

ATLAS LIVING LAB

LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 1 D.3.1.2 Living Lab factsheet Partner 4: Apulia Creative Cluster Association LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 2 Introduction Living labs also provide “physical regions or virtual realities in which stakeholders form public–private– people partnerships (PPPP) of firms, public agencies, universities, institutes, and users all collaborating for creation, prototyping, validating, and testing of new technologies, services, products, and systems in real life contexts” (Westerlund & Leminen, 2011). LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 3 Table of contents Research Methodology Sources: the main international Living Lab platforms Open Data as sources for informations The Living Labs in cultural and rural tourism within the EU legislative framework. The thematic domain of this Catalogue How to select Living Lab best practices on cultural and rural tourism? Living Lab best practices in cultural and rural tourism -Living Lab in Rivière-du-Loup -Andorra Living Lab -Europeana Lab -Swiss Open Laboratory for E-tourism (SOLET) -Smart Cities Living Lab Siracusa -Centralab- Living Lab in Gorejnska in e-tourism -ROCK -Regeneration and Optimization of Cultural Heritage in Creative and Knowledge Cities Other relevant experiences: Welcome City Lab References LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 4 Research Methodology The purpose of the Catalogue of Living Lab best practices in cultural and rural tourism is that of examining best examples of Living Labs in the above mentioned domain in order to find suitable models to draw inspiration for the sketching of the Living Labs to be activated within the framework of the Adriatic Cultural Tourism Laboratories Project, (ATLAS) funded by the European Union, Interreg V A Italy-Croatia 2014-20, Call “Standard +”, PRIORITY AXIS 3: Environment and culture heritage. By using publically available data sources (websites, online reviews, articles, publications and open data), case studies have been selected and illustrated with the aim of evaluating qualitative data by taking into account the main indicators as internationally recognized. Literature on Living Labs on cultural and rural tourism is almost completely absent mainly because few experiences have been activated in the field or because, as in many cases, tourism is considered as related to other sectors and represents one of the different areas of intervention of a LL. For example research has also focused on some LL working on culture and creativity in which tourism represents one of the different axis. Moreover Living Labs remain

an under-researched area due to the lack of common understanding of the concept and its underlying mechanisms.¹ In fact a wide diversity of thematic approaches, constellations, methodologies and tools ¹ Bergyall-Karenborn and Stahlbrost, 2009 LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM ⁵ for Living Labs exists.²The Living Lab has conceptualized as an environment³, a methodology or innovation approach⁴, an organization or an innovation intermediary⁵, a network⁶ and a system⁷. That is to say that despite almost two decades of Living Lab activity all over Europe and not only, there's still a lack of empirical research into the practical implementation and on the related outcomes of the Living Lab.⁸ In this sense the Catalogue of Living Lab best practices in cultural and rural tourism would contribute to bridge the gap of the absence of documents and publications in the field and to represent a starting point for a wider reflection on the sector. ² Almirall et al., 2012 ³ Ballon et al., 2005 ⁴ Bergyall-Karenborn and Stahlbrost, 2009 ⁵ Shuurmann et al., 2012 ⁶ Leminem and Westernlund, 2012 ⁷ ENOLL, 2007 ⁸ Veeckman, Shuurman, Leminem, Westernlund "Linking Living Lab characteristics and their outcomes: towards a conceptual framework, Technology Innovation Management Review, 2013 https://timreview.ca/sites/default/files/article_PDF/Veeckman_et_al_TIMReview_December2013.pdf LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM ⁶ Sources: the main international Living Lab platforms Apart from the scientific articles and publications available, the main European Platforms dedicated to the Living Labs have been taken into account i.e. the European Network of Living Lab (ENOLL). "The European Network of Living Labs (ENOLL) is the international federation of benchmarked Living Labs in Europe and worldwide. Founded in November 2006 under the auspices of the Finnish European Presidency, the network has grown in 'waves' up to this day. ENOLL counts today over 150 active Living Labs members worldwide (409 historically recognised over 11 years), including active members in 20 of the 28 EU Member States, 2 of the candidates and it is present in 5 continents in addition to Europe. Directly, as well as through its active members, ENOLL provides co-creation, user engagement, test and experimentation facilities targeting innovation in many different domains such as energy, media, mobility, healthcare, agrifood, etc. As such, ENOLL is well placed to act as a platform for best practice exchange, learning and support, and Living Lab international project development⁹". In ENOLL platform there's no a specific domain dedicated to tourism. Moreover, even if one of the missions of ENOLL is to benchmark best practices among its members and to increase the number of participants in its network in a series of "waves" or annual calls

for memberships, information are partial or not updated. Despite passing the ENoll evaluation phase less attention has been paid to the evaluation criteria of a Living Lab and how such an evaluation 9 www.enoll.org LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 7 contributes to the Living Lab performances, as well as why some Living Labs persist over time while others do not endure¹⁰. Open data as sources for information There is abundant literature on the concept of Living Labs as connected to the concept of “Open Innovation” Here as follows the main statement connected to this relationship: “Living labs are open innovation infrastructures shared by several stakeholders” (GarcíaGuzmán et al., 2013). Open innovation is a vital element of the knowledge-based economy (Wolfert et al., 2010). The living lab-concept is closely linked to the notion of ‘open innovation’, the ‘in- teractionist’ stance regarding user research and concepts from the social shaping of technology such as ‘social learning’ and ‘innofusion’ (Schuurman et al., 2011). Open innovation is in fact a collective term for several trends that have been recognized by researchers for quite some time. These trends include the role of lead users and the organization of R&D in network relationships (Wolfert et al., 2010). Companies are demonstrating a greater openness to external knowledge and to new organization models and principles, with a view to accelerating innovation. Open innovation is often contrasted with a closed innovation model, based on the development of innovations within an R&D department (Wolfert et al., 2010). According to Chesbrough¹¹ Open Innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology. ¹⁰ Mastelic, Sahakian, Bonazzi How to keep a living lab alive, 2015 <https://www.emeraldinsight.com/doi/abs/10.1108/info-01-2015-0012> ¹¹ Henry Chesbrough “Open innovation: the new imperative for creating and profiting from technologies, 2013 <https://www.emeraldinsight.com/doi/abs/10.1108/14601060410565074> LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 8 Open Innovation combines internal and external ideas into architectures and systems whose requirements are defined by a business model. That is to say that ideas and paths should freely circulate and be available to everyone. With regards to the concept of Living Lab as a tool for open innovation it should be binding that LL informations, tools, outputs would be published and available in Open Data platforms. Nevertheless there no many open data available on them essentially because of a delay in the development of Open data platforms as well as on the acquisition of specific competences on the

