



WaVE
Interreg Europe



European Union
European Regional
Development Fund

Action Plan

Municipality of Ravenna (IT)

1. GENERAL INFORMATION

Project:

WaVE – Water linked heritage Valorisation by developing an Ecosystemic approach

Partner organisation:

Municipality of Ravenna / Certimac

Other partner organisations involved (if relevant):

Country:

Italy

NUTS2 region:

Emilia Romagna

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2. BASELINE SITUATION IN THE REGION

A. MAIN FEATURES AND ENVISAGED IMPROVEMENT OF THE POLICY INSTRUMENT

Policy instrument(s) addressed:

1. Regional Operational Programme Emilia-Romagna ERDF 2021-2027

Institution responsible for addressed policy(ies):

Emilia-Romagna Region

Proposed self-defined performance indicator(s):

- 1) Number of projects developed as a result of interregional learning during the project.
- 2) Interreg Europe pilot action implemented testing lessons learnt from partners

Target value of the indicator(s):

- 1) 3 project actions developed - at least 1 approved
- 2) 1 pilot

Evaluation of the current operation of the policies:

To enhance the Water Linked Heritage (henceforth: **WLH**) in Ravenna's area we initially aimed to influence the Emilia-Romagna ROP ERDF 2014-2020 Axis 5 "Enhancement of Artistic, Cultural and Environmental Resources". However, when the WaVE project started, all calls under this Axis had already been launched and there was no further funding available.

According to the developments of the EU programming periods, and having received the Interreg Europe Managing Authority endorsement, we are now focusing on the **Emilia-Romagna ROP ERDF 2021-2027**, which is **currently being finalized**, and thus offers more opportunities for influence.

As a Municipality, we are active members of the "Pact for employment" working group, which is the main tool that the MA has set up for a participative planning and programming of the next ERDF linked policy, gathering all regional stakeholders representing enterprises, research and innovation and local communities.

The Emilia Romagna ROP ERDF programme (ER ROP ERDF), which is still under development, should be in line with the European Climate and Jobs Pact and coherent and complementary with the National Recovery and Resilience Plan (NRRP). The ER ROP ERDF Policy Objectives have been disclosed even though the document is still to be approved. Based on the available information, the Emilia Romagna Region will adopt only part of the Cohesion Policy Objectives, as the Cohesion Policy Objective 4 "a more social and inclusive Europe" is not addressed and only part of the PO3 "a more connected Europe by enhancing mobility" is considered in one of the ER ROP ERDF PO2 priorities, promoting a multi-modal and sustainable urban mobility. ER ROP ERDF PO1 "a more competitive and smarter Europe", PO2 "a greener, low carbon Europe transitioning towards a net zero carbon economy", and PO5 "Europe closer to citizens by fostering the sustainable and integrated development of all types of territories", instead, have been adopted by the ER ROP ERDF Priority Objectives. The Specific Objectives that we aim to address are listed below:

- **PO1 "a more competitive and smarter Europe"** – priority 1: research, innovation, and competitiveness. Within this priority, we aim to address the following Specific Objectives:
 - **SO 1.1** "developing and strengthening the research and innovation capacities and the introduction of advanced technologies";
 - **SO 1.2** "allowing citizens, enterprises, research organizations, and Public Authorities to seize the advantages of digitalization";
 - **SO 1.3** "strengthening the SMEs' sustainable growth and competitiveness, and the creation of employment within the SMEs also thanks to production investments".

We will influence this policy through Action 1 – Physical and digital exploration of the Water-Linked Heritage (pg. 24), and (pg. 47).

- **PO2 "a greener, low carbon Europe transitioning towards a net zero carbon economy"** – priority 2: sustainability, decarbonisation, biodiversity, and resilience. The Specific Objectives we aim to are:
 - **SO 2.1** "promoting energy efficiency and reducing greenhouse gas emissions";
 - **SO 2.6** "promoting the transition toward a circular and resource-efficient economy"

We will influence this policy through (pg. 34).

- **PO5 "a Europe closer to citizens"** – priority 4: attractiveness, cohesion, and territorial development. The **SO 5.1** is dedicated to "Promoting integrated and inclusive social, economic and environmental development, culture, natural heritage, sustainable tourism,

and security in urban areas". Within this framework the region requires that Municipalities develop a **Transformative Urban Agenda for Sustainable Development (TUASD)** in accordance with the Climate and Jobs Pact and the Regional Strategy for Sustainable Development. TUASD (ATUSS in Italian) will be based on participatory approach, mobilizing transversally different Cohesion Policy Objectives, and to be implemented through a wide variety of resources, including ERDF. The agendas are intended as a multi-level governance tool involving regional and local administrations, citizens, enterprises, and other local stakeholders.

Another instrument influencing the ER ROP ERDF 2021-2027 Calls content, is the **Region Smart Specialization Strategy (S3)** for Emilia Romagna adopted in June 2021. There are several thematic priorities within the S3 we aim to address throughout the project:

- Production, transformation, and enrichment of **cultural content**, also involving the end user (co-creation, distributed collaboration, user generated content, testing).
- New cultural **fruition and distribution** systems (user experience, emotional design, storytelling, gamification, edutainment, service design, accessibility, etc.).
- New formats, tools, and means of communication for handcraft/cultural/creative products and for the **territorial tourism**.
- **CCI and digital technologies** to support the competitiveness of regional productive sectors.
- **Participatory processes** and tools to support urban redevelopment and reactivation paths for citizens' empowerment in the ecological transition.
- Organizational and project design tools and models to support **urban reactivation** of redeveloped spaces or spaces undergoing redevelopment, including temporary and participatory management.

Change to be achieved in the addressed policies:

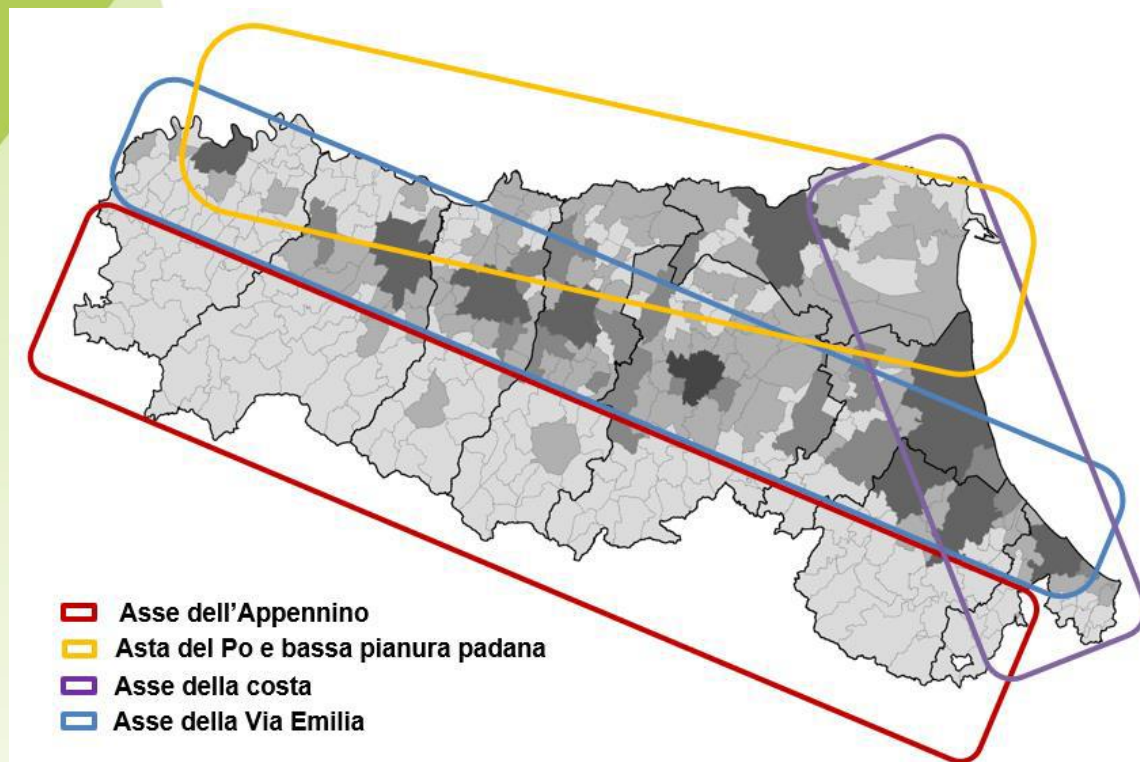
We plan to influence the regional ROP by using Wave best practices to design effective projects to be funded by the ERDF Regional operational plan 2021-27 (Actions 1, 2, 3).

In order to influence the programme in such a way we have been working as follows:

- Step one: having the importance of water and heritage highlighted in the Regional Strategy. This step was the necessary pre-condition to influence the ROP and it is achieved. The MA is aware of the possible interlinks and the role that WLH can play within the framework of 2021-27 planning, and more specifically within the urban-rural integrated development projects. Comparing the Strategic documents of the Region to the previous programming period, **the "water" element has become crucial** for the identification and definition of regional sub-systems for integrated development: the Po River and the Adriatic Coast are considered as two of the strategic territorial axes, Ravenna being included in the latter.

As a matter of fact, water plays a central role in the territorial development planning of the Po area and the coastal area: the former is focused on the enhancement of the water quality and the valorisation of the protected areas, whereas the whole coastal development will revolve around the concept of "sustainable tourism district" with particular accent on the redevelopment of urban/naturalistic sites, the diversification of the tourist offer and the mitigation of the anthropic pressure, and the collective effort to mitigate climate change

consequences and promote environmental sustainability, in line with the Emilia-Romagna Region Smart Specialization Strategy.



Img. 1 - The 4 macro-areas for Emilia Romagna's territorial development: the Apennine axis (red); the Via Emilia axis (blue); the Po axis (yellow); the Coast axis (purple). From: "Regional Strategic Document for the unitary programming of European Development Policies 2021-2027"

- **Step 2:** having the importance of water and heritage highlighted in the Local Strategy connected to ERDF ROP. The Wave learnings have influenced the ongoing design Local Strategy: Agenda Ravenna 2030. This is the second pre-condition to develop new projects and submit them in the framework of ROP.

The Agenda is both an integrated territorial strategy based on an ecosystemic approach and a dashboard for a better coordination of funding sources and objectives in the new scenario where the Municipality can access EU funding via the ROP ERDF and the "Italia Domani" National Recovery and Resilience Plan.

The local strategy has been drafted as a Transformative Urban Agenda for sustainable development (TUASD) and adopted by the Municipal board on January 28, 2022. The Managing Authority for the implementation of Ob.5 "Europe closer to citizens" has decided to work closely with Urban Authorities and has requested to draft the local Strategy as TUASD. The document is aimed at creating a framework for further participatory paths and project planning and eventually coordinating project proposals within the ERDF ROP and other funding programmes (including Interreg, territorial cooperation, PNRR National Resilience and Recovery plan) in order to foster sound and integrated territorial strategies, close to citizens (by means of participation) and able to benefit from different sources of funding. In this framework Ravenna drafted the TUASD "Agenda Ravenna 2030". It includes a territorial analysis where water-linked heritage is mentioned to be of

high importance for Ravenna and general objectives are set including the valorisation of such heritage as follows:

- Plan to regenerate the water-linked heritage, which is a typical asset of Ravenna's territory, by means of restauration, refunctioning, accessibility improvement and innovative uses;
- Valorisation of water sources through water quality monitoring and action for improving the water quality of the Candiano Canal, within the framework of a wider urban regeneration process of the Darsena district.

