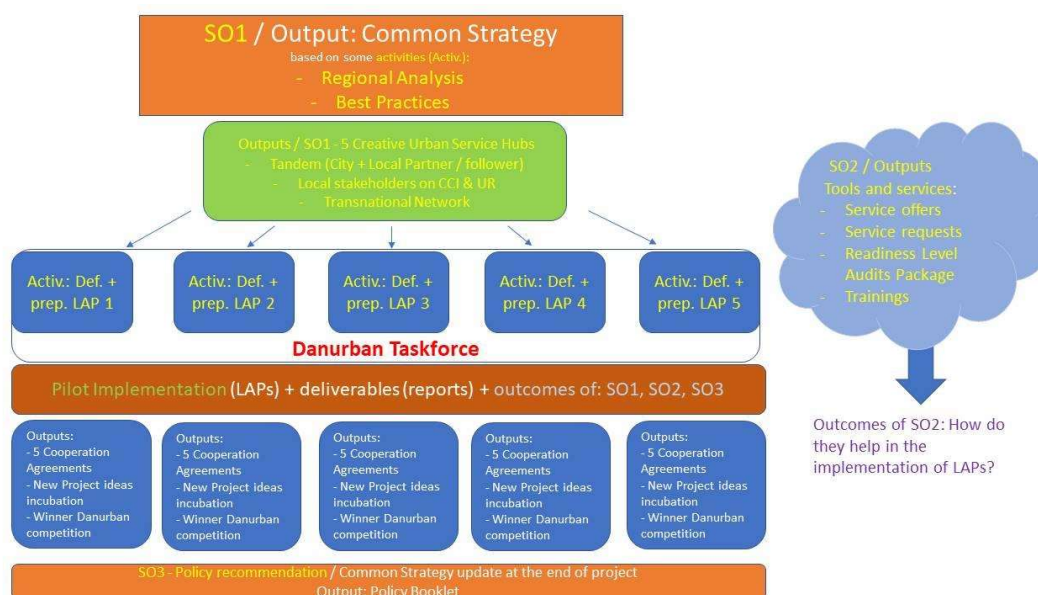


Fig. 1. RESTART\_4Danube project logic diagram

So, the first Specific Objective (SO1), named “Develop a common strategy to support creative and innovative urban developments to address societal challenges” targets the elaboration of a common strategy on creative UR for the DR, following a smart, inclusive and sustainable approach, and will be practically applied in the framework of 5 LAPs. The strategy will be based on preliminary research including one baseline study, one compendium of good practices, three urban green papers & one Urban Renaissance Agenda. In addition, LAP roadmaps will effectively signpost the common strategy and serve as basis for the development of the 5 LAPs in line with regional & local smart specialization strategies. In the first work package we will map CCIs in partner countries and engage a policy & stakeholder dialogue that will lead to a common strategy on innovative UR in the DR; research and mapping activities will lead to one smart guide for cities to develop LAPs. At the end of the project, a brochure on project implementation will review the activities and results of the project while the lessons learned from the implementation of the LAPs will lead to the formulation of concrete policy recommendations, destined to support innovative SMEs, being active in the field of CCIs, to be more strongly orientated towards B2B markets, acting as a horizontal enabler for bringing added-value in urban communities.

In the frame of the second Specific Objective (SO2), we will develop tools and services (including service offers – SOs, service requests – SRs, readiness level audits – RLAs), we will conclude 25 cooperation agreements, as well as the

elaboration of one innovative training toolkit based on the concrete needs of the 5 LAPs, in order to facilitate and boost transnational collaboration and stimulate cross-linkages development between CCIs, companies, R&D organizations & public authorities. In the second work package the elaboration & implementation of the LAPs will bring quadruple helix actors together at a local and transnational level. For each above mentioned tool (SO, SR, RLA), a methodology will be developed. 15 SOs, 10 SRs & 60 RLAs will be performed. The training toolkit will have two modules: one on urban innovation management and one on creativity and urban governance. Each module will have a training handbook and three training sessions will be realized, for which a report will be drafted.