domain. An exception has done for the Apulian ICT Living Labs, promoted by the Apulia Region and funded with three call for proposals of the Industrial Research and Innovation section, that are all listed in the national Open Data Portal www.dati.gov.it LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 9 The Living Labs in cultural and rural tourism within the EU legislative framework. In the 1990s the LL concept started to be mentioned in academic discussion, but only in 2006 the European Commission has been in charge of working on projects to advance, coordinate and promote a common European innovation system based on living labs (Dutilleul et al. 2010) The Helsinki Manifesto¹² “we have to move fast, before it is too late” adopted in November 2006 under the Finnish EU Presidency first pointed at Living Labs as a first step towards “a new European R&D and Innovation System, entailing a major paradigm shift for the whole innovation process”. After that a number of strategic policy documents have highlighted the relevance of human and social aspects for better design and implementation of Research, Development and Innovation (RDI) projects. The main aim was that of overpassing the main “European paradox” that is to say the gap between researcher leadership and commercial success of innovation. After having been implemented in the research agenda of Horizon 2020, the provisions for RDI within Cohesion Policy and Territorial Cooperation Programmes for 2014-2020, translated into the Smart Specialization Strategy, have drawn inspiration from these recommendations. by providing the implementation framework for the EU Digital Agenda at local level. ¹² The Helsinki Manifesto

http://elivinglab.org/files/Helsinki_Manifesto_201106.pdf LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 10 In fact the European Commission requested to European Regions to produce a Regional Research and Innovation Strategy for the Smart Specialization Strategy (RIS3) within the regional development strategy for the programming Period 2014-20 in order to satisfy the demand of innovation and stimulate new resources for a sustainable development. RIS3 are supposed to guide the implementation of Regional Operational Programmes in an horizontal perspective. In particular the first thematic objective of the ROP is titled “Research and Innovation” with the scope of turning into practice the RIS3 plan. The Living Labs represents one of the actions included in the RIS3 regional plans and consequently in the Regional Operation Programmes – Research and Innovation Objective. “Additionally, Living Labs allow a bottom-up policy coherence to be reached, starting from the needs and aspirations of local and regional stakeholders, creating a bridge between Horizon 2020, Smart Specialisation, the Urban Agenda, Cohesion Policy, and so forth.”¹³ In

2015, world leaders gathered at the UN to adopt 17 Sustainable Development Goals (SDG) to achieve several extraordinary goals by 2030: end poverty, promote prosperity and well-being for all, and protect the planet that the EU has committed to implement in its internal and external policies. Representing 10% of world GDP 1 in 10 jobs and 7% of global exports, tourism has a decisive role to play in the achievement of the 2030 Agenda. Given the multitude of links it has with other sectors and industries along its vast value chain it can accelerate progress towards all 17 SDGs. According to Achim Steiner, Administrator of the United Nations Development Programme, “If well managed, the sector can generate quality jobs for durable growth, 13 Smart Specialization Platform, European Commission <http://s3platform.jrc.ec.europa.eu/living-labs> 14 Tourism and the Sustainable Development Goals, Journey to 2030, UNWTO <http://www2.unwto.org/publication/tourism-and-sustainable-development-goals-journey-2030> LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 11 reduce poverty and offer incentives for environmental conservation – a triplewin to help countries transition towards more inclusive, resilient economies”. According to the Voluntary National Review presented by UN Member States during the High-level Political Forum on Sustainable Development (HLPF) in 2016 and 2017, tourism appears to be largely recognized as a high-impact sector with potential to advance all SDGs. According to the UNWTO achievement of the SDGs requires all hands on deck and it can only be achieved through effective and meaningful partnerships, encompassing the entire tourism industry, as well as international organizations, the development partners, civil society, academia and travellers themselves. By taking into account a general definition of the LL as innovation environments where stakeholders form a partnership of enterprises, users, public agencies and research organizations (Mabrouki et al., 2010) or open innovation infrastructures shared by several stakeholders (García-Guzmán et al., 2013) surely it can be said that LL represent the ideal context for the reaching of Sustainable Development Goals. Moreover, the ‘Chengdu Declaration on Tourism and the Sustainable Development Goals’¹⁵, adopted by Tourism Ministers during the 22nd UNWTO General Assembly in 2017, states that “national governments together with local authorities and other relevant stakeholders should promote innovation in tourism products, business models and management, openly share relevant experiences, and push forward the transformation and upgrading of the tourism sector in order to leverage its contribution to the 2030 Agenda and its SDGs”. ¹⁵ The Chengdu Final Declaration http://cf.cdn.unwto.org/sites/all/files/pdf/13.09.17_unwto_ga22-

hl_chengdu_declaration_final_clean_.pdf LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 12 In April 2018 the EU has adopted the European Initiative n. 5 “Tourism and heritage: promoting sustainable cultural tourism” within the Europe for Culture Programme, 2018 European Year of Cultural Heritage, a document listing all the previewed opportunities and activities to explore the relationship between cultural heritage and cultural tourism. The document states that “an EU member states expert group will examine sustainable cultural tourism across Europe and identify good practices. At the end of 2018 the group will present policy recommendations and guidelines for regional and local authorities and stakeholders”¹⁶. These guidelines will be presented in Florence, Italy on the 5th and 6th of November 2018. This catalogue on LL best practices on cultural and rural tourism could be submitted to the attention of the EU as a further document supporting the above mentioned research aimed at showing good practices on sustainable cultural tourism as derived by the LL adoption in some contexts from all over Europe in order to represent a good basis for policy recommendations and guidelines oriented to favour the adoption of the LL within the framework of sustainable cultural and rural tourism initiatives. ¹⁶ Initiative 5- Tourism and heritage, European Commission https://ec.europa.eu/culture/content/tourism-and-heritage_en LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 13 The thematic domain of this Catalogue. Research should focus not only on “Living labs on cultural and rural tourism” in a strict sense, since all the domain of the so called “creativity” is related to tourism. There are many Living Labs focusing on creativity that develop touristic products or services and/or that explain their effects on tourism. Researchers have stated that creativity “has been employed to transform traditional cultural tourism, shifting from tangible heritage towards more intangible culture and greater involvement with the everyday life of the destination. The emergence of ‘creative tourism’ reflects the growing integration between tourism and different placemaking strategies, including promotion of the creative industries, creative cities and the ‘creative class’”. ¹⁷ We may also argue that creativity is a key element in wider strategies of interventions i.e. in Smart Cities, in Role Model Cities, that are related to the Disaster Risk Reduction, or in strategies committed to the pursuing of the Sustainable Development Goals, and that, then, tourism is related to such a multitude of issues and goals that becomes hard to analyze it separately. ¹⁷ G. Richards, Creativity and Tourism: the state of the Art; Tilburg University, 2011
https://www.researchgate.net/publication/241854896_Creativity_and_Tourism_The_State_of_the_Art

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14 How to select Living Lab best practices on cultural and rural tourism? In order to select best practices the identification of specific indicators play the major role so to analyze Living Lab characteristics and their outcomes. The monitoring and evaluation of the Living Labs according to these indicators may furnish us important details on whether LL have been conceived within an internationally recognized shared conceptual framework based on research activities conducted by Universities and Institutions all over the world as well as within the framework of some research projects conducted under the umbrella of the EU funds. In this document we mention the key points that are emerged from a deep analysis on the logical aspects at the basis of the consequent LL steps: - The creation of a Living Lab should be preceded by analyses involving all the actors and identifying key and practical problems. This statement derives from the analysis of an investigation conducted on the opportunity for the use of Living Lab approach and its feasibility in LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 15 tourism activities in rural areas in Bulgaria 18. With regards to the importance of involving all the actors in the analysis the authors state that the organization and implementation of LL activities in this domain is a “tricky task” and , then, by taking into account strenghts and weaknesses of the LL if applied in the rural tourist sector in Bulgaria, they suggest to implement the concept of LL in national documents in order to assure sustainability and that the issues of setting targets and boundaries, financing and outcomes, would be really discussed with the actors. The authors propose to adopt the following model for the set up and functioning of a LL in tourist activities for sustainable rural development. By taking into account this model key and practical problems should be analyzed and, consequently, aims and strategies could be formulated containing general statements of solutions and rendering account to all the participants’ motives and needs.