Moreover as requested by the Region our agenda identifies integrated action fields, of which at least four interrelate to water-linked heritage:

- Natural heritage and accessibility
- Cultural and Creative Industries
- Network of cultural spaces
- The Darsena

In the next months the Agenda Ravenna 2030 will be further discussed and defined with stakeholders and citizens as part of the Priority 4 of the ROP ERDF 2021-2027: in this framework the water-linked heritage will be one of the focus, in order to better prepare and develop specific projects to be funded by the MA.

Finally the draft Agenda explicitly acknowledges the Wave participatory path as one the relevant experiences that contributed to defining the draft Agenda.

- Step 3: alignment of the local strategy with the managing Authority and influence the ERDF ROP 21-27 management and implementation of priority 4 "Attractiveness, cohesion and territorial development" linked to the general objective "Europe closer to citizens".

In parallel with the local participatory path to finetune the strategy and identify the relevant project the Municipality of Ravenna will discuss and co-design the TUASD with the Managing Authority. Such strategy will be hopefully incorporated in the ERDF ROP by the Managing Authority and therefore the new approach based on the Wave learning will become part of the policy instrument and its implementation. The alignment with the MA will include objectives, indicators and main project to be funded.

- Step 4: identification, design and submission of new projects; during the next months we will actively follow up the programme priorities development in order to get early information regarding the calls for proposal. We have identified three project themes matching the local needs and priorities and the ROP ERDF 2021-2027 priorities. Each project theme has been translated into an action project within this document and will be further developed with the stakeholders at the local level on one hand and will be brought to the attention of the MA on the other, in order to incorporate relevant issues in the policy instrument. The approval date of the final version of the Emilia Romagna ROP ERDF 2021-2027 is still unknown: it is expected by autumn 2022. To be constantly updated, a regular dialogue with the Emilia-Romagna Region is maintained.

B. BASELINE SITUATION AND VISION BASED ON THE REGIONAL STATUS QUO

STARTING POINT

Ravenna and Certimac have identified **three water-linked redevelopment sites** that are fully complementary to each other. They represent and "connect" three different landscapes; the

legacy of three different historical periods but also three different meanings of water: the Ancient Port of Classe, the Darsena docks and the Maritime Park.

1) THE ANCIENT PORT OF CLASSE

*Archaeological landscape - Remains of Roman period - Water as absence
WLH as sector*



Img. 2 - Remains of the ancient commercial port of Classe

Located within the wider Classe's Archaeological Park, the ancient port of Classe represents the "Legacy of the Empire", that is it testifies to the town's glorious past, dating back to the 5th and 6th centuries AD when Ravenna had been chosen as the Capital of the Western Roman Empire. The Ancient Port area (as well as the whole archaeological park) has been brought to light through excavation works carried out in fits and starts since the 1960s. The Ancient Port is nowadays an open-air museum exhibiting a series of ruins belonging to the former warehouses built on the banks of a canal and lined along a paved road. The site was first opened to the public in 2015. The visit area covers a surface of 10,000 square meters. Everything has been conceived in order to minimize the physical and visual impact on the archaeological elements. The museum is opened to visitors from March to November and during the summer several entertainment events are organized within the area.

Despite its high historical value and the strong commitment of all the involved public authorities to enhance and strengthen public policies for the conservation, valorisation, and exploitation of the area, which represents a "unique example" of cultural heritage, the Ancient Port is considered as set apart from the town due to its distance from the centre and the lack of adequate transport system. Nonetheless the stakeholders deem that with the WLH acting as binding agent it will be

easier to integrate the Ancient Port within an interconnected network (whether physical or virtual through storytelling) by means of urban plans and projects aimed at connecting the three sites.

2) THE DARSENA DOCKS

Proto-industrial landscape - Remains of XIX - XX centuries - Water as connection (from the city to the sea)

WLH as factor



Img. 3 - Photo editing showing expected future uses of the Darsena

The wet docks represent the “Legacy of the Town’s industrial growth dating back to the 19th Century” with its water-linked industrial archaeology buildings and infrastructures. The area, covering a surface of about 136 ha, is located just behind the town centre, and is connected to the sea through the Candiano Canal. The industrial settlements that used to be thriving in the 19th century were all abandoned in the 80s and since then the area has been deserted. Besides, it is located within the most densely populated town district with a very high percentage of non-national and low-income residents. Most of the buildings and spaces which constituted the former industrial area are still empty with some exceptions: a polyvalent cultural centre and art gallery, some bars, pubs and restaurants and playgrounds. The Municipality has been investing time and money to redevelop and manage the entire area. In 2015 a specific plan was issued, providing for the re-use of the former industrial buildings based on innovative concepts concerning culture, tourism, and sustainability to be identified through a participatory path involving local stakeholders and citizens. Most of the buildings are private ownerships except for the customhouse and the ancient sulphur refinery. Due to this situation, it is hard to implement the desired regeneration strategy. Nonetheless the re-activation of the public owned buildings and the temporary uses approach (which is allowed only in the docks) have acted as a driving wheel for a few private investments.

The stakeholders deem that the Darsena’s strategic position may help develop intermodal transport hubs and connected supporting services and increase out-of-season tourist flows by

extending the tourist offer. Besides, by developing a negotiation process with a common thread (WLH) we may manage to conceive a shared action plan that facilitates the implementation of the individual actions.

3) THE MARITIME PARK

*Coastal landscape - Remains of timeless period - Water as origin
WLH as vector*



Img. 4 - Photo editing to show how the Park will re-create a strong connection among sea, pine forests and “pialassa”

The Maritime Park represents our “Environmental Legacy”: our water-linked natural asset dating back to the Middle Ages.

Ravenna’s Maritime Park is an urban redevelopment project covering an overall coastal area of 35 km from Casalborsetti in the North to Lido di Savio in the South. It covers the beach dunes and the pinewoods running along the coast. Water is the soul of this natural heritage. Ravenna’s coastline is a well-known tourist destination, mostly appreciated by domestic tourism. Today beaches, beach clubs and clubs are the main attractions. The Maritime Park project wants to radically change this mainstream use of the coast by re-creating the original ecosystem composed of sandy dunes, pinewood forests and water (including the inland basin called “pialassa”, belonging to the complex geological history of the Delta of the Po River). For this reason, the significance of the site is destined to change in quite a short time: a sustainable and responsible tourism will be promoted and water, as a natural heritage, will be one of the main drivers of the future. The redevelopment of the site was decided by the Municipality in its Single Programming Document 2017- 2019 as part of its Urban Regeneration strategic planning. The operational goal is to regenerate the areas behind the beach facilities of all the municipal seaside resorts and to create foot and cycle paths in order to safeguard the natural environment.

The general objectives and expected goals of the project are:

- **to reveal** the water landscape of the wetlands and also have the opportunity to live the pinewood and the beach dunes by connecting the sea and the beach with the natural environment lying on the back;

- **to reconstruct** the environmental equilibrium between beach, dunes and pinewoods interrupted over the centuries by human exploitation;
- **to boost** the potentials of the area by identifying each regenerated element with information panels;
- **to promote** a quality tourism network all year-round, contributing to extend the tourism season.

The area covered by the plan is 35 km long and has been divided into three sections, based on the specific features of the individual beach resorts. The executive plan for the first section has been approved and regeneration works were expected to start in September 2020, but due to legal actions during the procurement phase they have been postponed to October 2021. The first section covers a 9km coastal area located North-East of the town centre. The costs for the first section are covered by regional fund, whereas the remaining sections of the Maritime Park project have been approved for funding through the National Recovery and Resilience Plan in January 2022 for an overall budget of € 10.475.000,00.

The WLH of our town is a true asset, even though it is not always perceived as such. The values of the individual redevelopment sites are acknowledged, but in isolation. Time has come to connect such values. Thanks to WaVE project we have the opportunity to do it and share the awareness of the WLH valorisation through an integrated narration with water as a common thread.

VISION

Our vision for the areas involved in WaVE project could be named “**Our future in our roots**”, as during our first LSG meeting all the participants acknowledged the visual reproduction of the Roman Ravenna (to which the Ancient Port of Classe belongs), whose main elements were: the structural function of the water system, with its peculiar relationship between the sea and the inland water (basins and canals); the untouched nature of the coastline, made of sand and dunes, covered by salt-tolerant plants (halophytes); the presence of trees; a well-organized village, developed around an orthogonal streets system (following the organization of a *castrum*, that is a roman military camp); an easy connection between the village and its port; an overall sense of equilibrium between nature and human beings.

In line with the European Sustainable Development Goals, these are the elements that should characterize Ravenna **in 2030**, when, unlike today, the WLH will recover its fundamental role, and a better balance between the natural ecosystem and the anthropic activities will be achieved.

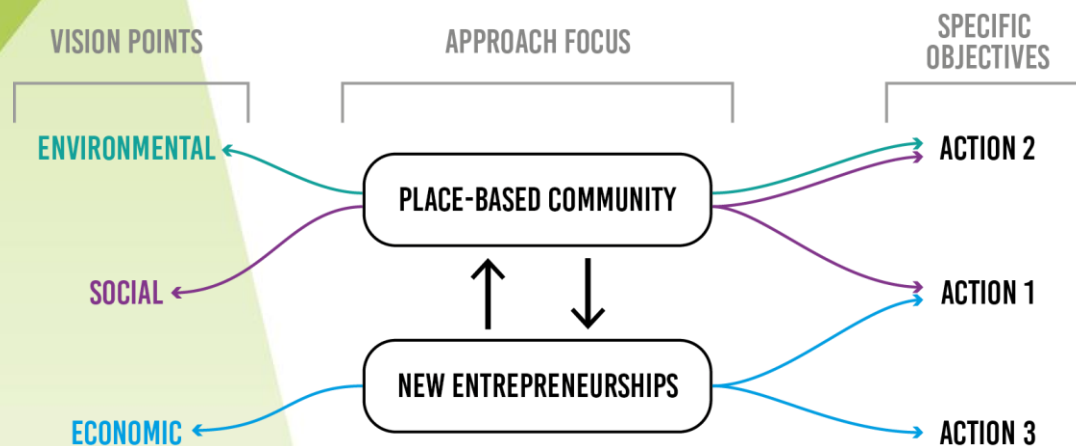
The resulting landscape will convey:

- from the **environmental point of view**: the importance of natural ecosystems with which human activities shall interact in a more balanced way;
- from the **economic point of view**: the value represented by a welcoming territory for tourists and travellers, prosperous and able to valorise its potentials without exhausting the available resources, including the land;
- from the **social point of view**: the importance of the WLH both as a primary asset enabling human life and as natural defence element .

STRATEGY TO REALISE THE VISION

The **three dimensions of sustainability** outlined above as elements of our vision are reflected in our Actions specific objects through a strategic **approach** based on the **alliance** between a **place-**

based community and a **new entrepreneurial ecosystem** aimed at the WLH valorisation and protection: the community will be committed to the heritage care, thus contributing to the attractiveness of the territory, while the entrepreneurial ecosystem will be able to support the heritage through solutions, products, and services.



The **place-based community** will be provided with knowledge, tools, and spaces (physical and virtual) to participate collaboratively in the conservation and enhancement of the WLH. On the other hand, the creation of **new entrepreneurs (CCI)**, while guiding the existing ones to develop a new mindset, is linked to the improvement of the attractiveness of the territory and the deepening of the collaboration between businesses, research, and the public sector, especially in the areas of social innovation and conscious and responsible tourism.