Finally, in the frame of the third Specific Objective (SO3), named “Support policy dialogue and good practice exchange in creative UR” it will be established a transnational partnership network, with the support of the results obtained following the organization of two policy dialogue workshops and other two Danurban taskforce meetings. Also, a number of 5 study visits & two city summits will encourage the process of peer-to-peer exchanges & assessments. In addition, all PPs will engage in capitalization activities with like-minded actors, organizations & current EU-funded projects (e.g. CINEMA, RegionArts, CRE:HUB, Creative Spirits, Women in Business) to foster synergies in the partner countries, in the DR and beyond. It will also capitalize results from relevant previous projects (Creative Clusters, Creative SpIN) & develop synergies with ongoing networks (ECHN, European creative alliances industry–ECIA) & instruments (Urban Innovative Actions–UIA). Capitalization activities will go beyond inviting other projects representatives during project events to develop common activities & deliverables such as a report. The project will also ensure capitalization of the implication of COVID - 19 in CCIs for UR. The policy dialogue will support consistency, synergy & integrated multilevel governance in UR through vertical (policy dialogue workshops, capitalization events) & horizontal coordination (two city summits, 5 study visits) between decision-making bodies at the municipal, regional, national & transnational level & between sector-related policies. Three major dissemination events, 9 policivil workshops & one Creative Danurban competition will provide opportunity for exchanging best practices between all relevant stakeholders.

Based on the presentation of the main characteristics of RESTART\_4Danube project, the present paper deals with the analyze of the modalities in which it responds to some new orientations, i.e. co-creation of knowledge for innovation in CCIs, mission and challenges oriented innovation policies and regional innovation system in the frame of place-based innovation for sustainability and how hybrid management procedures are applied for the best implementation of the project.

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## **2. Co-creation of knowledge for innovation in complex project. Case study: RESTART\_4Danube project**

Many collaborative projects could be assimilated with complex modalities and sophisticated ways of cooperation comprising fundamentals of co-creation process, where several stakeholders, having different background competences, brings significant contributions (Ruoslahti, 2020). Consequently, in innovation oriented projects, where the facilitation of mutual knowledge acquiring and reaching a co-evolution process, partners should capitalize some challenges, including diverse and unexpected inputs, in order to co-create deliverables and outputs, often involving partners with “variable geometry” of activities (e.g. companies, higher education and research organizations, public authorities, NGOs). Some extra bureaucratic burden appears, but the associated complexity could bring also positive benefits, i.e. diversity could enhance creativity and innovation, but also if project is managed poorly, could be seen also as a cause of misunderstandings, suspicions and conflicts that could appear inside the consortium. In the same sense, multidisciplinary and multi-sectorial approaches can bring valuable contributions in members’ competitiveness, by helping the implementation of complex problem-solving-approach procedures. An efficient management of stakeholders portfolio brings a systematic way to organize the relationship between partner organizations and how stakeholders could be involved in reaching the proposed objectives (Ruoslahti, 2020). In this respect, multi-stakeholder collaborative networks could be assimilated with organizational structures, which facilitate a collaborative innovation process, going beyond organizations and even regional / national boundaries, pointing out, in a trans-regional approach, objectives and actions being adapted at each participant characteristics, if their participation is well defined as purpose and role.

On another hand, communication inside the consortium membership plays a central role, supporting the achievement of organizational goals, and increasing the efficiency of processes (Ruoslahti, 2020). If we consider that innovation projects are strongly associated to human characteristics, e.g. the self-organizing capacity, the process begins from the formulation of the project idea and continues with the proposal configuration phases, proving capacity to allow co-evolving effects and to co-create knowledge that was likely improbable to be predicted from the beginning. Complementary, social interactions and knowledge sharing, during co-creation processes, require new competencies possibly coming from experts and professionals outside the consortium. One special objective is to increase confidence among the stakeholders, enhancing capacity of efficient communication inside and outside the project consortium.

Project consortium need to enhance its resilient capacity, concerning activities implementation, in a continuous fluid and dynamic context, likewise a robust

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organization. Project partnership should be able to mediate and adjust relationships between different personal and institutional cultures, in order to create a unified values system (Ruoslahti, 2020). An efficient balance between sometimes opposing tendencies with the maintenance of diversity require special managerial competences, in the frame of a “co-evolutionary integration”, in order to capitalize the cooperation between organizations, and, consequently, the whole consortium to benefit from each entity contribution.

In conclusion, the elements of complexity (Ruoslahti, 2020) are used to determine competitiveness in innovation projects, where partners communicate and collaborate, by a common agreement on objectives, activities and responsibilities to be assumed during implementation. Consequently, all members of the consortium bring their professional background and experience into the collaboration, identifying possibilities and working together to create new knowledge and attain the objectives assumed altogether. The project consortium adopts which is the best modality of working together, as described in project proposal and, if it will be the case, to define extra directions to address during implementation. Interaction and dialogue inside the consortium are destined to recalibrate some of the project details, when confronting with changes, in its contextual implementation and among the consortium members, but continuing to work together and bringing reciprocal influences, of all kinds and in all directions.