18https://www.researchgate.net/publication/291353369_Living_labs_in_integrated_agriculture_and_tourism_activiti_es_Driving_innovations_for_sustainable_rural_development Ekaterina Arabska, Ivanka Shopova, Vihra Dimitrova (University of agribusiness and rural development, Plovdiv, Bulgaria) “Living labs in integrated agriculture and tourism activities: Driving innovations for sustainable rural development” LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 16 19 - at the start of the initiative aspects related to strategy and to the infrastructure to be adopted should be discussed since they underpin the real intention of the Living Lab with the aim of creating value and share it with everyone. The statement derives from researches conducted at an

international level on Living Lab main characteristic and their related outcomes²⁰. The 19 See note 16
 20 Veeckman, Shuurman, Leminem, Westernlund “Linking Living Lab characteristics and their outcomes: towards a conceptual framework, Technology Innovation Management Review, 2013 LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 17 importance of creating value is stressed in many points of the same document i.e. “a clear thematic focus on strategy will lead to complementary, shared motives for collaboration which in turn will benefit the community aspects (i.e. through increased engagement towards a given topic) and creation of new partnerships (eg less differentiated domains).”; and “...thus, it is essential that value should be created and shared amongst all the stakeholders when joining the living lab initiatives. After all living lab break down traditional and hierarchical approaches to innovation and frame them in a more experimental and collaborative manner”; 21 “The lack of common purpose among stakeholders may lead to few interaction or information sharing among stakeholders , thus limiting the level of openness. The risk of stakeholders fearing competitiveness and/or making partners reluctant to present and share results or give updates on scheduled technical improvements should be avoided by creating shared motives for collaboration...” “When there is no value there is no openness” After that we may argue that: -the creation of the value proposition within the framework of a Living Lab represents a fundamental step to be developed. The Living Lab should be conceived as a platform for the continuous co-creation of the value proposition. Concerning the individuation of the most efficient tools to be adopted for the creation of the value proposition the researchers Ayväri, Jyrämä²² 21 Hellstrom, Reimer et al. 2012 22 Rethinking value proposition tools for living labs, Ayväri, Jyrämä “Rethinking value proposition tools for living labs”, 2017, link <https://www.emeraldinsight.com/doi/abs/10.1108/JSTP-09-2015-0205> LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 18 have provided a conceptual analysis on value proposition tools to be used in empirical research within the framework of a Living Lab. They have analyzed the three tools that are generally used to create value proposition within the LL, that are: the Value Proposition Builder, the Value Proposition Canvas and the People Value Canvas and, by using abductive reasoning in the context of the Living Lab approach they have stated that all these tools seem to have some limits. The first one seems to conflict with the ideas and premises of user-centric innovation processes while in the VPC the co-creation aspect is rather vague “as the enterprises and its offerings are presented as creators of value for the customer”. Even if more aligned with the service-dominant logic and the premises of living labs, even the third tool neglect as well

as the others “in a deeper acknowledgment of the wider context, the service eco-system and the role of networked actors as a resource integrators”. Here as follows a table summarizing the nature of value in the three tools for building value propositions in living labs LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 19 Then, the acknowledgment of the importance of the context and the key role of the service ecosystem is vital when developing managerial tools for building value propositions in Living Labs. Thus living lab is a mean to include the service ecosystem into managerial tools. This is why the authors suggest to adopt one of the existing tools, but within a wider framework considering living lab as platform to invite all the actors of the service ecosystem into a continuous co-creation of value proposition. - Community engagement is crucial as well as a minimum set of users. LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 20 As already evidenced community involvement is of absolute importance in order to include end-users in every phase of the Living Lab. The level of engagement is related to objective and /or induced qualities, as for example: -strategic intention: individual or shared motives for collaboration (that, we may argue, is directly related to the value proposition); -passion: for participation and collaboration within user community or partners; -knowledge and skills: having or not a certain expertise; -other resources: the amount and timing of available other resources; -partners in the LL network: the number and typology of participants in the network.²³ The qualities, as stated in the above mentioned document²⁴ seem to directly affect the outcomes of Living Labs. This is why they should be considered as important indicators for the evaluation of Living Lab practices. Community engagement may be reinforced through the use of communication tools to guarantee a frequent and strong communication i.e. through bi-monthly newsletter, sharing results and pictures of the project as well as of the management of the panels and that should also lead to discover new opportunities: in this sense a mixed set of Living Lab tools is required. ²³ See note 3. ²⁴ See note 18 LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 21 On the basis of the previous elements, a first set of indicators may be described as follows as derived by a research study on the relation between Living Labs and their outcomes ²⁵ -analysis: with the identification of key practical problems; -value proposition: whether it has been co-created and the LL act or not as a platform for its continuous co-creation; -identification of a precise strategy: as deriving from the analysis -community engagement: that is to say the effective level of community involvement in the activities by taking into account some sub-indicators like: strategic intention, passion, knowledge and skills, other resources,

partners. Moreover, a deep knowledge on indicators elaborated for the evaluation of LL at an international level is extremely useful to avoid the risk of failure. The model elaborated by Veekman, Shurmann, Leminem, Westernlund²⁶ could be adopted since it is the most articulated one, based on the characterizing purposes of Følstad²⁷ and combined with the key principles of good practice by Eriksson et al.²⁸ Indicators concerning Living Lab environment: -real world context: users should be studied within a real-life context technical infrastructures: technical components should be available as well as the monitoring of technical performances lifespan that is to say the duration of a living lab; scale/ecosystem approach: it is important to create value to attract and retain members, and to share it in order to create long term engagement and identification on the Living Lab; 25 Veekman, Shurmann, Leminem, Mika "Living Living Lab characteristics and their outcomes: towards a conceptual framework", 2013 <https://timreview.ca/article/748> 26 See note 3 27 Følstad, 2008 28 Eriksson et al., 2005 LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 22 openness to partnerships: the innovation process should be as open as possible because a multitude of perspectives might speed up the development and bring more innovative ideas; community: users should be part of a community of interest or a community of practice; it is important to choose useful drivers to keep all motivated and engaged (see the above mentioned community engagement) Indicators related to the Living Lab approach: evaluation, content research, co-creation: Test users should be given the opportunity to shape the innovation in interaction with researchers and developers. Co-creation should be iterative and make use of, for example, participatory methods.²⁹ user role user roles depend on the view that companies pursue for integrating users in living labs and the degree of user activity within these living lab activities. These indicators go further to the previous internationally recognized models that have established a framework to assess the performance of Living Labs according to their relevant dimensions and characteristics. The harmonization cube developed within the Corelab project³⁰ had identified seven categories for analysis and evaluation of the Living Labs. 29 See the previous note 30 Mulder, Velthausz, Kriens "The Living Labs Harmonization cube: communicating Living Labs' essentials" http://www.ifip-tc3.net/IMG/pdf/eJOV10_SPILL8_Mulder_Velthausz_Kriens_Harmonization%20Cube.pdf LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 23 These last indicators show the limit of considering the "government" dimension instead of the "level of governance" while the concept of user involvement does not explain the degree of real involvement in