Our overall approach is focused on the interaction between these two aspects: the community on one hand, is strongly oriented toward the local perspective, while the entrepreneurial system, on the other, can also be open outward. These two aspects of the approach influence and support each other and will be implemented through the following transversal features:

- **Strategic storytelling**, spreading the knowledge of the territory's history and its relationship with water. Such a relationship has built, defined, and shaped the landscape that we see today, involving both natural and human elements: through a narration that can excite and involve the people, without betraying the scientific value and the quality of the collected information, we will be able to share the various opportunities offered by the territory valorisation within a systemic logic (synchronous narration that connects past, present, and future). More specifically the narration will be addressed to:
 - **Citizens**: a deeper awareness of their territory's history will enable them to better evaluate public policies and private actions undertaken to valorise the WLH, and facilitate the creation of an environment that supports change;
 - **Tourists**, by targeting the shared information on the different publics to be reached, but also introducing the concept of tourist as a "temporary citizen", thus part of the community;
 - **Entrepreneurs** by suitably grouping the collected information in order to spur the production of new products/services or the development of entrepreneurial ideas to give the properties a brand new life.

In this perspective, the storytelling is functional for the place-based community to open itself outward, and to the entrepreneurial system to attract both visitors and talents from outside, to become a part of the local community, even if temporarily.

- **Hardware/Software integration.** The redevelopment of buildings and areas, intended as “hardware” actions aimed at preserving the property, will provide a physical place acting as **community aggregator** able to give life to a collaborative environment and to raise a deeper awareness on environmental protection and valorisation, also granting the community continuity in time and the thriving of the entrepreneurial ecosystem. On the other hand, specific activities, and the development of dedicated digital tools (“software” actions) will: enable and facilitate connections and relations; guide city users in the exploration of the WLH; support the sharing of knowledge and experiences, unlocking the CCI’s untapped potential and prompting open innovation. The role of digital tools as enablers allows to easily shift from the territorial narrative dimension to the accurate implementation, translating into a synergy between hardware and software actions. Such synergy has been implemented for instance, through the strategical exploitation of **temporary uses**, ranging from events aimed at raising awareness, to the realization of creative installations on the spot, in a perspective of progressive revitalization of buildings and areas.

In this framework, the **WLH** might play several roles, acting as:

- a mean to **convey knowledge**, providing suggestions and inspiration through the narration of both experiential and scientific knowledge resulting from the implementation of Action 1 (pg. 24);
- a **catalyst of interests** on sustainability and biodiversity issues, becoming a renowned and frequented place that is part of a wider narration, as expected result of Action 2 (pg. 34).
- a **vehicle for opportunities** for CCIs for the reactivation and valorisation of the cultural and natural WLH, as planned within Action 3 (pg. 47);

Lastly, the concept of **integration** guides our strategy: punctual interventions are not as effective as integrated ones to prompt the envisioned new approach to the WLH. The whole context is always to be considered. For this reason, all the action projects proposed are aimed at affecting transversally the three WaVE sites. The action projects themselves are strongly **interconnected**. They have nonetheless been conceived so as to be developed individually in case they are not all funded at the same time, the workload being equally distributed among the partners so that, in case all the 3 projects are successful, their commitment can remain focused, increasing the quality of the project proposal.

3. Pilot Action – Immersive Tour of Ravenna's water linked heritage

ORIGINAL GOOD PRACTICE(S)

Province of Alicante - Blue Routes: Guide to Alicante's Hydrogeological Heritage.

From Alicante we learned about a Guide with 10 different routes which has been created in order to discover the water-related heritage in their province. The Guide represents a good example of storytelling and branding: the routes targeting different audiences with different interests and purposes (educational, scientific, recreational). Moreover, different means of communications have been taken into consideration - either physical or digital- in order to maximize the reach. Finally, great value has been given to user-generated content, feedback and stories.

Municipality of Breda - (Re)development in dialogue - A new approach to heritage protection and valorisation

From the Municipality of Breda we learned that the focus should not be on strict protection or legislation, but on dialogue. Being able to create working groups by involving stakeholders from different sectors and with different expertise can accelerate decision-making processes. The development of mutual trust between stakeholders can lead to the sharing of broader objectives and to activating synergies that were not possible before.

Municipality of Breda - Brabant remembers

75 personal life changing war stories connected to various locations of the Brabant region have been used to narrate the impact of the Second World War in a tangible and more impactful way. The unusual, inspiring, personal stories are localized on a map, thus strongly conveying a deeper sense of connection to the actual territory.

Ister-Granum EGTC - Párkány és Vidéke Kulturális Társulás (Cultural Associations of Štúrovo and the Surrounding Area) - Bridge Guard Residential Art / Science Centre

We were inspired by the Bridge Guard Art residence gathering artists from all over the world to create something unique about the region of Ister-Granum. By opening calls not only to artists but also to citizens might help actively involve them in the processes that are affecting areas such as our Darsena.

Municipality of Aarhus - The uncovering of The River Aarhus

The decision to uncover and demolish the concrete road on top of the river, while establishing pedestrian zones along an open canal, was not supported by everybody at the beginning. From this Good Practice we learned that supporting changes with planning open events and initiatives, can contribute to the engagement of citizens, visitors and tourists.

Municipality of Ravenna - CIRI - ICT (Centre for Industrial Research on Information and Communication Technologies of the University of Bologna) - SACHER – Smart Architecture for Cultural Heritage in Emilia-Romagna

An innovative ICT platform based on a Cloud Computing infrastructure, fully distributed and open source, aimed at facilitating storage and use of Cultural Heritage data for both specialized users and the public. Being totally open source, it can be adapted to different local specificities and objectives.

TRANSFER JOURNEY OF THE GOOD PRACTICE

The pilot action is inspired to individual or multiple actions taken from the Good Practices exchanged with WaVE's partners during the knowledge exchange sessions and connected bilateral meetings. The transferred elements from the abovementioned Good Practice described by our partners are the following:

- From **Alicante Good Practice "Blue routes"**: the collection of information and data on the identified water-linked redevelopment sites and their presentation in an attractive and well-structured way, by means of the most modern and cutting-edge communication techniques (drone mapping and 3D rendering represents a further enhancement – suggestion arisen during the discussion with the local **stakeholders** and in particular with Open Lab).
- From **Breda Good Practice "(re)development in dialogue"**: the concept of heritage as a source of spatial valorisation and a product of (public) debate. Owners of the buildings and local stakeholders are involved in creating a common storytelling.
- From **Breda Good Practice "Brabant remembers"**: the collection of individual stories told by citizens connected to Ravenna's redevelopment sites. The stories will be included in the 3D rendering together with official history and other information on the areas/building.
- From **Ister-Granum's Good Practice "Bridge Guard"** and **Aarhus' Good Practice "The uncovering of the river Aarhus"**: the identification of one or more buildings/infrastructures located in the redevelopment sites that might be used as place branding elements.
- From **Ravenna's and Certimac's Good Practice "SACHER – Smart Architecture for Cultural Heritage in Emilia-Romagna"**:
 - 3D digital models of architecture dedicated to the management of Cultural Heritage and to the storage of the numerous data generated by the team of professionals;
 - at the business model level, the participatory design models have been used to foster creation of new content that will enable the evaluation and implementation of cultural services through the involvement of common users and cultural experts;
 - the creation of a customizable service application for data access, analysis and display targeting both experts and tourists with the aim of integrating heterogeneous and fragmented data sources and facilitating the storage and usage;
 - the creation of services related to Cultural Heritage, providing specialized users with customized tools, and the community (tourists and citizens) with user-friendly applications aimed at improving knowledge of Cultural Heritage from several points of view.

ADAPTED GOOD PRACTICE - Action summary

Coordinator: Municipality of Ravenna

Partner (LSG members): RavennAntica

Sites: the Ancient Port of Classe; the Darsena Docks; the Maritime Park

Project details:

Ravenna's water-related heritage embraces environmental as well as built assets, ranging from archaeological finds to contemporary industrial areas and buildings. Following one of the overall project goals, that is a shared water-linked storytelling to be made available for tourist as well as educational, scientific, and entrepreneurial purposes, this pilot action is dedicated to **the development and testing** of two tools conceived to support the storytelling: drone mapping and 3D virtual rendering. By matching the narration of the water linked heritage with selected points of interest, both techniques offer an innovative and engaging mean of exploration:

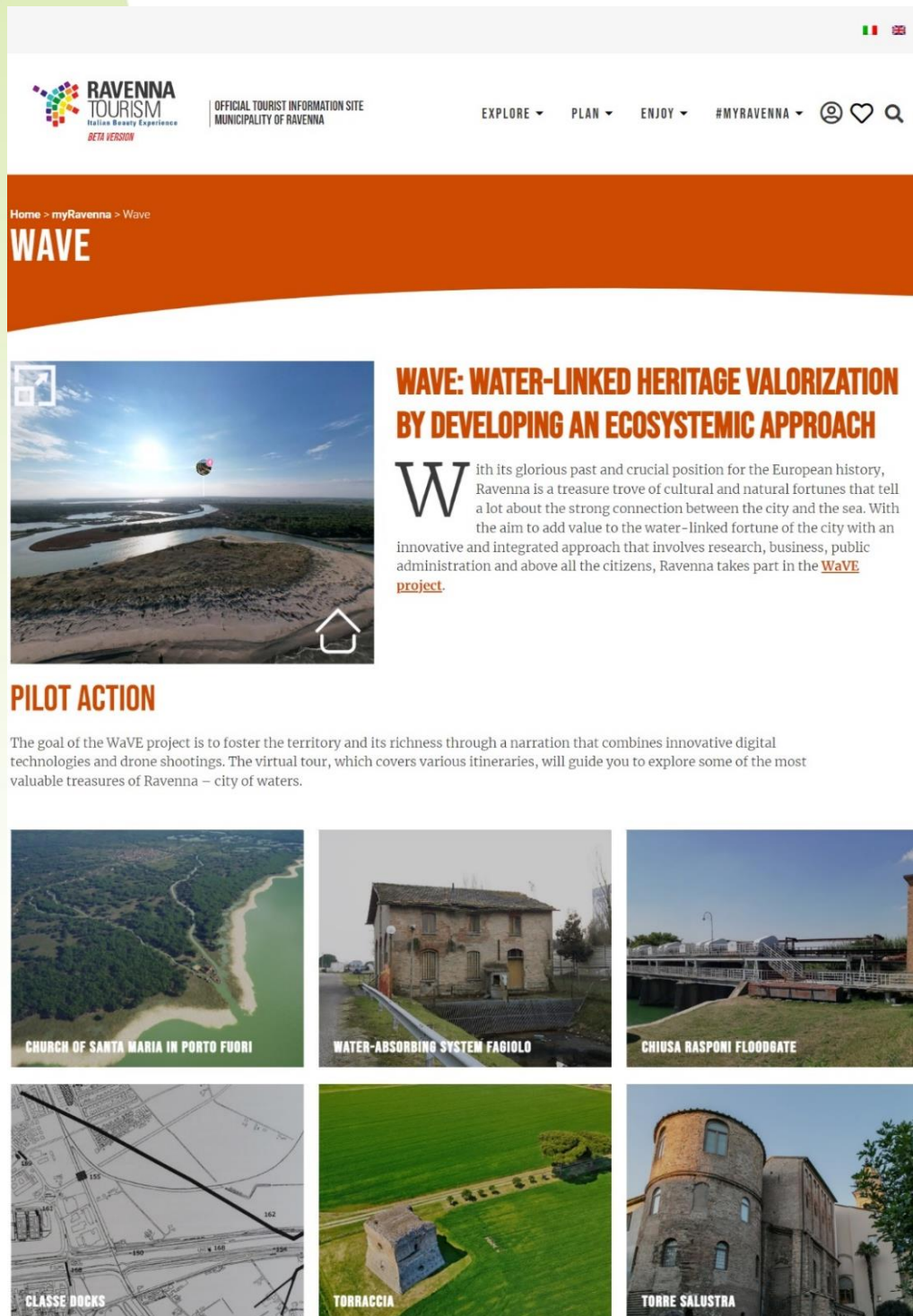
- the drone mapping will provide an **easier visualization** of the abundance of water-related features in the area, framing each point of interest within the overall map and providing a straightforward comprehension of the **narrative thread** connecting them. ;
- the 3D rendering, scaled down to an individual item, will enrich and enhance the narration through **experiential navigation**, that can be tailored to the needs and interests of the individual users (for education, research, conservation planning but also tourism marketing) of the individual water-related asset. Classis Museum was selected as a sample site for the 3D reconstruction, representing the smallest unit within the local redevelopment sites addressed in the scope of WaVE. The 3D reconstruction will allow the virtual visit of the Classis Museum, thus offering a totally **free, high-quality and inclusive experience** to tourists and any other users, while overcoming the physical limitations to cultural heritage access in such times as the ongoing pandemic.