These elements of complexity in project co-creation process will be treated as follows in the frame of RESTART\_4Danube project.

#### 1. Connectivity & interdependence

First characteristic of a project complexity concerns interrelations between members of the consortium, in the frame of the concept of “connectivity & interdependence” (Ruoslahti, 2020). In RESTART\_4Danube, among the project partners (RESTART\_4Danube, 2021), that collaborate continuously in order to deliver expected results, through collaborative activities, mentioned explicitly in the description of the project. In this respect, partner organizations bring their different background and areas of expertise, like public authorities, companies, business support organizations, higher education and research organizations, civil society actors, when implementing majority of project activities, towards some practical approaches. Parallel activities in the project imply that partners are strongly interconnected, and each of their individual work is affected if the plan of delivering results is not respected, project deliverables and outputs being integrated by combining the work of all consortium members, these jointly implement activities being under the coordination of their task & work package leaders. The whole concept of RESTART\_Danube project, based on tandems & follower cities, presupposes a strong collaboration between different partners. In

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this respect, all project partners provided inputs and were involved in the project design at different stages of the proposal via physical and/or virtual meetings and exchanges. The functioning in tandems will be a real asset to ensure that the LAPs will contribute to regional development and have a regional outreach.

## 2. Self-organization

Majority of RESTART\_4Danube project partners (PPs) is intrinsically motivated to act professional, and by doing so also bring expected results, also because the project proposal was well planned from the beginning, each partner dedication and competences being important, in the frame of the concept of “self-organization” (Ruoslahti, 2020). The practice of implementation emphasize that project work shouldn’t imply actively only a part of the consortium members, active and continuous collaboration should imply all partners, in order to balance efficiently the self-organization process. Furthermore, “the coordinator is in a very crucial position”, smooth implementation depending strongly on his competence and practical management expertise. The day-to-day administrative project management will be performed by the lead partner (LP) – University POLITEHNICA from Bucharest (UPB) and its project management team. The LP will appoint a project manager (PrMg) who has the overall responsibility of the project and who will involve the PPs that are relevant for each activity. It will furthermore appoint a financial manager (FM) and a communication manager (CM). At the partner level, each PP will also appoint a project management team composed of similar positions as for LP, in order to ensure efficient project management. The PPs representatives will work together in the implementation of project activities. At the beginning of the project, a steering committee (SCOM) will be established to act as the main supervisory and decision-making body. The structure of this monitoring body will be validated by the consortium at the first kick-off meeting of the project.

## 3. Collaboration background

Complexity takes also into account the “collaboration background” concept (Ruoslahti, 2020), in the frame of consortium members and addressing the status of some of the stakeholders envisaged to be implicated in project implementation. The same aspect is referring also to the staff coming from each partner, each member offering his own competences and expertise while professionally interacting with others. Not negligible, cultural backgrounds should be taken into consideration, mentalities and attitudes being essential when working together and communicating throughout the implementation process. However, in complex project as RESTART\_4Danube, needed competencies come from different thematic fields, all project partners being expected to contribute accordingly. In fact, the LP - UPB and Steinbeis Europa Zentrum (SEZ), as a strategic partner,

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were the two major motors in the project preparation and collaborated closely in the development of the concept. UPB as LP coordinated exchange of information with all project partners, and communicated with different project partners who had the opportunity to be actively involved in the elaboration of the project proposal. PPs provided inputs via exchange of e-mails, Skype discussions, phone calls and physical meetings. Besides, UPB led deepened discussions with the municipalities responsible for each LAP, in order to elaborate the specific topics. An important part of the Application Form (AF) was dedicated to an extensive description of partner relevance, organization and territorial benefit, and previous international project experience or all PPs, proving the quality of consortium composition.

#### 4. Exploration-of-the-space-of-possibilities

The “space of possibilities” concept (Ruoslahti, 2020) is addressing the flexibility of modalities and methods of working in the project and, consequently, to the spectrum of exiting different solutions to solve certain expected or unexpected issues, e.g. the COVID-19 Pandemic, which obliged us to replace all face-to-face activities with on-line meetings. Also, important to mention, project proposal preparation for RESTART\_4Danube started with approximate two years before the date of submission and required a high level of details preparation, especially because it followed two stages procedure. After the peer evaluation process and concerning the COVID-19 Pandemic conditions, some clarifications and adaptations were requested, so some modifications were communicated to the funder, by using a Change-Log-File procedure, which led to a modified AF as basis of the Subsidiary Contract. However, it was noted that in the frame of an innovative approach, also during the project implementation, by using strong argumentation, the consortium flexibly adapted the content and calendar events of the project, in the benefit of increasing quality of results and outputs expected to be achieved.