each phase. The set of indicators for the evaluation of the LL Best practices on cultural and rural sites should take into account the definition of “third generation living labs, considered as “platforms with shared resources, which organize their stakeholders into a collaboration network(s), that relies on representative governance, participation, open-standards, and diverse activities and methods LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 24 to gather, create, communicate, and deliver new knowledge, validated solutions, professional development, and social impact in real-life contexts³¹.” Then this new generation of living labs portray different modes of collaborative innovation, where different stakeholders and particularly users have crucial roles in innovation on platforms³². By taking into account all the previous statements, selected indicators are the following ones: -analysis -value proposition -community engagement -technical infrastructures -lifespan -scale -eco-system approach -innovative outcomes ³¹ Habib, Westerlund, and Leminen (2015), ³² Seppo Leminen, Mervi Rajahonka, Mika Westerlund, “Towards third generation living lab networks in cities”, 2017, Technology Innovation Management Review <https://timreview.ca/article/1118> LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 25 Living Lab best practices in cultural and rural tourism Living Lab in Rivière du Loup Responsible body for the implementation Living Lab en innovation ouverte- LLIO is a research center of the College of further education (CEGEP) in Rivière-du-Loup that offers training and research activities on open and collaborative innovation as well as services for the management of Living labs. Funding source Quebec government Location The Rivière du Loup is a regional county municipality (RCM) in the administrative region of Bas-Saint-Laurent in eastern Quebec, Canada. It is considered as a rural area with rural landscapes and beautiful countryside. Website <http://llo.quebec/index.php/portfolio-item/tourismeriviere-du-loup> Description LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 26 The essentially rural territory of the Rivièredu-Loup area makes it an interesting object of study, with unique dynamics compared to large urban centres³³. A destination marketing organisation (DMO) of rural Québec, Canada, wished to actualise its tourism circuits by creating an experience enhanced by a mobile application to meet the expectations of visitors. To overcome this challenge, the application has been designed in a collaborative mode by involving users in its conceptualisation. Stakeholders involved were higher-education institution, a destination management organization, a technology developer, tourism providers, and tourists. It represents a study case of a rural context that have adopted the LL to work on

tourism innovation whose initial gaps and results can be optimally compared thanks to some interesting publications furnished on it. In this case an analysis on the preconditions and gaps has been elaborated before the implementation of the LL with the aim of analyse and identify key and practical problems. This approach corresponds to the suggestions furnished by Arabska, Shopova, Dimitrova in their publication³⁴ as previously mentioned. It resulted in a best practices because of the evidence of a strict correspondance between gaps and implemented actions, that have given origin to results evidenced as follows: GAPS EVIDENCE OF POSITIVE RESULTS Limited IT skills sharing best tourism and IT practices on the project's 33 Guimont, Lapointe, Sévigny – Changing collaborative practices in tourism-a Living Lab case- Canadian Journal of Regional Science <http://www.cjrs-rcsr.org/V40/cjrsrcsr40-1-7Guimont-lapointe-sevigny.pdf> 34 See note 16 LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 27 and resources Facebook page provides further evidence of the shrinking gaps; - participants are embracing IT and tourism discourse and concepts during in-situ meetings A lack of knowledge about change management culture within businesses; inertia among organizations; a poor understanding of the value of innovation; risk aversion Project stakeholders told the researchers that they have incorporated open innovation tools into their management practices. (i.e.using innovation project management template and involving stakeholders in innovation efforts). For the DMO, the project was a catalyst for change and made it aware of its role in driving members towards innovation. A rethinking of the DMO's planning strategy ensued. The organization of a five yearly tourism forum -The DMO applies strategies as a means to identify best practices and in an effort to place tourists and their knowledge at the heart of planning activities Some development agents have incorporated innovation processes into their operations: other stakeholders have expressed their interest in using the LL process Rudimentary levels of trust and collaboration, especially compared to open An increase of the use of the tourist panel - As the project advanced and the mobile application, which is its core deliverable, started to take form, stakeholders increasingly suggested recourse to the tourist panel, whereas such suggestions used to be made only by LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 28 innovation standards; researchers - Stakeholders now spontaneously suggest that questions be put to tourists instead of looking for answers themselves, and researchers have to adapt the surveys sent to the tourist panel accordingly -The project has fostered a climate of trust within the industry. Collaboration opportunities among stakeholders have flourished. In addition, stakeholder engagement has been maintained Also

developed new innovative projects of their own beyond the scope of the LL project. Four spin-off projects are already underway, spurred by the acquisition of knowledge about the 2.0 tourist experience and the integration of cocreation skills. RESULTS35

a. New inspiration/search module better suited to visitors' needs on the DMO's website

b. Creation of a research and development unit, as part of the web developer training program, that works on developing a bank of technoconcepts (AR, VR, connected objects, geolocalization, etc.) that can be used in tourism contexts.

c. Launch of two technology enhanced experiences in a museum: Free Alice! and The Haunted Room of Alice.

d. Launch of a joint geocaching/treasure hunting project by the town and county departments of cultural development. 35

<https://www.researchgate.net/publication/272369586> Guimont, Lapointe

"Cocreation_of_a_Technology_enhanced_Tourist_Experience_in_the_Context_of_a_Living_Lab", 2015 LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM

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e. New action research project aimed at turning an island in the St. Lawrence river into a tourist destination using LL-inspired collective intelligence processes. The following table synthesizes the correspondance with the main indicators: Degree of correspondance with the indicators low Medium High Analysis Value proposition - Community engagement Technical infrastructure - Lifespan (2 years) Scale Eco-system approach Innovative outcomes

Another important element that has emerged from a further research analysis on the LL36 is the existence of a macro-level, where stakeholders in the innovation ecosystem come together and discuss the planning and governance

36 D. Guimonte, D. Lapointe "Empowering Local Tourism Providers to Innovate through a Living Lab Process: Does Scale Matter?", 2016

https://timreview.ca/sites/default/files/article_PDF/GuimontLapointe_TIMReview_November2016.pdf

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30 of the area or industry where user-driven innovation is needed that in this case corresponds with the research center of the College of further education (CEGEP) in Rivière-du-Loup (LLIO). It is extremely important since it give us the idea of a preexistent shared value proposition and a strategy for the whole territory that for the scope has been translated into a specific LL in the tourist sector. At the micro-level in order to favour co-creation different physical spaces were used:

- a collaborative space at the local college (used by the LLio living lab) for cocreation workshops and training sessions
- a tourist information centre and museum institution for field observations
- a secret Facebook group, SurveyMonkey, Google Drive, and a website for data collection and interactions. The analysis provided

within the framework of a scientific research³⁷ has furnished us the chance to evaluate some indicators mainly related to the community engagement, the eco-system approach and the innovation capability. The LL has been adopted as a case study to validate some presumptions that are related to the importance of adopting the LL research methodology to obtain positive goals in the case of tourism related to rural areas: -the LL has raised the innovation capability of tourist stakeholders; - The capacity of LLs to stimulate innovation, which has already been observed in more technology-intensive industries (Schuurman et al. 2013) but also in the tourism industry (Lenart, Pucihar & Malešić 2014; Sifrer et al. 2012), can be also confirmed in the case of a rural area. -The power of the LL to boost innovation capability stems from the co-creation process which, as part of this research, helps to establish an innovation management culture and a climate of trust among stakeholders. ³⁷ See note 27 LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 31 Andorra Living Lab Responsible body for the implementation Massachusetts Institute of technology Media Lab’s City Science Location Andorra, a 468-square-mile nation of about 77,000 people Funding Andorra government Website [https://www.media.mit.edu/projects/andorraliving-lab/overview/](https://www.media.mit.edu/projects/andorraliving-lab/overview/Cultural/rural) Cultural/rural site “Cultural heritage is one of the main testaments to the history, identity and creativity of a country.” (Art. 34, Constitution of the Principality of Andorra). The LL insists on all the Andorra country, that preserves, among different cultural attractors, two cultural and natural assets that are part of the World Heritage List drawn up by the UNESCO as well as interesting rural areas. Description LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 32 The Case of Andorra Living Lab is really interesting because it has been developed by the first US-based living labs research consortium that is recognized as the City Science Initiative at the MIT Media Lab. Researchers from Massachusetts Institute of Technology Media Lab’s City Science have been working in initiatives to prototype, deploy and test urban innovation on Andorra that has been selected because of its geographical dimension in relation to the importance of the tourist cultural sector since with more than eight million visitors a year, tourism represents almost 30% of the economy of Andorra. In 2014, Andorran government officials met with Larson’s City Science Initiative to discuss collaboration opportunities. Andorra had aspirations — and still does — of becoming the world’s first “smart country” by making use of big data to help develop and deploy innovation. The project City Science Andorra represented the scientific one aimed at gathering and analyzing data from social media, call detail records and wifi in order to understand the country’s dynamics of tourism and commerce. On the basis

of these researchers LL in Andorra have started to design interventions to improve tourist experiences. The main goal is that of encouraging tourists to visit Andorra more frequently, stay longer and increase spending. The case has demonstrated that given a wider territory, ie. an entire country, LL can positively affect the development in terms of innovation, whether external studies – not developed in the same countries-may contribute to push the innovation. It may be argued that some innovation elements for cultural and rural tourism are replicable and scalable . This has given the challenge of turning Andorra into an “Internationally Recognized Intelligent Country.” LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 33 degree of correspondance with the indicators Low Medium High Analysis Value proposition Community engagement . - - Technical infrastructure Lifespan Scale Eco-system approach Innovative outcomes /results By taking into account the adopted indicators, the following considerations can be done: - the LL shows a deep level of previous analysis as stated by the researches conducted by the Massachusset Institute of Technology Media Lab’s City Science on the country; - a detailed strategy has been conceived before the intervention and shared with the government level; it does not properly corresponds to a cocreated value proposition among all the stakeholders. Moreover, even in this case the existence of a macro-level can be attested, with an LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 34 innovation ecosystem that put together scientists from MIT and the government with the aim of planning the future urban challenges of the country in different topics (Tourism, Innovation, Energy & Environment, Mobility, Dynamic urban planning); - there are no available sources to investigate on the level of community engagement; - by taking into account technical infrastructures belonging and/or developed by the Massachusset Institute of Technology a high level of innovation has been reached within the LL framework ; consequently, high innovative outcomes have been prototype and tested. Among these, we mention the Andorra City Scope Data Observatory, a data-driven-agent-based simulation on individual mobility based on spatio-temporal data from mobile phones. By using different representation, abstraction and interaction features the simulation shows the Andorra visitors’ flow and traffic congestion during some events. Data are drawn from anonymous call detail records (CDRs) that represent a novel source of data that can be useful for the formulation, analysis and evaluation of tourism strategies at a national or local level. In this case CDRs have been used to “evaluate marketing strategies in tourism, understand tourists’ experiences, and evaluate revenues and externalities generated by touristic events...” “...”we do this by extracting

novel indicators in high spatial and temporal resolutions, such as tourist flows per country of origin, flows of new tourists, tourist revisits, tourist externalities on transportation congestion, spatial distribution, economic impact, and profiling of tourist interests” 38 38 Pentland, Noriega Campero, Winder, Pastor, Larson “Analysis of Tourism dynamics and special events through mobile phone metadata”, Massachusset Institute of Technology Media Lab LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 35 The work is based on the consideration that policy and research on tourism traditionally rely on surveys and economic datasets, which are based on small samples and depict tourism dynamics at low spatial and temporal granularity. On the contrary big data, mobile sensors and social media should be taken into account, since they generate many incredible opportunities for their supposed capacity to provide answers for questions related to travelers’ behaviors and experiences. Applying big data in tourism has the following advantages: larger reliability than self-reported data and intentions; easier to cross-reference with other data based on the geo-spatial information; more knowledge about the industry’s target market produced by the customers themselves³⁹ However this kind of work is not directed to the end-user, but properly to experts in charge of contributing to a urban expository decision support system for city development. In this sense, it can be argued that this simulator could be adopted within a LL framework as a tool to improve data analysis on tourism in the first steps of the process.

<https://www.media.mit.edu/publications/analysis-of-tourism-dynamics-and-special-events-throughmobile-phone-metadata/> An example of the use of these indicators for the planning and evaluation of high impact touristic events such as cultural festivals and sports competitions :

<https://www.youtube.com/watch?v=fLikAuFvVyg> 39Leng, Winder, Noriega, Luts, Pentland, Alonso “Analysis of Tourism Dynamics and Special Events through Mobile Phone Metadata”, 2016, Massachusset Institute of Technology Media Lab

https://www.bbhub.io/company/sites/2/2016/09/paper_57.pdf LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 36 Europeana Lab Responsible body for the implementation Europeana Foundation Location The Netherlands Funding Connecting Europe Facility, Innovation and Networks Executive Agency (INEA), European Commission Website