All stakeholders have been involved in the **collection of materials** to create the contents narrated within the virtual tour. Moreover, the Pilot Action is developed in synergy with the DARE and TEMPUS projects: some of the materials resulting from these projects have been capitalized, and more specifically:

- within DARE, the results of the Open Call for citizens' contribution of historical images and videos of the Darsena;
- within TEMPUS, the images and texts resulting from the scientific research on the local heritage conducted by the University of Bologna.

The results of the pilot actions can be accessed through Ravenna's Tourism official website at url: www.turismo.ra.it/en/myravenna/wave/. Besides Laboratori Aperti (Openlab) promotes the tool on their official websites at: <https://laboratorioapertoravenna.it/category/eventi/>, whereas RavennAntica foundation gives access at <https://classisravenna.it/laboratorio-aperto/> and <https://www.parcoarcheologicodiclasse.it/news-eventi/>.

A screenshot of the Municipality web page is shown below (Img. 5). The page briefly describes WaVE project and its pilot action, with the preview of the aerial virtual tour of Ravenna's WLH and the thumbnails of the webpages dedicated to each Point of Interest (PoI, a total of 19 – in Img. 5 we only show a few as an example).



Img. 5 - screenshot of the webpage dedicated to the WaVE pilot action on the #myravenna platform

The full-screen version of the virtual tour can be accessed through this url: wave.supertour360.com. The videos recorded by drone have been enriched with navigation points

(view points) enabling to aerially explore the area and to locate the visible Points of Interest. The location of the Points of Interest and the view points are shown in the following map (Img. 6)



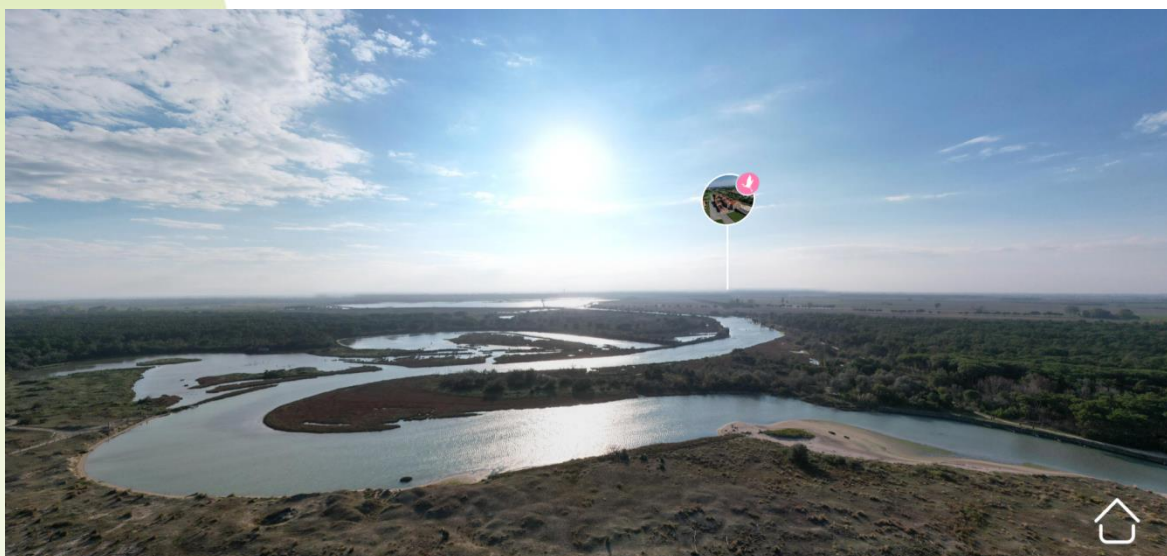
Img. 6 - map of the area with the view points and the points of interest of the aerial virtual tour.

A complete list of the Point of Interest and their corresponding number on the map is given in the table below:

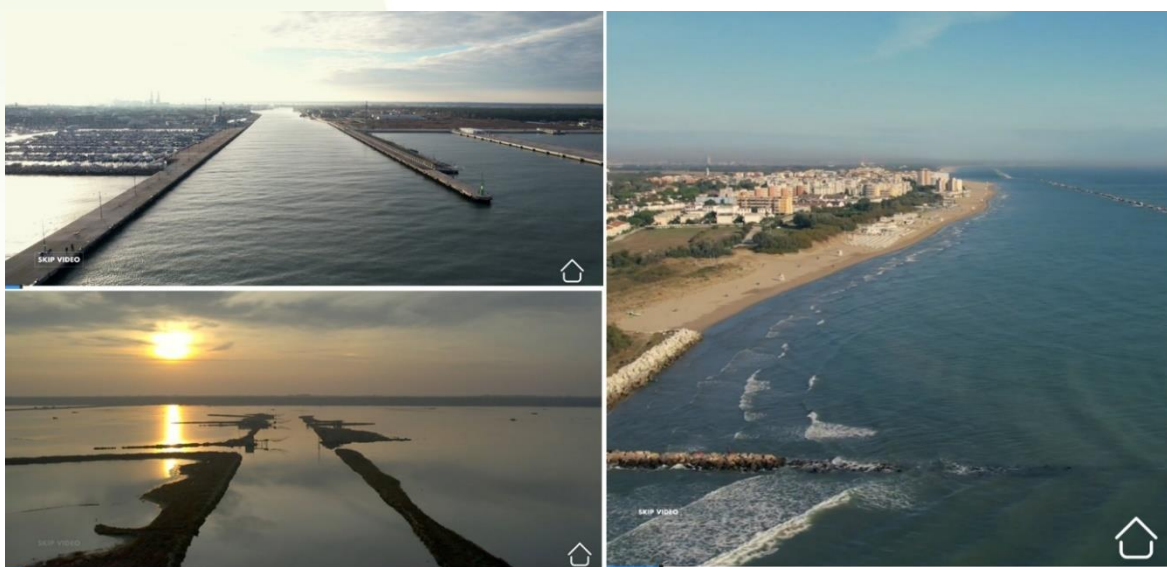
NR.	PoI	Relevance as WLH
1	Ancient Port of Classe – Archaeological Park of Classe	Ancient Waters
2	Classe Docks	Access point from the sea
3	Classe City Wall	Ancient Waters
4	Church of Santa Maria In Porto Fuori	Sacred Waters
5	Chiusa Rasponi Floodgate	Drainage Water management
6	Torraccia	Ancient access point from the sea
7	Ravenna Maritime Park	Sustainable tourism through water
8	Marina Di Ravenna Lighthouse	Actual access point from the sea
9	Former Fish Market	From production to protection
10	Pialassa Baiona	Ancient water management
11	Water-absorbing system Fagiolo	Drainage Water management
12	European Maritime Day	European port and sea waters network
13	North Adriatic Sea Port Authority	Sea Water management
14	Moro Di Venezia Boat	Relationship with Waters through Sport
15	Mausoleum of Theodoric	Ancient access point from the sea
16	Sant'Eufemia Church/ Domus of the Stone Carpets	Sacred Waters
17	Salustra Tower	Sacred Waters
18	Molino Lovatelli Mill	Productive Waters

19	Mar – Ravenna Art Museum	Second headquarter of the Open Lab
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As shown in the map (Img. 6) key, there are two types of view point: a click-and-go, direct view point, depicted with a small logo of a pink egret on a white background, and view points that offer the possibility to be “reached” with a full (accelerated) video of the scenery filmed during the flight from the starting point to the destination one (white egret on a pink background). The videos can be skipped for brevity, but they give a beautiful bird’s eye perspective of different water bodies (see some examples in Img. 8), which further testify to Ravenna’s great richness.

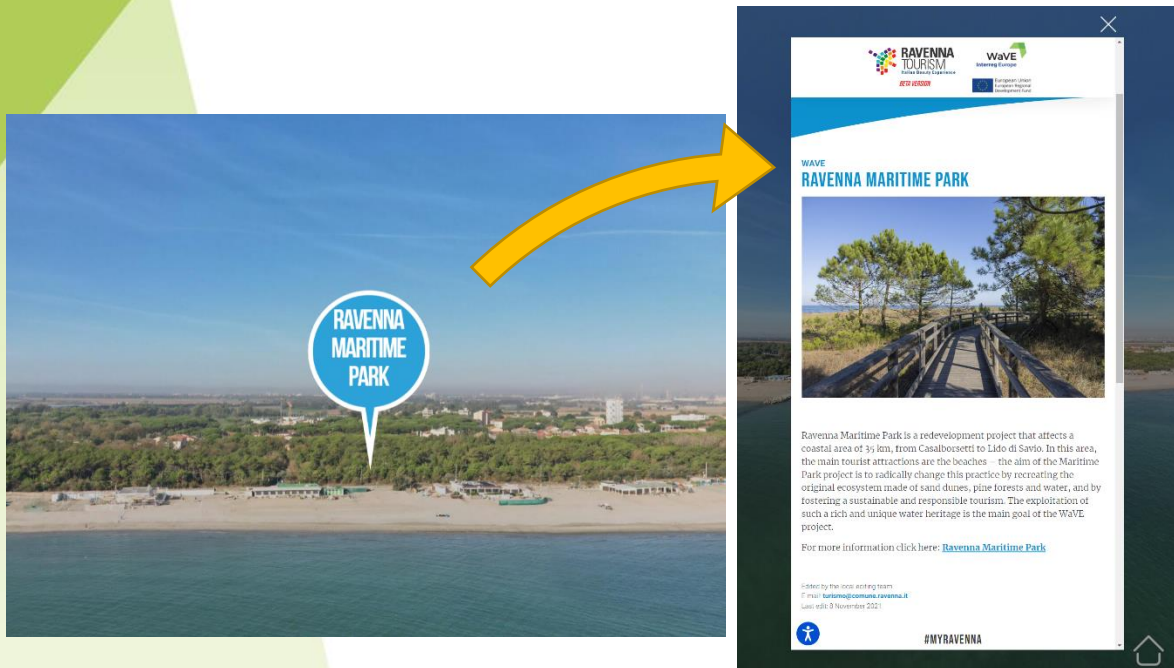


Img. 7 – starting point of the tour. An example of how the view points are depicted in the video is shown: clicking on the view point, the viewer “navigates” the scenery to the destination point - in this case (white egret on pink background) a video of the flight is shown.