#### 5. Path dependence

“Path dependence” concept (Ruoslahti, 2020) is related to the modality to adapt to the appearance of new paths for action adopted by already taken decisions, not programmed from the beginning, but strongly depending on how well project partners collaborate, depending on their mentalities and cultural backgrounds. In the case of RESTART\_4Danube, new possible partnerships appeared in different combinations of actual consortium members, as some partners acted professionally in solving their project tasks and assuming all responsibilities, also promptly reacting and well communicating with work package and task coordinators. Unfortunately, some partners performed in a “lazy” manner, without

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expected professionalism, and, consequently, having limited chances to be further integrated in next collaborative project proposals.

#### 6. Feedback

“Feedback” concept (Ruoslahti, 2020) addresses capacity to bring necessary modifications, envisaging collecting and efficiently responding to feedback signals, as a way to engage all partners in the project implementation and, when needed, to re-focus the project tasks. In the specific case of RESTART\_4Danube, the content and format of the communication messages/activities were tailored to the specific target groups (public authorities; enterprises/SMEs, business support organizations and networks/hubs; infrastructure and service providers, HER; general public). In this respect, the communication activities will support a regular inward & outward information flow, for gathering information through exchange, feedback and collaboration with all relevant quadruple helix actors vs. disseminating information and results. The project activities will bring quadruple helix actors together locally (especially in the frame of the workshops and local action plans) & transnationally (e.g. during some dissemination events or trainings).

#### 7. Far-from-equilibrium

In fast changing regional and innovative ecosystems or extreme situations, such as COVID-19 situation, projects will need to make major adaptations, being often “far from a state of equilibrium” concept (Ruoslahti, 2020). In this respect, RESTART\_4Danube proposed and it were approved by Management Authority / Joint Secretariat (MA/JS) of DTP some modifications of the AF, e.g. concerning the postpone the 2nd Policy Dialogue, for “...offering in this way to the policymakers concrete and applicative subjects of dialogue and bringing valuable contributions to the content of the final version of the "Common strategy on creative urban regeneration for the DR"”. The principle issue that affected all activities in the project was related to the express request received even before the contracting phase, i.e. “Given the current situation created by the COVID-19 pandemic, especially with regards to organization of joint face-to-face events and bearing in mind that the 3rd call for proposal projects can have maximum 30 month implementation period, without possibility of extension of the timeframe, together with the partnership, the LP is kindly asked to review all the project activities and make use as much as possible of the modern electronic communication in all related activities in order to ensure the start of the implementation of the project, as indicated in the Application Form. The project start and end dates shall be shifted to July 2020 and December 2022 respectively, as well as the time plan should be revised in order to allow the implementation of

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activities that require travels/ joint meetings at a later stage when the pandemic would have passed”.

#### 8. Co-evolution

“Co-evolution” concept (Ruoslahti, 2020), applied to any consortium, addresses the challenge to find and adopt special or new dedicated possibilities of working in partnership, with positive inter-relations, being able to generate valuable results and to capitalize new ideas. For RESTART\_4Danube project the co-evolution will be materialized in new possible partnerships appeared in different combinations of actual consortium members, and by PPs implication in capitalization activities with like-minded actors, organizations & current EU-funded projects (e.g. CINEMA, RegionArts, CRE:HUB, Creative Spirits, Women in Business) to foster synergies in the partner countries, in the DR and beyond. It will also capitalize results from relevant previous projects (Creative Clusters, Creative SpIN) & develop synergies with on-going networks (ECHN, European creative alliances industry–ECIA) & instruments (Urban Innovative Actions–UIA). Capitalization activities will go beyond just inviting other projects representatives during project events, with the purpose to develop further common activities & deliverables.