<https://pro.europeana.eu/what-we-do/creativeindustries#about> Description The Europeana Living Lab has been analyzed in order to understand whether the Open Data access on cultural and tourist heritage may represent an ideal pre-condition for the development of innovation in LL on cultural and rural

tourism. Europeana Lab represents an example of LL connected to the exploitation of previous results. In this case starting from the Europeana online portal providing access to more than 30 million digitised cultural heritage objects from Europe's libraries, museums, archives and audiovisual collections, the idea of the project was that LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 37 of demonstrating that the same platform can facilitate the creative re-use of digital cultural heritage content and associated metadata. The publication of the Europeana metadata under the terms of the Creative Commons Public Domain Dedication (CC0) took place in September 2012; starting from there further development of innovative applications based on this metadata has taken place. Partners have developed a number of pilot applications focused on design, tourism, education and social networks. Building on these pilots, a series of open innovation challenges has been launched with entrepreneurs from the creative industries to identify, incubate and spin-off more viable projects into the commercial sector. Some startups have generated from the re-use of the digital heritage. VanGoYourself has been developed as part of Europeana Creative in collaboration with Europeana partners Culture24, Plurio.net and Spild af Tid and provides a fun and friendly way to engage with cultural heritage. It allows users to recreate classic scenes from some of world's most famous paintings in a contemporary setting, and then share it with their friends on social media. Europeana Labs has been conceived as an exclusive online Living Lab in which development and innovation may happen given some pre-conditions- i.e. the access to the websites, a deep knowledge on Open data and their reuse-. It is an interesting model related to a high degree of qualification of their users that are not located in a well- identified spatial dimension (ie. A region, a state, etc.) In this sense this model connects people with the same background all over the world to reuse data and invent startups. Moreover a strong limit can be evidenced with regard to the possibility that the Europeana LL may positively affect tourism on rural areas. In fact, a clear LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 38 precondition for the reuse of Open Data is that of generating Open Data on a specific territory/area. By taking into account the gaps and the limits of some areas in Open Innovations and Open Government it may be argued that many areas could not benefit of the advantages deriving from an Open Data platform and that Open data in the field of culture and tourism represent a positive precondition for innovation just in case government and local authorities are committed to Open Government strategies and stakeholders are trained in Open Data. Another key limit of Europeana Living Lab is the absence of a "physical region" or space where the LL may take

place, being Europeana an online resource. This is why we may argue that Europeana does not fit with the LL statements that put the physical spatial dimension of interaction at the centre of the process.

Degree of correspondance with the indicators Low Medium High Analysis Value proposition Community engagement . - - Technical infrastructure Lifespan LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 39 Scale Eco-system approach Innovative outcomes /results Swiss Open Laboratory for E-tourism (SOLET) Responsible body for the implementation Institute of Information System, Bern Location Switzerland Website www.ifitt.org Description From the ENOLL website we read that “ SOLET is devoted to the use of information and communication technology (ICT) in tourism. It aims to create a playground for innovative ideas that may be used to improve the work of agents in the tourism and hospitality industry, the collaboration between different players in the value chain, the relationship of tourism agents and their respective customers. It links scientists and practitioners with an interest in the field and allows for sharing their ideas, developing new concepts and tools, as well as validating them in scientific experiments” Really according to the premises and the furnished details of the project SOLET seems to have been an engaging Living Lab, with activities and tools oriented to the community and the end-users i.e. a forum (face-to-face and virtual) for the exchange of ideas and requirements; a brokering service for matching interested users and research projects through the online user community LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 40 solet.ch. Moreover, also tourism organizations seems to have been concretely involved with a brokering service for matching interested tourism organizations and research projects (e.g. pilot tests) as well as the overall community through the possibility of having an overview over running pilots and showcases. This is why SOLET has resulted in a project with a high level of engagement of involved stakeholders. SOLET has benen developed with the research and technical contribution of 3 Institutes with a strong expertise on Information System (Institute of Information Systems (IWI), University of Bern; Technology Center Information Systems (TEWI), Brig; Department of Informatics (IFI) at the University of Zurich) and 2 Istitutes for Tourism (Institute of Economics and Tourism within the University of Applied Sciences Valais; Institute for Tourism of the Lucerne School of Business). The foundation of the Swiss Chapter of the International Federation of IT in Travel & Tourism (IFITT) is the main result of the SOLET Living Lab. IFITT focuses on tourism and technologies and acting as a platform furnishes news, tools and facilitate networking activities. In fact, it organizes string of events called Swiss E-Tourism-Forum in different

regions of Switzerland for collaboration facilitation between the academic partners and tourism practitioners and guarantee access to publications on tourism and technologies (newsletter, publications). Among its main programmes IFITT Hero that is used to book sessions with e-tourism experts and participate to meetings, workshops and seminars globally and locally. Another declared output is that of the eFitness® Benchmarking platform with 8 tourism destinations federated and over 200 accommodation enterprises from Germany, Austria and Switzerland. Its main goal is that of working on LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 41 marketing based on the new media to influence tourism. Unfortunately no further data are available on this last platform. degree of correspondance with the indicators Low Medium High Analysis Value proposition Community engagement . - - Technical infrastructure Lifespan Scale Eco-system approach Innovative outcomes /results LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 42 Smart Cities Living Lab Siracusa Responsible body for the implementation Municipality of Siracusa Location Siracusa, Italy Funding winner of the national call “energy from renewable sources and TIC for energetic sustainability” promoted by National Council of Research and National Association of Italian Municipalities Website <http://smartcities.cnr.it/> Description Siracusa is one of the three Municipalities selected under the national call call “energy from renewable sources and TIC for energetic sustainability” promoted by National Council of Research and National Association of Italian Municipalities with the aim of studying and experimenting innovative solution to make cities sustainable in their energetic and enviromental aspects. LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 43 Nevertheless TIC are conceived as a tool and not as the scope of the project. This is why there isn’t any wonder the project has focused on heritage valorization and on tourism through the adoption of multimedia tools and with innovative services and solutions. Precisely because of this original approach to the themes of culture and tourism Siracusa has won the prize. According to the guidelines of the call implemented results should act as levers for the transformation into Smart Cities through the installation of technological tools. In this sense Siracusa has been indicated as the first italian smart city and as a best practise among the international cities that are willing to become Smart Cities. The end-user may have access to the website www.welcometosiracusa.it or to six multimedia totems and QR code spread all over the historic archaeological areas of Neapolis and Ortigia. Interactive maps, virtual tour and augmented reality enrich the tourist experience. The initiative has been developed through a collaborative approach among

National Council of Research Institutes that is to say the Institute for archaeological and monumental goods; the institute of Biometeorology, the Institute for building technologies and the Institute for the organic synthesis and photoreactivity. Adopted technologies are the result of an improvement of previous ones developed by the Smart Services Cooperation Lab of Bologna (<http://www.cooperationlab.it/>) and showed in the Smart Cities Test Plant in the National Research Council research area in Bologna. This is why the LL follows the model of a testbed with the aim of replicate and improve technologies that have been developed somewhere else. LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 44 No reference to any aspect related to the involvement of the end-users and, in general, of the community is mentioned in the available docs related to this case, apart from the direct involvement of the Public Administration that is the main beneficiary of the initiative. By taking into account the indicators, here as follows a general evaluation of the case-study Degree of correspondance with the indicators Low Medium High Analysis Value proposition Community engagement . - - Technical infrastructure Lifespan Scale Eco-system approach Innovative outcomes /results LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 45 Centralab – Living Lab in Gorejinska in e-tourism Responsible body for the implementation E-Zavod E-Institute for Comprehensive Development Solutions (Head of Centralab Project) ;the University of Maribor (Slovenia) was responsible for the implementation of the pilot action on e-tourism Location Gorejinska, Croatia Funding Central Europe Programme, cofinnaced by ERDF Website Centralivinglab.eu Description The experience is relevant because it may furnish key details for a usercentered design of a web-based platform for sustainable development of tourism services in the Living Lab context of a rural area. The Living Lab was developed within the framework of the Centra-Lab project. LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 46 As a first step key stakeholders of the area were identified: tourist service providers - among those the Bled Regional Tourist Organization-; policy makers; researchers; developers. A work on the identification of problems has been carried out by identifying the main gaps as weak collaboration and participation. The platform was conceived as a web based one with the possibility of content re-use and of adding further contents from end-users and tourism service providers, as well of furnishing insights, suggestions to improve contents and develop new services. A first prototype of platform was developed by the Geodetic Institute and University of Maribor, Faculty of Organizational Science on the basis of previous researches on the most appealing