Img. 8 - An example of the beautiful water scenery along the virtual tour

The virtual tour is designed to be navigated back and forth as the user prefers, with no established route: each view point shows the surrounding PoIs and other view points. The PoIs position is pinpointed by a clickable blue symbol with the PoI name on it. By clicking on it the relevant webpage pops up (e.g.in Img. 9).



Img. 9 – on the left: the Point of Interest "Ravenna Maritime Park" pinpointed by the blue symbol- on the right: the relevant webpage pop-up which opens up by clicking on the symbol.

A different symbol has been designed to pinpoint the Classis Museum, to highlight the explorable 3D reconstruction accessible here (Img. 10).



Img. 10 – the aerial view of the Classis Museum, pinpointed with a specific symbol to highlight the different type of content available here.

Clicking on the symbol, the user can virtually access and visit the Museum. The interior of the Museum is entirely reconstructed, showing all its precious content on the history of the area (an example is given in Img. 11).



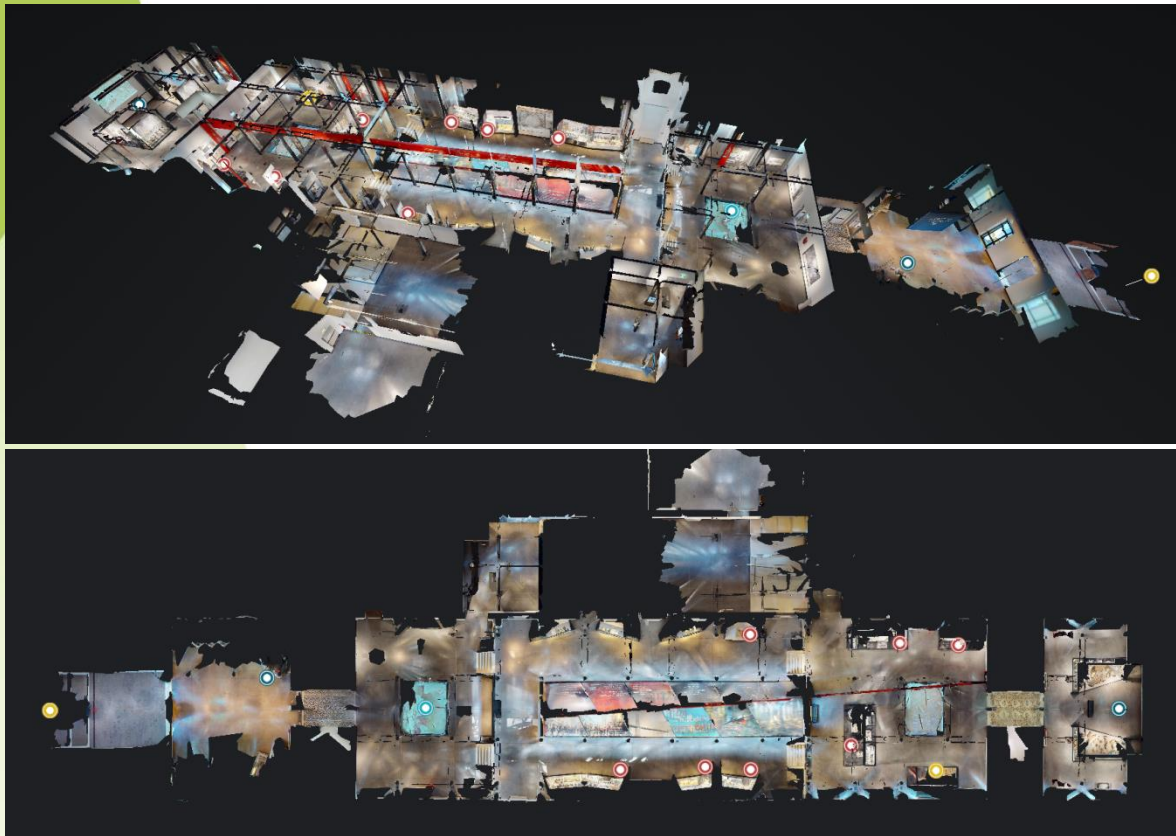
Img. 11 - view of the virtual interior of the Museum.

Several clickable information points along the visitor's path provide additional information as a pop-up displaying text, images, or videos (Img. 12)



Img. 12 – detail of virtual exploration of the Classis Museum. The information point pop-up shows a brief explanation, in English, of the assets displayed.

As shown in the picture, the exploration of the virtual Classis Museum is aided by the white circles on the floor, allowing the visitor to easily move inside the virtual space from a room to the other. The survey executed so far is quite extensive and is shown in the following top view and dollhouse view of the building:



Img. 13 - top view (above) and dollohouse view (below) of the Classis Museum 3D survey.

The pilot action dissemination included the following activities:

- submission of a google form survey both in Italian and in English to the relevant stakeholders. 26 answers were received assessing the usability of the tool and the appreciation of the contents displayed, including some suggestions for improvement. The average appreciation degree from 1 to 5 was 4.
- several newsletters sent either through the Tourism Department's or the European Policies Office's channels to overall 2,332 addressees, of which about 500 hundred opened the e-mail and 100 hundred exploited the virtual tour.
- New Year's greeting e-mail sent to the Municipality staff (over 1,000 people). N.7 enthusiastic feedbacks received.

The goals reached by the pilot action will be further **developed and completed** within the scope of **Action 1**, with the integration of the water related heritage narration with original contents to be collected and added along the virtual tours in the form of pictures, texts and/or videos.

ACTION STEPS

Activity 1 - Mapping & 3D rendering	n. 1 drone map of the 3 Wave water-linked sites	- Drone mapping completion by end of September 2021 - 3D rendering of Classis Museum expected by end of August 2021	PP3-Ravenna	Involvement of all partners for the identification of the Points of Interest (PoI) to be included as the first core of local WLH	€18.990,00 source of fund: pilot action budget
Activity 2 – Community storytelling	19 points of interest cards	- from March 2021 to December 2021	PP3-Ravenna + OpenLab	Activation of all stakeholders for the collection of materials + capitalization of DARE Open Call	€ 7.925,00 source of fund: pilot action budget
Activity 3 - Creating synergies with the local stakeholders		- from March 2021 to December 2021	PP3-Ravenna + OpenLab		
Activity 4 - ICT tool final deployment and delivery	n.1 3D virtual navigation tool available on the official websites; digital tool completed	Beginning of December 2021	PP3-Ravenna + OpenLab + RavennAntica		€ 17.500,00 source of fund: pilot action budget
Sharing pilot plans during Ravenna physical meeting (originally planned in the AF so not exclusively pilot related activity)	Preview of the pilot	15 th and 16 th November 2021	All Partners	Visit to the main stakeholders involved in the project	
Learning about pilot interim results and supporting piloting partners during Ister-Granum online interregional thematic meeting (originally planned in the AF so not exclusively pilot related activity)		15 th and 16 th September 2021	All Partners		

Activity 5 – Promoting experiential journeys and targets	2 newsletters to over 1500 recipients	from end of activity 4 to end of Semester 5	<ul style="list-style-type: none"> - WaVE's stakeholders - stakeholders of the Tourism Dept - All departments of the Municipality 	Invitation to fill in a google form survey	
Activity 6 - Evaluation and first step of replication	n. 1 monitoring report on satisfaction	from end of activity 4 to end of Semester 5	Tourism Department and European Policies office		

POLICY CHANGE

As clarified above (pg. 3), the Emilia Romagna Region offers the general framework to refer to, but the identification of the local priorities is a responsibility of the territories. The Pilot Action is resulting in WLH assets being inserted, described, and valorised on the local Institution's website: such recognition by the territory translates into the possibility to include the WLH in the local answer to the ROP ERDF objectives. Therefore, through the Pilot Action the WLH is given **solid relevance for the territory**, furthering the chances of getting specific funds for the further implementation of the innovative idea within the ROP ERDF 2021-2027 **evolving the Pilot Actions results within Action 1** (see pg. 33) and specifically contributing to Action 1 aim to influence the ER ROP ERDF 2021-2027 addressing the calls pertaining the following objective:

- **PO1 “a more competitive and smarter Europe”** – priority 1: research, innovation, and competitiveness. Within this priority, we aim to address the following Specific Objective:
 - **SO 1.2** “allowing citizens, enterprises, research organizations, and Public Authorities to seize the advantages of digitalization”, more specifically:
 - Supporting spaces and projects for digital communities, also with the involvement of the Third Sector.

4. Action 1 – Physical and digital exploration of the Water-Linked Heritage

ORIGINAL GOOD PRACTICE(S)

Province of Alicante - *Blue Routes: Guide to Alicante's Hydrogeological Heritage.*

for the Good Practice description see page 12

Municipality of Breda – *Redoutes: Valorisation of a water-linked cultural site while solving water management issues.*

The Municipality decided to redesign four redoubts which are typical features of Breda's historical defence system by creating new natural areas and using storytelling for citizens and visitors. More specifically, the realization of the water-redoute (a drained wetland/polder) was a good example of collaboration between municipal and regional authorities and the local stakeholders.

Municipality of Breda - *(Re)development in dialogue - A new approach to heritage protection and valorisation*

For the Good Practice description see page 12

Municipality of Ravenna - *CIRI - ICT (Centre for Industrial Research on Information and Communication Technologies of the University of Bologna) - SACHER – Smart Architecture for Cultural Heritage in Emilia-Romagna*

For the Good Practice description see pg. 12.

TRANSFER JOURNEY OF THE GOOD PRACTICE

We studied WaVE partners' good practices and during IKES1 interviewed each partner, looking for elements to be imported and adapted to Ravenna's case. Following Delft's instructions, we discussed our specific knowledge needs and identified the elements to be transferred from the relevant proposed GPs. We were mainly inspired by Alicante's Good Practice "**The Blue Routes**" and Breda's "**Redoutes**". The first impressed us for its very successful creation of knowledge paths with the support of digital resources, which is very close to what we aim to achieve with our action. We found their use of the mapping of natural heritage very interesting and immediately decided to apply it to Ravenna's complex WLH, not necessarily just the natural one. The latter gave us great insights on how to use storytelling as a driving force for boosting the territory attractiveness.

Following bilateral meetings held online with the individual partners we found also Breda's "**(Re)development in dialogue**" collaborative approach very inspiring. The next step was to share such learnings with local stakeholders, therefore we decided to split the selected Good Practices into several actions and describe them accordingly in short video pills submitted by mail before the second LSG meeting. During the meeting stakeholders were asked to vote the individual actions and connected Good Practices by means of Padlet interactive platform. The following actions were the most voted:

- BREDA: Implementation of a participatory approach using co-design methodologies
- BREDA: Construction works spread over several years. Advancement of the project as an accelerator to raise the necessary funds + ISTER GRANUM: Identification of an infrastructural or architectural element acting as a symbol for the territory
- ALICANTE: Map construction (paper and digital) to facilitate the dissemination of knowledge and attract new visitors whereas the winning Good Practice proved to be BREDA's "Redoutes".

During IKES 1 follow-up meeting we had the opportunity to discuss such results with WaVE PPs and a first skeleton of our AP was drafted. In summer we shared our ideas with the municipal relevant administrators/managers and together selected four directions to be further developed for our AP. We also met some other municipal departments and discovered interesting synergies with another ongoing Interreg Italy-Croatia project called SUTRA which physically connects our three redevelopment sites by means of a bike sharing system. The four directions were briefly described in our first draft AP and discussed with partners during IKES 2. On that occasion we had the opportunity to get a clearer view of our partners' sites and Good Practices thanks to the site visit videos and took advantage of Delft's hints on improving our AP. The four identified directions, enriched with further contributions from IKES 2 and WaVE Festival, were then brought back to the local stakeholders during the third LSG. Stakeholders were asked to give feedback on Padlet platform by posting keywords, suggested activities and individual interests for each of the four directions.