### **3. Mission and challenges oriented innovation policies and regional innovation system in the frame of place-based innovation for sustainability. Case study: RESTART\_4Danube project**

#### **3.1. Mission and challenges oriented innovation policies**

Many studies were and are preoccupied of topics of innovation policies developed at different governmental levels, passing more and more from supporting R&D activities and strengthening innovation systems, in the direction of transforming society and economy, by taking into consideration societal challenges. One specific trend, characterizing the “era” of new innovation policies, is the orientation to become “challenge-based innovation missions” (Hekkert, 2020), e.g. to reach the target of 50 % circular economy by year 2030. Such new “Mission-oriented Innovation Systems” (MIS), introduces the economic category of “networks of agents and sets of institutions”, destined to develop and integrate innovative solutions, aiming to define, follow the implementation and successfully accomplish a societal mission (Hekkert, 2020). Starting from observing existing innovation policies and what were the traditional tendencies until nineties is possible to notice that the second generation of innovation policies

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strived to correct mistakes that appeared in national innovation systems and also to strengthen the corresponding networks. Today, more and more, policy makers promote the next third generation “transformative” innovation policy, acknowledging the role of tackling societal problems, as well as changing innovation direction when path dependencies have strong influence (Schot and Steinmueller, 2018). Other authors, as Weber and Rohracher (2012) formulated the term of “transformation failures” in society, which - when being added to market and economic system collapse – legitimize public authorities intervention towards innovation addressing societal problems (Boon and Edler, 2018; Kattel and Mazzucato, 2018; Wesseling and Edquist, 2018; Wanzenböck et al., 2019).

Complementary to MIS development, it seems reasonable and necessary that responsible policy makers to attempt the design and implementation of a “Mission-oriented Innovation Policy” (MIP), due to the lack of coherence when attempting to assess the dynamics of innovation processes, that contribute to the achievement of a societal mission, and consequently to the development of efficient intervention strategies.

In its essence, MIS is similar to any innovation system, with specificities at national, regional, sectorial, local of technological characteristics, but is individualized in the way that system boundaries are defined, in how interactions in this system arise (e.g. request-pull vs. offer-push) and what it finally produces (e.g. new technological and social conduct solutions) (Hekkert, 2020). Following some promising research directions, e.g. how a MIS “comes alive” and how its specificities determines the impact, with a strong focus on the pace of transition of innovation processes, how a strong guidance influences the level of technological contributions in an innovation system, and what is the role of public authorities in shaping an effective MIS, Hekkert (2020) assumes that the current MIP initiatives provide a favorable context for an effective transition of research priorities orientation towards an emerging MIS and valorize previous experiences, destined to improve the design of future initiatives and overall strategies.

In this respect, RESTART\_4Danube outputs are queued to strengthen the links between enterprises, R&D centers, HER, public sector and civil society, in order to improve framework conditions & contribute to the development of some mission-oriented policy instruments supporting the regional & local smart specialization strategies (S3) for a new model of urban regeneration involving CCIs. The project will also address the insufficient transnational cooperation & coordination on institutional level, by giving different opportunities & platforms for public authorities, including policy dialogue workshops, to discuss issues & exchange ideas but also to alleviate the most important administrative barriers in a coordinated & transnationally integrated way, by responding with practical solutions to the above mentioned research avenue of what could be the role of the

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national, regional and local authorities in shaping a MIS and coordinating a mission for developing CCIs in the DR. Also, RESTART\_4Danube will support the development of some innovative public policies through the elaboration of policy documents, mainly focused on supporting innovative SMEs in the field of CCIs, e.g. to have a stronger orientation towards business-to-business markets, but also addressing societal challenges, by paying attention to respect the principle of providing equal opportunities and non-discrimination and to ensure equal access to information regarding the project activities and outputs and in particular the local action plans that are going to be implemented to different target groups (in terms of age, migration and vulnerability).

### **3.2. Regional innovation system in the frame of place-based innovation for sustainability**

“Regional innovation system” (RIS) concept is used to analyze innovation dynamics, for designing policies promoting innovation capacity of regions (Tödtling, 2021), mainly oriented to technological and business innovation, stimulating competitiveness and facilitating economic growth. In the actual context, when environmental and social challenges become more and more important, e.g. climate change threats, aging of population and increasing inequalities, this approach is obsolete, requires the development of a new orientation addressing regional innovation policies, and how RIS policies will benefit from this new understanding of innovation process. Recent studies on mission-oriented and transformative innovation policies (e.g. Hekkert, 2020), were followed by the development of the notion of “challenge-oriented RISs” (CoRISs) (Tödtling, Trippel & Desch, 2021). This concept grasps a different view of innovation, focusing on the new orientation of change, including new innovation actors acting at different territorial coverage, paying more attention to up-scaling of innovation dimension at regional level and not only, and taking into consideration regional specificities and their diverse capacity for adopting transformative changes and passing to a CoRIS. Deficiencies manifested in research and education system, lacking qualifications and skills for graduates and employees, or poor access to finance and venture capital resources are in the focus of CoRIS, in order to bring necessary corrections.