existing solutions. There have been several iterations of prototype development and its testing based on 70 criteria. At this stage the prototype was tested by all tourism living lab stakeholders and 52 users in a role of tourists within several workshops, by investigating on the level of simplicity/ complexity of the platform, also by submitting questionnaires. Then users' comments posed the basis for the development of the new version of the platform. For the scope a professional web design company was hired. Even in this case several prototypes were built and tested by researchers and developers, and, then, by all stakeholders. The main innovative element of this platform stands in its functional mechanism that enable collaboration at all levels, with the possibility of commenting, ratings, adding multimedia contents, updating and re-using them. It may be assumed that it represents a good result deriving from a multistakeholder approach according to the LL methodology. LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 47 Anyway, a deep analysis of the process would help us to understand the limits of this model, since with regards to the main service/product - the web-based platform- it seems that an empirical approach has been adopted more than a service design one. That is to say that, for example, the first prototype of platform should have been derived from a collective process more than from specific technical expertise. This is why, probably, many attempts and efforts have been done to re-define the platform until its second version. In a LL environment end-users should not be involved just for giving feedbacks, as emerge from research documents related to this LL experience⁴⁰ but they should be completely engaged as cocreators in any phase. The key role of end-users is more related to the third - generation living labs that portray different modes of collaborative innovation, where different stakeholders and particularly users have crucial roles in innovation on platforms⁴¹. degree of correspondance with the indicators Low Medium High Analysis Value proposition Community engagement . . . 40 Andreja Pucihar; Ana Malešič; Gregor Lenart; Mirjana KljajićBorštnar; et al. " User-centered design of a web-based platform for the sustainable development of tourism service in a living lab context", 2014 41 Seppo Leminen, Mervi Rajahonka, Mika Westerlund, "Towards third generation living lab networks in cities", 2017, Technology Innovation Management Review <https://timreview.ca/article/1118> LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 48 Technical infrastructure Lifespan Scale Ecosystem approach Innovative outcomes /results "ROCK -Regeneration and Optimization of Cultural Heritage in Creative and Knowledge Cities" Responsible body for the implementation Municipality of Bologna Location Bologna, Lisbon and Skopje Funding Horizon 2020, EU Programme Website

www.rockproject.eu Description The Bologna, Lisbon and Skopje Living Labs have been developed within the framework of the “ROCK42 -Regeneration and Optimization of Cultural Heritage in Creative and Knowledge Cities” project. The project involves 10 42 www.rockproject.eu LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 49 cities, 7 Universities, 3 networks of enterprises, 2 networks of cities and several companies and development agencies, a foundation as well as a charity organization. These Living Labs have been activated with the aim of adding Bologna, Lisbon and Skopje in the list of the Role Model cities, that are authorities or local governments that have implemented innovative, creative, inclusive and efficient measures to realize strong political will in the field of Disaster Risk Reduction (DRR) at local level. By taking into account that the DRR includes many different fields, the ROCK project management has selected 7 role model cities (Lyon, Turin, Cluj, Eindhoven, Athens, Vilnius, Liverpool) that are characterized by a knowledgebased economy and that have selected their most successful actions related to culture and creativity as Models. That is to say that the same 7 cities represents best practices of urban Living Labs processes in the field of creativity. Moreover, Bologna LL represents an interesting case on how creativity may impact in improving the Model of resilient cities according to the UN Office for Disaster Risk Reduction and how tourism- as a component of the wider creative framework- may positively impact and influence such different domains. As stated in the UN Sustainable Development Goals, in effect, tourism is one of the goal whose pursuit may impact on all the other ones. Regardless to results and outputs that have not been still achieved since these are ongoing projects, the Bologna, Lisbon and Skopje LLs represent best practice in themselves because of the specific methodological process that has been adopted for the case , by taking into account the best experiences all over the world that have been classified and recognized within the wider framework of the Role Model Cities. LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 50 That is to say that the LLs have been conceived with the aim of pursuing sustainable long term goals that are not only related to the gaps that may emerge from a territorial analysis, but to the idea of converge to a wider result (in this case the Disaster Risk Reduction) they may benefit all the community in all sectors. (see for example the ten point checklist essentials for making cities resilient as elaborated by the UNISDR)⁴³ The wider goal is evident as ROCK project conceptualizes an innovative circular urban system model called the ROCK Circle, that is a multi-stakeholders , multi-sector approach. The published factsheets on the LLs have been conceived with the aim of spreading results on how co-creation contributes to heritage-led urban

regeneration, in particular through the ROCK LivingLabs, that is to say how co-creation processes may impact on the regeneration of urban centres by stressing the attention on heritage. That is relevant to our analysis because the regeneration is a key to further develop tourism. Briefly, it can be argued that it is absolutely significant that a LL working on tourism should be developed within a wider framework that put all the stakeholders in charge of pursuing sustainable long term goals that should be interrelated to the VISION of that specific territory that should be shared at all levels (government, public & private sectors, citizens, etc.). Degree of correspondence with the indicators Low Medium High Analysis 43 UNISRD , Making Cities Resilient

<https://www.unisdr.org/campaign/resilientcities/assets/documents/Role-Model-Guidelines.pdf> LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 51 Value proposition Community engagement . - - Technical infrastructure Lifespan - - - Scale Eco-system approach Innovative outcomes /results - - - Other relevant experiences Here as follows the description of an experiences that goes beyond the concept of Living Lab and has been developed in a strict relation with the urban approach of Urban Lab, a wide project of urban experimentation managed by Paris and Co, based on the partition of the city in different neighbourhoods of Urban Innovation in which pilot project are tested and experimented. Welcome City Lab44 Description Welcome City Lab is the tourism innovation platform of Paris. It is the first incubator exclusively dedicated to tourism all over the world. It incorporate the main Living Lab 44 <https://welcomacitylab.parisandco.paris/> LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 52 characteristics: the goal of promoting innovation, favouring people exchanges, collaboration, researches, by mixing public and private stakeholders. Moreover it lacks of some typical Living Lab characteristics : i.e. the lifespan, since it is a permanent place with the aim of working on a long-term period; the scale, since it is always related to Paris geographical dimensiona as well as to the specific dimension adopted by each project. It is an example of clear value proposition since its goal is that of “positioning France to be the first in the world to create network of tourism incubators”. It provides the following services: - Incubation of startups: each year 30 startups are selected (10% from foreign countries) ; among the service offered, the coaching of the entrepreneurs and teams- marketing, commercial, management, methodologies – and the possibility to get in contact with other professionals; -activities to sensibelize tourism professionals to what innovation is, sensibelize innovation professionals to the which opportunities tourism brings to them; make them work together i.e. in workshops, conferences, etc..; -experimentation-