Action 1 resulting from "Direction 1" registered the following:

- keywords: inspiration, language choice, crowdsourcing, open data, balance, participation, storytelling, digital exploration
- suggested activities: urban data stories, experiential journey involving all citizens, new models for involving tourism operators and stakeholders
- interest for project development: Ravenna's Tourism Department, on behalf of the Municipality, committed to run as coordinator, whereas the following stakeholders applied as possible partners: Open Lab; RavennAntica; University of Bologna - CRICC (Research Centre for the interaction with CCI); University of Bologna - Cultural Heritage Department - FrameLAB Research Unit; University of Bologna - History and Culture Department - Archaeological Research Unit; Land reclamation and drainage Authority

Further considering, we decided to draw technical guidance and inspiration by our own Good Practice "**SACHER**", dealing with innovative digital tools for disseminating Cultural Heritage among tourists and citizens.

A specific focus group on Action 1 was then created. In spring the group met to start the co-designing process of the action and some further ideas were proposed and discussed. Soon after the last synergy session was held online for a final discussion with the relevant municipal decision makers and division managers. Eventually in July 2021 the key local stakeholders were all summoned at the final online LSG meeting and on that occasion the territorial competence of the action was defined, and the connected activities agreed upon.

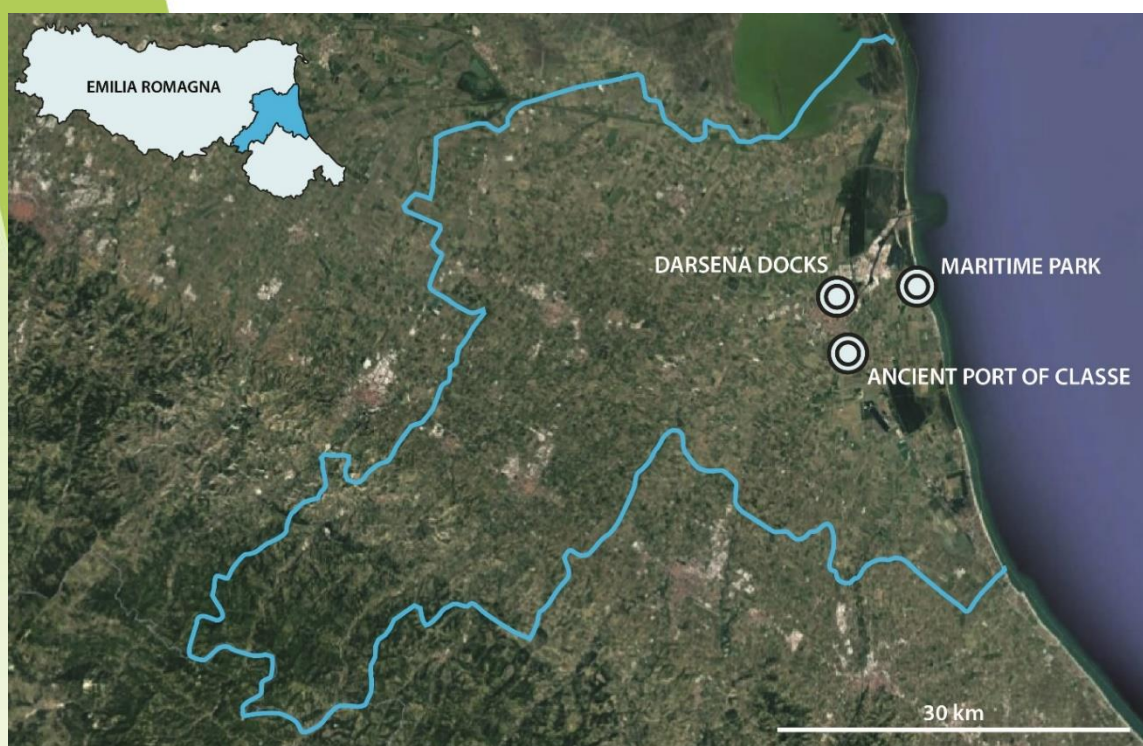
ADAPTED GOOD PRACTICE - Action summary

This action consists in developing a project proposal to be submitted under the upcoming 2021-2027 Emilia-Romagna's ROP ERDF calls, expected to be published within WaVE project duration (ending in July 2023).

The information that will guide the drafting of the project idea, to be further detailed once the Call content has been made available, are listed below.

Coordinator: Municipality of Ravenna (Tourism Office)

Sites: the Ancient Port of Classe; the Darsena Docks; the Maritime Park.



Img. 14: Localization of the three WaVE sites in relation to the Province of Ravenna, which borders are highlighted in blue in the picture

Project details:

The project idea to be developed through this Action **further develops the WLH storytelling started with the Pilot Action** (pg. 12) and aims at **improving the attractiveness** of the territory by valorising the WLH through the construction of a **digital storytelling** able to guide citizens and visitors on a diachronic exploration to discover the relationship between humans and water in the Province of Ravenna, starting from the three WaVE sites. As learnt by the Covid-19 emergency, investing in digital storytelling tools becomes very relevant to raise an interest in the potential visitors and to increase the territorial appeal in anticipation of future visits in case of impossibility to travel. Moreover, an additional goal to the heritage valorisation and protection consists in counteracting the concentration of anthropic pressure on specific areas of the territory and de-seasoning tourist flows.

To reach these goals, several existing assets can be capitalized within this action:

- the **#myravenna**¹ platform, which is a virtual space owned by the Municipality of Ravenna open to storytellers and already hosting a collection of experience-based stories told by citizens and visitors (user-produced)

1

- the knowledge-based stories (provided by researchers and scientists) collected within the ongoing **DARE**², **TEMPUS**³ and **REMEMBER**⁴ projects
- the innovative web based digital tools supporting the storytelling developed within the **DARE** project

A possible list of **activities** to be planned for the implementation of this Action project proposal (subject to possible modifications depending on the ROP ERDF 2021-2027 calls content) is the following:

1. taking after Alicante's "Blue Routes" Good Practice, the creation of a **digital space** to host the water-linked storytelling, accessible through and integrated with **#myravenna** platform to be enriched and enhanced with a new thematic section dedicated to the WLH, adding to the already existing sections "Sea and Nature", "Ravenna Art City", and "Food & drink". Moreover, the new digital environment will be connected to the **DARE platform** through its content related to several water-linked assets located in the Darsena. The development of the new digital environment, possibly creating a dedicated app, should grant its interoperability with the Land Reclamation and Drainage Authority's Web GIS, containing a wide variety of valuable information to narrate the evolution of the area.



Img. 15 – The 3 existing sections "Ravenna Art City", "Sea and Nature", and "Food & drink" on the #myravenna platform.

² <https://uia-initiative.eu/en/uia-cities/ravenna>

³ <https://www.italy-croatia.eu/web/tempus>

⁴ <https://www.italy-croatia.eu/web/remember>



Img. 16 - The homepage of the DARE platform "Darsena Ravenna, Approdo Comune"⁵, and its 4 sections "Live", "Discover", "Collaborate" and "Use".

Inspired again by the Alicante's "Blue Routes" Good Practice approach applied to cultural WLH, this action will also include the progressive **mapping of the WLH** in the area, supporting the diachronic narration of the relation between Ravenna and its waters. The mapping will also be specifically structured as a tool to support policy makers: by consulting the map they will be able to take decisions based on data analysis.

2. As learnt from Breda's "Redoutes" Good Practice, integration of researchers' and scientists' **knowledge-based** stories with **experience-based** ones. Merging the transmission of scientific knowledge with the narration of experiences through storytelling would also lead to the development of a **language** able to efficiently divulge scientific information, greatly contributing to the widening of the target reach while facilitating the dialogue between the research and the entrepreneurial sectors (especially CCI).
3. Taking after Breda's "(re)development in dialogue" approach to collaboration and Alicante's "Blue Routes" approach to the creation of WLH-centered touristic/educative paths, the construction of a **collaborative work group** gathering LSG members, the Municipality's officers, and other stakeholders aimed at defining and co-designing **physical and digital paths** for the knowledge and exploration of the WLH.
4. Following the teachings of "SACHER" Good Practice on using digital resources for heritage valorization, implementation of specific digital tools to enable the **access** and **fruition** of the WLH assets:
 - remotely through virtual environments (e.g., virtual tours);
 - on site through web-based tools (e.g., multimedia interactive content visualization during an on-site visit, such as scrolly-telling web pages)
 - enriching the on-site experience with digital features (e.g., augmented reality experiences).

Particular care will be invested in selecting tools able to grant **accessibility** to the widest possible targets, with special consideration for disabilities.

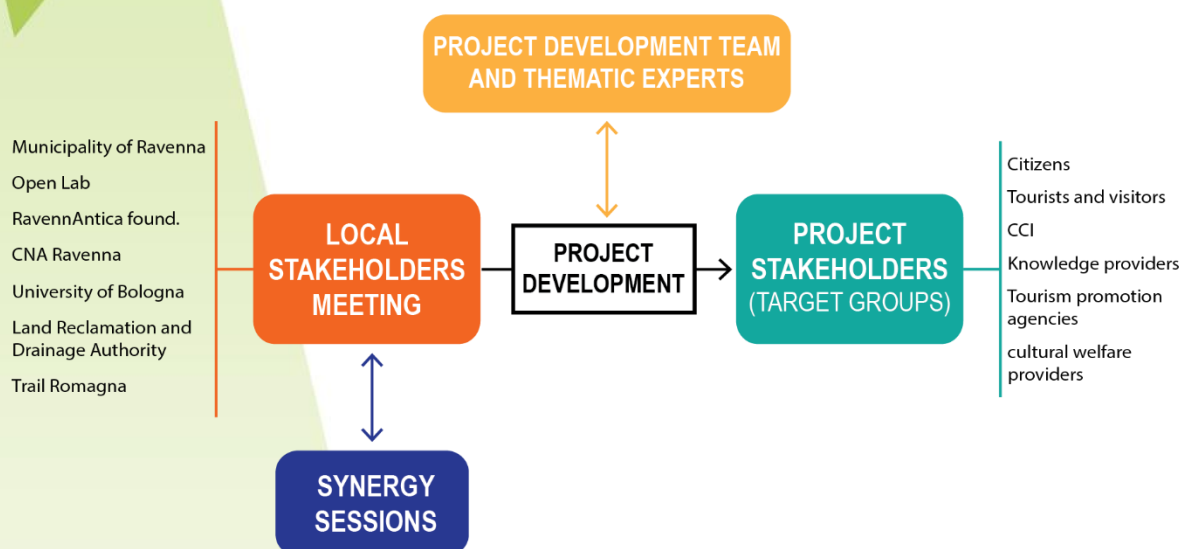
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<https://www.darsenaravenna.it/>

5. The definition and actualization of **means of interaction** with the platform users aimed at collecting data that can be later processed through specific **sentiment, and semantic analyses**.

Stakeholders' engagement:

The stakeholders' engagement pattern identified for this Action is shown in the following diagram:



Img. 17 – Stakeholders' engagement pattern for Action 1

The local stakeholders meeting is composed by the following key LSG members:

- Open Lab
- RavennAntica
- CNA Ravenna
- University of Bologna
 - CRICC - Research Centre for the interaction with CCI
 - FrameLAB - Cultural Heritage Department
 - History and Culture Department - Archaeological Research Unit
- Land Reclamation and Drainage Authority
- Trail Romagna

The target project stakeholders will be identified and involved while developing the project proposal described for this action, supported by the project development team and the external experts identified at the early stages of the action implementation.