In the same sense as MIP / MIS, a new approach should focus on needs, by increasing capacity to address societal demanding, at regional, national and international level, including the contributions brought by an enlarged group of actors, and the alignment with “sustainability development goals” (SDGs), also adopting new methods of integration in open innovation processes (Morgan, 2017).

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Today we acknowledge a strong modification in policy logic, passing from classic S3 to new “smart specialization strategies for sustainable and inclusive growth” (S4+). The purpose is to change the way in which regional development strategies will be developed in Europe (McCann & Soete, 2020). In this respect, a S4+ agenda will modify the structure of “innovation-related” and “enterprise-related” stimulus at local and regional levels, respecting engagements from Green Deal initiative, and also becoming attractive to private sector, civil society and public sector organizations. Regions specialized in producing readily exportable products benefit of highly qualified human capital and skilled workers, social issues being relatively simple, when discussing also about customers. Consequently, a major risk, encountered especially in economically weaker regions, relies to their poor capacity to sufficiently address sustainability and inclusiveness challenges, one way of manifesting this risk being associated with a “strict and hard partitioning” of regions, the companies from weaker ones being only capable to produce goods primarily oriented towards local consumption, with less qualified workers and relative poor customers, social issues being more difficult to address and solve.

This new orientation to S4+ requires material and support services, as knowledge-assets and resources are necessary to be made available to local policy-makers across Europe, in order to develop expertise in regional and urban governance, as a unique resource for intelligence on the EU-wide regional impacts of different policy frameworks. In this respect, JRC Seville offers such information, one important aspect being oriented to how European Green Deal is progressing across cities and regions of Europe and how the move forward results from certain regions may connect with the initiatives and activities attempted in other regions (Barbero-Vignola et al., 2020).

Concerning how CoRISs and challenge-oriented regional innovation policies could become practical approaches, there is still room for further professional analyzes (Tödtling, 2021), e.g. to better understand how and why regions differ in their capacities to adapt their RISs, in order to take into consideration societal challenges and why they offer different response to the same global challenges. Also, is necessary to better understand which are the conditions to be imposed in order that CoRISs should help regions to gain competitiveness, by reconciling generous societal issues with practical economic ones (Tschumi et al. 2020).

When considering RESTART\_4Danube capacity of responding to the issues raised by actual and future mission and challenges oriented innovation policies from Danube Region, in the frame of place-based innovation for sustainability, some of these challenges receive an adequate response, as follows.

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The main objective, in accordance with its strategic mission, of RESTART\_4Danube is to improve framework conditions & policy instruments supporting the regional and local S3 for a new model of Urban Regeneration (UR) involving CCIs, viewed as a challenge / opportunity in the frame of services offered by this industry to urban communities.

The project will also support the development and implementation of future innovative public policies, through policy documents, mainly focused on supporting innovative SMEs in the field of CCIs, destined to have a stronger orientation towards business-to-business markets. Consequently, the elaboration of a common strategy to support creative and innovative urban developments, also addressing societal challenges, is envisaged, as part of a next potential innovative CoRIS in DR.

RESTART\_4Danube is based on the idea that Danube Region (DR) transnational collaboration between SMEs, R&D & cities – via e.g. study visits, cross-national exchange with LAP tandems, transnational service offers and requests – is necessary to disseminate good practices, improve local/regional innovation policies, stimulate new business models and thereby spur structural change.

Through a place-based and quadruple helix approach in the development of LAPs & service hubs, the project will contribute to improve cross-linkages & to optimize internal synergies between CCIs, R&D & public sector in UR from DR.

RESTART\_4Danube project is embedded in the Innovation Union Flagship (Europe 2020) whose actions aim at strengthening the role of CCIs as a catalyst for innovation & structural change. The project also supports the implementation of Urban Agenda for the EU that strives to enable urban authorities to work in a more systematic & coherent way towards achieving overarching goals & to contribute to territorial cohesion. RESTART\_4Danube will contribute to targets of different EUSDR PAs, as follows:

- PA7 Target 2, thanks to stimulated cooperation & emergence of innovative services between HER, CCIs & the public sector in the LAPs using the concept of living labs;
  - PA8 Target I & VII, through involvement of chambers of commerce & industries and service providers in the provision of hard/soft investment supporting better entrepreneurship & competitiveness of CCIs and Target IV and VI, through Readiness Level audits & trainings that will support capacity building of public authorities & CCIs entrepreneurship;
  - PA9 Target II, thanks to its services & tools that will enhance entrepreneurship, innovation & active citizenship and Target V by supporting quadruple helix collaboration in the LAP cities.
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The five Local Action Plans that are at the core of RESTART\_4Danube will directly and positively contribute to a sustainable development process of urban communities in DR. To start with, the municipalities involved in the local action plans will apply green public procurement. LAP 1 will contribute to more employment opportunities and support services in the context of sustainable development. LAPs 2 & 4, which involve building refurbishment, will pay attention to reach the cost-optimal levels of energy performance according to Directive 2010/31/EU. LAP 3 will contribute to reduce transport and mobility-related air pollution and support a sustainable integrated urban development. LAP 5 will contribute to the development of green infrastructure and to sustainable integrated urban development.