startups experiment ideas in real conditions- ie. In public spaces; -economic intelligences- identify the trends of the new future. To help identify trends in tourism innovation at a global level and publish a trend book on innovation tourism hospitality and travel It is also an example of clear revenue model since it has established public and private percentages of incomes to stay in the game for a long period. It is based on public-private funds coming from the incubated startups (€18.000,00 for each of the 30 selected startup/year in change they cover rental costs and mentorship)- they represent the 50% of LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 53 the incomings; the 40% come from private donors/funds and the 10% from public municipal contributions. In this way the LL may benefit of about 1,080 mln Euros/year. Surely WELCOME City Lab take advantages from its own geographical position. Moreover a key element of its success is the number of incubators related to specialized sectors widespread all over Paris and that may directly/indirectly contribute to the reinforcement of innovation aspects related to tourism. Another key element to be drawn from this case study is the importance of considering innovators and professionals not only as workers but also as qualified and high income tourists. An attractive environment for innovators may also led them to choose these places for their daily life. References Researches and publications Veeckman, Shuurman, Leminem, Westernlund “Linking Living Lab characteristics and their outcomes: towards a conceptual framework, Technology Innovation Management Review, 2013 https://timreview.ca/sites/default/files/article_PDF/Veeckman_et_al_TIMReview_December2013.pdf Mastelic, Sahakian, Bonazzi How to keep a living lab alive, 2015 <https://www.emeraldinsight.com/doi/abs/10.1108/info-01-2015-0012> Henry Chesbrough “Open innovation: the new imperative for creating and profiting from technologies, 2013 <https://www.emeraldinsight.com/doi/abs/10.1108/14601060410565074> Ekaterina Arabska, Ivanka Shopova, Vihra Dimitrova (University of agribusiness and rural development, Plovdiv, Bulgaria) “Living labs in integrated agriculture and tourism activities: Driving innovations for sustainable rural development” LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 54 https://www.researchgate.net/publication/291353369_Living_labs_in_integrated_agriculture_and_tourism_activities_Driving_innovations_for_sustainable_rural_development Rethinking value proposition tools for living labs, Aiväri, Jyrämä “Rethinking value proposition tools for living labs”, 2017 <https://www.emeraldinsight.com/doi/abs/10.1108/JSTP-09-2015-0205> Mulder, Velthausz, Kriens “The Living Labs Harmonization cube: communicating Living Labs’essentials”

http://www.ifiptc3.net/IMG/pdf/eJOV10_SPILL8_Mulder_Velthausz_Kriens_Harmonization%20Cube.pdf Guimont, Lapointe, Sévigny – Changing collaborative practices in tourism-a Living Lab case-Canadian Journal of Regional Science <http://www.cjrsr.org/V40/cjrsr40-1-7Guimont-lapointe-sevigny.pdf> <https://www.researchgate.net/publication/272369586> Guimont, Lapointe “Cocreation of a Technology enhanced Tourist Experience in the Context of a Living Lab”, 2015 D. Guimonte, D. Lapointe “Empowering Local Tourism Providers to Innovate through a Living Lab Process: Does Scale Matter?”, 2016 https://timreview.ca/sites/default/files/article_PDF/GuimontLapointe_TIMReview_November2016.pdf Pentland, Noriega Campero, Winder, Pastor, Larson “Analysis of Tourism dynamics and special events through mobile phone metadata”, Massachusetts Institute of Technology Media Lab <https://www.media.mit.edu/publications/analysis-of-tourism-dynamics-and-special-events-through-mobile-phone-metadata/> An example of the use of these indicators for the planning and evaluation of high impact touristic events such as cultural festivals and sports competitions : <https://www.youtube.com/watch?v=fLikAuFvVyg> Leng, Winder, Noriega, Luts, Pentland, Alonso “Analysis of Tourism Dynamics and Special Events through Mobile Phone Metadata”, 2016, Massachusetts Institute of Technology Media Lab https://www.bbhub.io/company/sites/2/2016/09/paper_57.pdf LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 55 Andreja Pucihar; Ana Malešič; Gregor Lenart; Mirjana KljajićBorštnar; et al. “ User-centered design of a web-based platform for the sustainable development of tourism service in a living lab context”, 2014 Seppo Leminen, Mervi Rajahonka, Mika Westerlund, “Towards third generation living lab networks in cities”, 2017, Technology Innovation Management Review <https://timreview.ca/article/1118> Documents The Helsinki Manifesto http://elivinglab.org/files/Helsinki_Manifesto_201106.pdf Smart Specialization Platform, European Commission <http://s3platform.jrc.ec.europa.eu/living-labs> Tourism and the Sustainable Development Goals, Journey to 2030, UNWTO <http://www2.unwto.org/publication/tourism-and-sustainable-development-goalsjourney-2030> The Chengdu Final Declaration http://cf.cdn.unwto.org/sites/all/files/pdf/13.09.17_unwto_ga22-hl_chengdu_declaration_final_clean_.pdf Initiative 5- Tourism and heritage, European Commission https://ec.europa.eu/culture/content/tourism-and-heritage_en UNISRD , Making Cities Resilient <https://www.unisdr.org/campaign/resilientcities/assets/documents/Role-ModelGuidelines.pdf>

Websites www.enoll.org LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 56 <https://welcomacitylab.parisandco.paris/> www.rockproject.eu www.centralivinglab.eu <http://smartcities.cnr.it/> www.ifitt.org <https://pro.europeana.eu/what-we-do/creative-industries#about> <http://llo.quebec/index.php/portfolio-item/tourisme-riviere-du-loup> <https://www.media.mit.edu/projects/andorra-living-lab/overview/> The Creative Apulia District. It is a no profit association composed by enterprises, public and profit organizations as well as third sector that have the scope of creating a shared system for the development and growth of all the creative sectors, recognized by the Apulia Region as a Productive District with the regional Law n 23/ 2007 “promotion and recognition of productive districts”. With the definition of the Development Plan 2016-19 in line with the European Strategy 2020 the Apulia Creative District indicates the three main goals: the creation of a favourable ecosystem for the development of the cultural and creative sector; the consolidation of the ecosystem and the reinforcement of the relationship among cultural and creative sectors and the other ones in society and economy. In the last publication Symbola Foundation “I am Culture- 2018” has recognized the District as one of the main drivers for the development of culture in Italy. LIVING LAB FACTSHEET CATALOGUE OF LIVING LAB BEST PRACTICES IN CULTURAL AND RURAL TOURISM 57 The author Lucia Lazzaro is an expert of cultural and enviromental innovation processes. She works as a project manager in the cultural field in different local and international projects. After having managed activities within some international networks and organizations and projects related to the co-creation of development strategies for tourism in extended areas, her work is focusing on the empirical research on the engagement of communities in pheripheries in cultural and creative activities in order to impact on social and economic growth. Pictures used in this documents are under CC0 domain Contents are released under CC- BY SA 3.0 licence