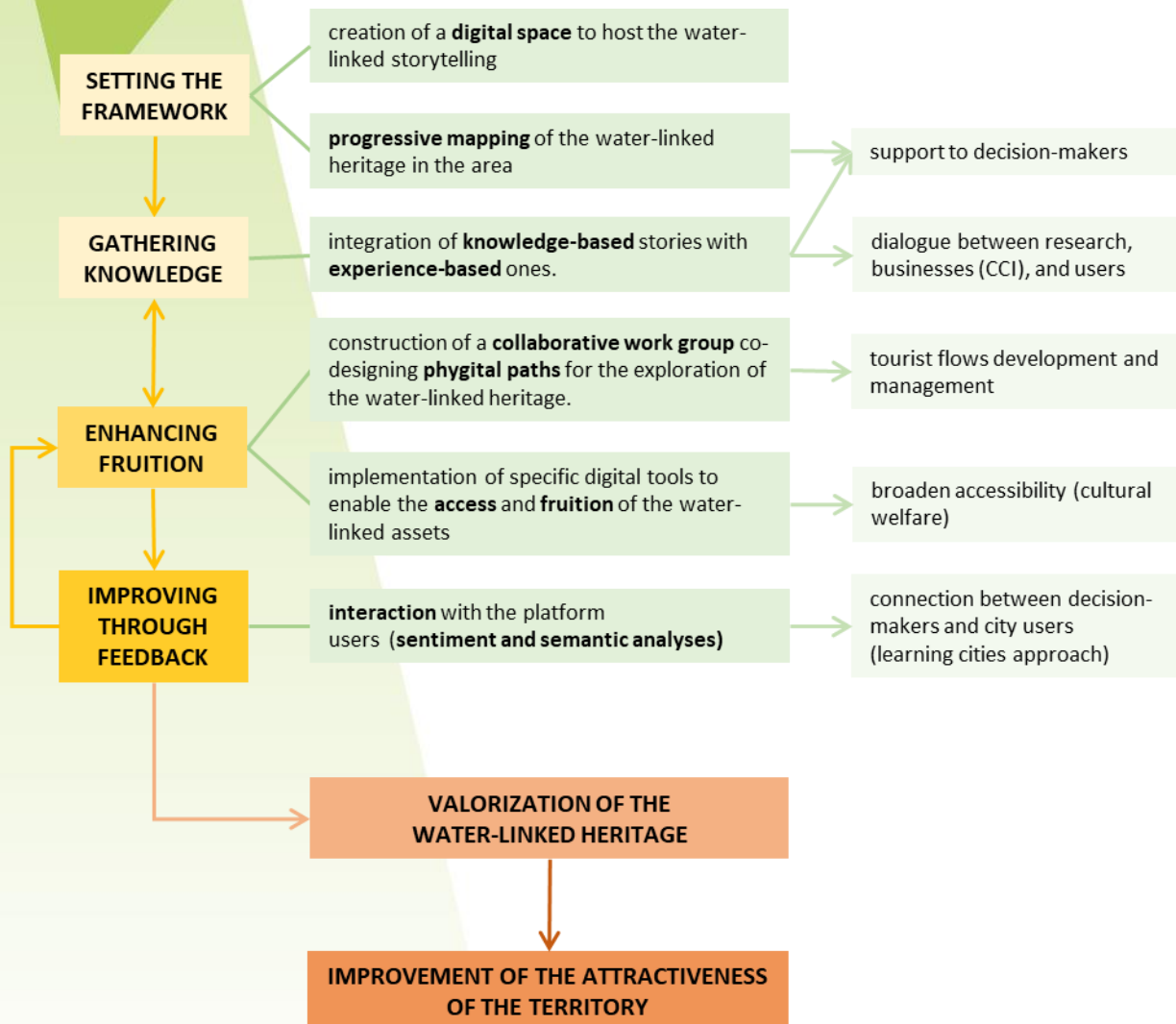
For this project proposal in particular, the **eligible project stakeholders** are identified as follows:

- **Citizens** – to be accompanied in deepening their knowledge of the territory. Especially expanding the Pilot Action results, citizens will be able to access information digitally, adding to their desire to physically discover their territory.
- **Tourists and visitors** – through digital valorisation of the WLH, tourists and visitors will be offered a wider variety of means to explore the area and its less famous WLH sites.
- **CCI** – especially those active in the digital and in the art sectors, CCIs in the area can greatly add value to the knowledge of the territory. Moreover, CCIs can provide valuable content for

the digital exploration of the WLH, as seen in the Pilot Action's Classis Museum 3D Reconstruction, and can also develop products and services for the enhancement of physical responsible tourism, enriching the tourist experience and dissemination of the history and role of the WLH on site through artistic performances.

- **Knowledge providers** – the involvement of researchers is pivotal for the contribution of relevant scientific and historical content. Moreover, knowledge providers can collaborate with CCIs on finding new and more effective ways to transmit knowledge
- **Social and healthcare organizations** to involve in the inclusive design of all tools to be developed through this Action, in order to widen the accessibility to the WLH to everybody. The organizations interested in offering new inclusive cultural tools to their users (cultural welfare) will also contribute greatly to the dissemination and exploitation of the results of this Action.

Action flowchart:



ACTION STEPS

All details pertaining the Action steps, including the timeframe, strategy for stakeholders engagement, and budget are not yet available as the Emilia Romagna ROP ERDF 2021-2027 is still to be published. All the information will be detailed once the Calls content will be made available.

Preparations and setup of internal project team and thematic experts	Drafting team setup	May 2022	Ravenna Municipality Tourism Department		Staff costs: 6.000,00€ Source: Ravenna Municipality
Partnership definition and organization	Partnership setup	September-October 2022	Ravenna and Partners		
Stakeholders selection and engagement	-Target groups definition -engagement strategy	November-December 2022	Ravenna and Partners		
Detailed project outline and implementation plan	-Outline -workplan	December 2022	Ravenna and Partners		
Application Form drafting	Project developed	January-February 2023	Ravenna and Partners		
Work Plan and work packages definition					
Budgeting					
Administration activities					
Project Submission	Submission confirmation	March 2023, prospecting approval within July 2023 at the latest based on approval of the Italian Partnership Agreement.	Ravenna Municipality		

POLICY CHANGE

Preserving the natural habitat endangered by the strong anthropic pressure caused mainly by the large tourist flows on the coast is a major challenge for Ravenna. Bringing attention to other WLH assets, the action aims at diversifying tourist targets and deseasonalizing the touristic offer, thus allowing a better management of tourist flows. The policy instrument addressed will generally be included in the 2021-2027 Emilia-Romagna's ROP ERDF (see pg. 3), whose calls content details are not available yet but are expected for the second semester of 2022. However, the project to be submitted through this action is in line with the following Priority and Specific Objectives:

- **PO1 “a more competitive and smarter Europe”** – priority 1: research, innovation, and competitiveness. Within this priority, we aim to address the following Specific Objective:
- **SO 1.2** “allowing citizens, enterprises, research organizations, and Public Authorities to seize the advantages of digitalization”, more specifically:
 - supporting spaces and projects for digital communities, also with the involvement of the Third Sector;

Referring to the S3 strategy, this action project addresses the following specific priority thematic areas:

- Production, transformation, and enrichment of cultural content, also involving the end user (co-creation, distributed collaboration, user generated content, testing).
- New cultural fruition and distribution systems (user experience, emotional design, storytelling, gamification, edutainment, service design, accessibility, etc.).

5. Action 2 – (Re)development of a WLH-driven infrastructural network.

ORIGINAL GOOD PRACTICE(S)

Municipality of Aarhus - The uncovering of The River Aarhus

For the Good Practice description see pg. 12.

Municipality of Breda - (Re)development in dialogue

For the Good Practice description see pg. 12.

Province of Alicante - Blue Routes: Guide to Alicante's Hydrogeological Heritage

For the Good Practice description see pg. 12.

Municipality of Aarhus - Urban Mediaspace

Thanks to this Good Practice we learned that big challenges need urban catalysts. Aarhus was able to transform an old water-linked area into a new and contemporary public space. The establishment of Urban Mediaspace has not only given the city a new public library, new recreational spaces and secured the city centre from flooding, but it has completely changed the self-perception of the city and its inhabitants.

Hungarian Water Management Museum (Danube Museum) - Water Museum of Esztergom

Integrating general human, scientific and technical knowledge, the Good Practice provides insights and inspiration on how to convey knowledge on regionally relevant water related features, including water management and water-related cultural intangible heritages, and more global topics such as the effects of climate change and the importance of environmental protection, raising awareness on environmental and water responsibility.

Municipality of Ravenna - CIRI - ICT (Centre for Industrial Research on Information and Communication Technologies of the University of Bologna) - SACHER – Smart Architecture for Cultural Heritage in Emilia-Romagna

For the Good Practice description see pg. 12.

Municipality of Breda – Redoutes

The Good Practice has already been presented in Action 1 (pg. 24). In this case we have taken inspiration from the new design of the Redoutes natural area. The project realized by the Municipality of Breda combined historical, cultural, and environmental features in the same place.

TRANSFER JOURNEY OF THE GOOD PRACTICE

- AARHUS: Creation of a programme of activities to be carried out “with and within water” as a tool to improve human wellbeing in urban contexts
- AARHUS: Important investments on buildings located around the redevelopment area, aimed at becoming the symbols of a comprehensive urban regeneration project
- ISTER GRANUM: Close cooperation between different actors in the territory to make the whole operation possible

This Action was also conceived during the first IKES as we were immediately inspired by Aarhus's and Good Practice **"The uncovering of the River Aarhus"**, which have identified an infrastructural or architectural element acting as a symbol for the territory, raising a sense of belonging among citizens while revitalizing a specific area of the town. The Good Practice was further analysed during the bilateral meetings held online with the individual partners, which helped us better understand which elements might be transferred and adapted to our specific situation. On the same occasion, we understood that also elements of Breda's **"(Re)development in dialogue"** and Alicante's **"Blue Routes"** could greatly contribute to our action, as well as Breda's **"Redoutes"**. As described in Action 1, the Good Practices were split into actions and narrated accordingly in video pills submitted to stakeholders. During the 2nd LSG stakeholders voted either the actions or the GPs. During IKES1 follow-up meeting we shared the adopted methodology and the results with WaVE partners and took notes of their observations and hints. In the Summer 2020 we met the Municipality relevant decision makers and Division Managers and together we sketched out the initial framework of our AP, identifying four directions to be further discussed with local stakeholders. During IKES2 we had the opportunity to better understand the selected Good Practices thanks to the PPs' site visit videos and found that others might be of inspiration for this Action. In that occasion, Ister Granum's detailed presentation of **Water Museum of Esztergom** really sparked our interest, as we were immediately able to see the relevance of this experience for scientific dissemination about water and its uses and management and to convey the relevance of the human-water interaction in shaping the territory. We envisaged the possibility to couple this experience's teachings with the identification of a physical space as a catalyst from Aarhus' **"Urban Mediaspace"** GP, which inspired us. Besides, following Ister-Granum draft Action Plan we decided to further develop our own good practice, that is **SACHER**. The 4 identified directions further clarified after Delft's and the other partners' comments on our "very draft AP" were then submitted to our stakeholders during the 3rd LSG. Stakeholders were asked to give feedback on Padlet platform by posting keywords, suggested activities and individual interests for each of the four directions. The Action proved to be very interesting. Several buildings/infrastructural elements were proposed as potential icon for the territory, all connected with water.

keywords: redevelopment, valorisation, study centre on water and the town, old factories and warehouses, waterways, water management buildings

suggested activities: pop-up installations, memories collection of the place and its inhabitants, citizen-science shop, valorisation of old drain pumps and of the locks that made the history of the town, rooting temporary interventions carried out in the past years, map buildings and infrastructures, create new places for events, (re)connecting scattered water-related assets and heritage, valorising the dense network of waterways and water-related features in the area

interest for project development: Certimac expressed their interest to act as a Coordinator of the project, whereas RavennAntica; University of Bologna - History and Culture Department - Archaeological Research Unit (Partner in TEMPUS project); Land reclamation and drainage Authority; University of Bologna - Cultural Heritage Department - FrameLAB Research Unit (maybe); University of Bologna - Architecture Department and the Municipality expressed their interest to act as partners.