#### **4. Hybrid Project Management. Case study: RESTART\_4Danube project**

Adequate management mechanisms, suitable for the context of complex cooperation projects, are necessary to be put in place, for increasing the effectiveness of this type of collaborations. As indicated in all specialized literature, Project Management (PM) practices address all elements that characterize PM processes, including all necessary techniques (e.g. work plan structure), and various guidelines, including all documents, checklists, job descriptions etc., taking into account actual two main existing management approaches: predictive (waterfall) and adaptive (agile) (Fernandes, 2018). In this respect, the predictive approach (waterfall) is applicable in majority project cases, but in “VUCA world”, when projects involve requirements Volatility, Uncertainty in change processes, Complexity in project environment and Ambiguity, considering undetermined cause and effect correlations, the waterfall approach induces difficulties in utilization, leading to potential conflict relationships between partners, when seeking specific deadlines. In this context, the adaptive (agile) management technique should be followed, since agile management proved to be adequate to find effective solutions to the raised issues and to capitalize the changes as opportunities.

Introducing the concept of procedural models, the specific ones addressing PM can be grouped into two main categories, i.e. “plan-driven methods” according to a waterfall process, and “agile methods” (Scrum or Kanban), corresponding to an iterative, “test-driven approach”, by organizing the methods and tools of PM into “project phases” in a structured manner (Thesing, Feldmann, Burchardt, 2021). In majority of project management cases, implying a “waterfall” process of planning and implementation, expected results are defined clearly from the beginning, so, the project can be executed, from kick-off to the end, by using work packages,

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defining responsibilities, and establishing deadlines, all efforts being allocated to the implementation of the project plan, in all its details, as precise as possible, providing predictability and a structured approach, respecting the allocation of necessary resources.

PM in RESTART\_4Danube is organized in a separate work package (WPM), organized in a waterfall manner, and destined to set up & implement the overall coordination in terms of structure, responsibilities, conduct & decision-making procedure, provide a sound financial management & controlling of the budget respecting the principles of efficiency, effectiveness & economy, and assure the quality of the work & activities carried out in all other work packages. Day to day management is performed by the LP and its project management team (PMT) including a project manager (PrMg), financial manager (FM), communication manager (CM) and quality assurance manager (QAM). The LP will act as an interface between the MA/JS of the Danube Transnational Program and the Consortium. A steering committee (SCOM) will be established from the beginning of the project and will be the main regulating and decision-making body regarding implementation and financial issues. The PMT and the work package / activity leaders will cooperate closely with the SCOM for planning and monitoring the progress of project implementation based on detailed actions and financial plan.

More concrete, the objective of WPM is to establish the appropriate management structures and procedures, which will be applied during the implementation of the project to ensure the efficient and timely execution of project activities and the transmission of deliverables / results. WPM contains two main activities: first, refers to administrative management, at which UPB as LP is responsible for ensuring clear, consistent and adequate communication with all PPs by organizing physical and virtual meetings, monitoring the implementation / documentation of project activities and controlling the elaboration and transmission of deliverables / results. The second activity considers the quality assurance process (preparation of quality assurance and monitoring plans at project implementation). Given the size of the consortium, it is necessary to have an efficient management and good internal communication procedures. Consequently, LP will organize a monthly virtual meeting with all PPs to discuss the current state of activities & address potential issues. These virtual meetings will ensure a smooth implementation of the project activities throughout the project duration. During the meetings, WP leaders will hold short presentations of the status of implementation (e.g. stand of activities, what has been achieved in the past month, what remains to be done, next deadlines, issues encountered and addressed solving solutions). The meetings will also be the occasion for the consortium to exchange innovative ideas and define new perspectives of development future collaboration.

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One major problem that appeared from the beginning of the project (01.07.2020) and continued in Period 2 of implementation (01.01.2021 – 30.06.2021) was the COVID-19 Pandemic, needing some modifications adoption in the implementation process, i.e. all events were organized on-line instead of classical face-to-face meetings, considered as “major force” clause, included in the subsidiary contract of the project. Another representative example of needed modification in the implementation calendar is referring to the fact that after the organization of the 1st Policy dialogue workshop (15.04.2021), two partners (SEZ and UPB) had a bilateral discussion regarding the organization of the 2nd Policy Dialogue workshop, which was supposed to be organized in June 2021. Due to the results and outcomes of the first event, it has been remarked that organizing the second event with same format and inputs will not bring much added value for the project. For this reason, in agreement with the whole consortium, the LP requested by the submission of a Change Log File the postponement of the organization of the 2nd Policy Dialogue workshop in Period 4 (01.01.2022 – 30.06.2022). The Change Log File was approved by MA/JS of DTP, under official procedural rules of projects implementation, belonging as PM technique to a waterfall method for solving specific issues during implementation process.

One hybrid approach of PM represents the combination predictive vs. adaptive, where the elements of the project that are well defined and planned follow a “predictive life cycle” (waterfall) and those elements continuously evolving (being “fluid” and changing unexpected) follow an “adaptive life cycle” (agile) (Fernandes, 2018). Hybrid approaches become useful, in order to enrich the “plan - driven process” model, with the contribution of agile principles, consequently reciprocal valorizing the advantages of both methods. In this respect, the “big picture” of the project plan is developed following the “plan-driven” waterfall approach, but some specific activities could be managed following an agile approach. Using continuous communication activities and developing short feedback cycles (“sprints”), certain “fuzzy lines of action” could benefit of agile characteristics, such as clearness and flexibility, but still following the overall structure of the entire project, in a classical manner.

The mentioned hybrid approach was adapted and adopted to our project, which comprises several “lines of action”, supporting both PM techniques, waterfall and agile. In a previous paper (Boanță, 2021) it was analyzed extensively the opportunity for the RESTART\_4Danube project to apply an agile PM method, by using “Scrum” practices; the criteria of analyze were: flexibility, autonomy and self-organization. The RESTART\_4Danube project has a complex structure (Boanță, 2021), involving many partners, with three major “Specific Objectives” (SOs), producing 10 “Outputs”, 5 “Local Action Plans” (LAPs), and one package of “Cooperation Agreements”. All these elements are grouped in 6 “Work

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Packages” (WPs), comprising 19 activities, producing 60 deliverables and addressing a target group of 675 organizations and individuals.

In this context, it was supposed as justified to introduce a "Scrum" type management method for some activities, comprising complex interdisciplinary activities, implemented by various organizations. The “big picture” in RESTART\_4Danube project, is organized in a monitoring instrument, under the form of an Excel file, by grouping each work package in sheets, comprising all necessary information (Boanță, 2021). This monitoring tool is constantly managed and updated by PrMg, and systematically accessed by all partners. Regarding the adoption of "Scrum" methods for some activities in RESTART\_4Danube project, the elements of development "sprints", as well as other specific aspects of agile management procedures, were just theoretically applied to the PM of the project, just some simple elements, as regular communication and reviewing of progress stages, were used in practice, due to the specific of RESTART\_4Danube project, mostly being manageable under waterfall principles.

## **5. Conclusions**

RESTART\_4Danube project addresses the tricky issue of limited transnational cooperation in the field of Cultural and Creative Industries (CCIs), for regenerating urban communities in the Danube Region. The project outputs are queued to strengthen the links between enterprises, Research & Development centers, Higher Education & Research organizations, public sector and civil society to improve framework conditions & policy instruments supporting the regional & local smart specialization strategies for a new model of urban regeneration involving CCIs.

RESTART\_4Danube project configuration demonstrates how complexity elements characterize the process of co-creation of knowledge in innovation projects. This aspect is strongly connected to how efficient project partners work together, emphasizing that the element of “Self-organization” directly affect the quality of working in the project, with necessary interconnections and need for cooperation among partners, concerning the characteristics of “Connectivity and interdependence” and “Co-evolution”. Choices taken in collaboration (“Path dependence”) and necessary feedback (“Feedback”) have strong capacity of influencing the decision on what adaptations are needed for project implementation and which direction project should follow (“Far-from-equilibrium”) when some modifications are made.

Offering valuable solutions to modern social, environmental, and economic challenges, with major threats like climate change, demographic issues, health and

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poverty raise big difficulties for generating sustainable and inclusive growth. Innovation across multiple sectors could be the result of new “mission-oriented” policies, broad enough to engage civil society and attracting cross-sectorial investment, but remaining focused enough to involve industry, in order to achieve measurable success.

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