An extra synergy session was then carried out with the Municipality's relevant Administrators and Managers who appreciated the action idea and the interest expressed by the stakeholder but were rather worried about some "icon nominations" as there are burning issues on some buildings linked to ownership or to current use. They suggested alternative solutions which we proposed to the LSG focus group. On that occasion we started the co-designing process of this action, and some new ideas were proposed and discussed with the relevant stakeholders. In May 2021, we visited some of the suggested buildings/infrastructures together with Certimac and the representative of the Land Reclamation Consortium and identified the most eligible ones. In June 2021, we discussed such proposals with the relevant decision makers and division managers and agreed upon one site. Eventually in July 2021, the key local stakeholders were all summoned to the 5th online plenary LSG meeting for the Action "finalization". One physically connecting infrastructure and one building located in the Darsena District were identified as the most interesting elements to be redeveloped.

ADAPTED GOOD PRACTICE - Action summary

This action consists in developing a project proposal to be submitted under to the upcoming 2021-2027 Emilia-Romagna's ROP ERDF calls, which is expected to be published within WaVE project duration (ending in July 2023).

The information that will guide the drafting of the project idea to be further detailed once the Call content will have been made available, are listed below.

Coordinator: Certimac

Sites: the Ancient Port of Classe; the Darsena Docks; the Maritime Park

The action aims at valorising the WLH through the creation of a WLH-driven network connecting water-linked built heritage and green & blue infrastructures, (re)developed with the purpose of becoming catalysts of the public attention on environmental and sustainability issues, connecting water and the city through dedicated public spaces following the inspiration of Aarhus' "Urban Mediaspace" and "The uncovering of the River Aarhus" GPs. The proposed methodology entails a collaborative approach to (re)development and valorization through co-design processes. The methodology itself is an added value to the action purposes and will be transferred through citizen science and learning by doing activities, allowing replicability.

As shown by the map below (Img. 18), the three WaVE sites are interconnected through a dense network of waterways. Following the waterways paths, two sites have been identified as territorial polarities to become catalysts: the San Marco Watergate and the Artificerie Almagià.



Img. 18 - Map showing how water connects the San Marco Watergate and the Artificerie Almagià to the WaVE sites.

As shown in the map, the Montone River flows through the **San Marco Watergate** (Img. 19), merging eastward with the Ronco River and forming the Fiumi Uniti (literally translated “United Rivers”). Streaming toward the sea, the Fiumi Uniti touches the Ancient Port of Classe archaeological park and flows into the sea within the area of the future Ravenna Maritime Park. At the same time, near the San Marco Watergate the Scolo Lama, a smaller stream of water, flows toward north-east. The Scolo Lama runs underground for a trait, then resurfaces in the context of the Darsena District, nearing the working-class neighbourhood and ultimately flowing into the Candiano Canal at the very heart of the Darsena. For its specific location, and as part of Ravenna’s WLH, the San Marco Watergate represents a relevant physical reference point to involve the citizens and raise awareness on sustainability and environmental issues through educational and formative activities inspired by the **Water Museum** of Esztergom, especially for spreading knowledge about how water influences the infrastructure of the territory.



Img. 19 - The San Marco Watergate

Located in the Darsena District, **Artificerie Almagià** (Img. 20) is an important reference point for local and supra-local cultural organisations. Formerly a sulfur refinery storage warehouse, the building is also an important element of the rich local industrial archaeology heritage as part of the

historic productive sites of the former Port area. Unused since 1983, it was reactivated by the Municipal Administration after its purchase in 1999 and is now a creative and multicultural hub locally renowned for artistic research and experimentation. Due to its value as heritage and prominence in the city's cultural environment, the further (re)development of the building will evolve it into a catalyst for a cultural and artistic approach to awareness raising on environmental protection and sustainability practices, bringing the citizens attention back to the water and the WLH as shown by Aarhus' "**Urban Mediaspace**" Good Practice.



Img. 20 - the Artificerie Almagià

As highlighted by experience of "The uncovering of The River Aarhus" Good Practice, blue infrastructures are extremely valuable to convey the importance of the WLH, connecting it among different areas of the territory and providing opportunities for further valorization by bringing people's attention back to water through events and activities. For this reason, within this action. For this reason, the network envisaged by this Action includes also **blue and physical connective infrastructures** as part the valorisation plan, as water-related features and as corridors that can help reconnect different parts of the territory.

The following **activities** are planned (subject to possible modifications depending on the ROP ERDF 2021-2027 calls content):

1. Taking after Breda's "(Re)development in dialogue" Good Practice, organization of co-design sessions for developing a re-functionalization and **valorisation strategy** of the locations also through **(temporary) uses**⁶ in a logic of harmonic, progressive and incremental development. The valorisation should be designed taking into consideration possible synergies with other locations already hosting environment-centered activities, such as the Cestha headquarters (Img. 21) and the open spaces around the Rasponi Watergate (

6

also capitalizing on the results of the TEMPUS project (<https://www.italy-croatia.eu/web/tempus>)

2. *Img. 22*). Aarhus's "**Urban Mediaspace**" Good Practice will directly influence the valorisation of Artificerie Almagià, transforming it into a reference point allowing the community to get together and participate in cultural and artistic awareness raising activities. The San Marco Watergate area, on the other hand, will catalyse the public attention on environmental issues in a more educational and didactic-oriented approach, transferring in Ravenna the insights provided by the experience of the **Water Museum** of Esztergom.



Img. 21 - Cestha headquarter - interior



Img. 22 - The Rasponi watergate

1. Collection of memories (documents, interviews, videos...) connected to the history of the locations aimed at **building a narrative** that stresses the iconic value of the property as a representative of the close relationship between Ravenna and its water environment: a

punctual location as a gateway to the knowledge of the territory⁷. In this regard, this activity follows the teachings of Breda's "**Redoutes**" Good Practice: the storytelling enables the exploration of the territory, the valorisation of the environment in urban contexts, and the historic reconstruction of the sites through digital storytelling. Also, the "**SACHER**" Good Practice is transferred here regarding the narration of man-made features and buildings. The example of Alicante's "**Blue Routes**" is useful here further stressing the interconnection of the water related features in the area through storytelling, developing once again the aims of the Pilot Action (pg. 12).

2. In line with the enhancement strategy and using the "(re)development in dialogue" approach, designing of the **renovation project** paying particular attention to materials sustainability (circular economy) and energy efficiency (including the possible self-production of energy from renewable sources) issues. The designing activities will consider the different elements of the space (buildings, infrastructural elements, and open areas) as components of a single place, interacting with each other to build an urban organism: the adopted approach might then be replicated in other areas of the city.
3. Creation of a "**didactic construction site**" where it will be possible to assist to the experimentation of innovative materials equipped with sensors to monitor the state of the asset and aimed at the energy efficiency and technological improvement of the buildings⁸ (the data will be made available to the citizens according to modalities to be defined). The construction site (and subsequently the recovered property) will become the place where **training activities** will be carried out **based on a citizen science approach**, following the example of Aarhus' Good Practice "The uncovering of The River Aarhus" for the organization of engagement events, and of Esztergom's Water Museum Good Practice for the dissemination of scientific information to the general public.
4. Creation of a **digital twin** of the building (including its 3D reconstruction) to which the complete documentation of the steps taken for the (re)development (projects, videos, interviews, technical sheets...) will be connected. This action will apply the teachings of the SACHER Good Practice, which provides technical insights on buildings redevelopment and valorization. The narration of the (re)development process will become both **informative material** (synthesized and simplified for non-experts) and **explanatory material** of the solutions adopted (in its extended version addressed to the experts, especially those who will intervene on the property in the future, to support them with the minute knowledge of the restoration actions previously carried out).

Stakeholders' engagement:

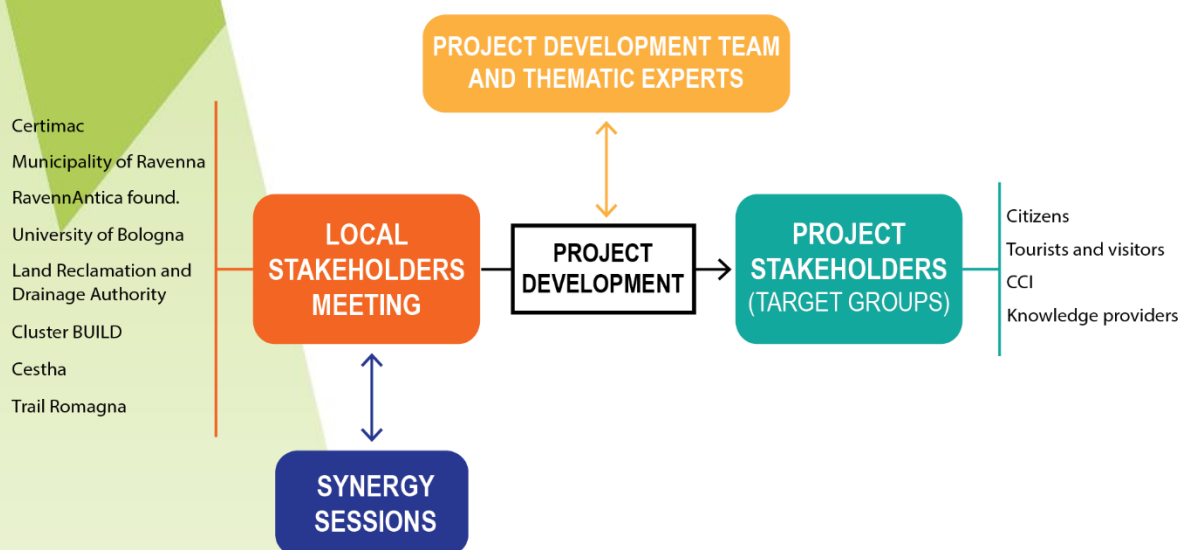
The stakeholders' engagement pattern identified for this Action is shown in the following diagram:

7

also capitalizing on the DARE (<https://uia-initiative.eu/en/uia-cities/ravenna>) and TEMPUS (<https://www.italy-croatia.eu/web/tempus>) projects.

8

also capitalizing on the results of the MIMESIS project: www.mimesis-project.eu.



Img. 23 – Stakeholders' engagement pattern for Action 2

The local stakeholders meeting is composed by the following key LSG members:

- Municipality of Ravenna;
- RavennAntica;
- University of Bologna
 - FrameLAB - Cultural Heritage Department;
 - History and Culture Department - Archaeological Research Unit;
 - Department of Architecture;
- Land Reclamation and Drainage Authority;
- Cluster BUILD;
- Cestha;
- Trail Romagna.

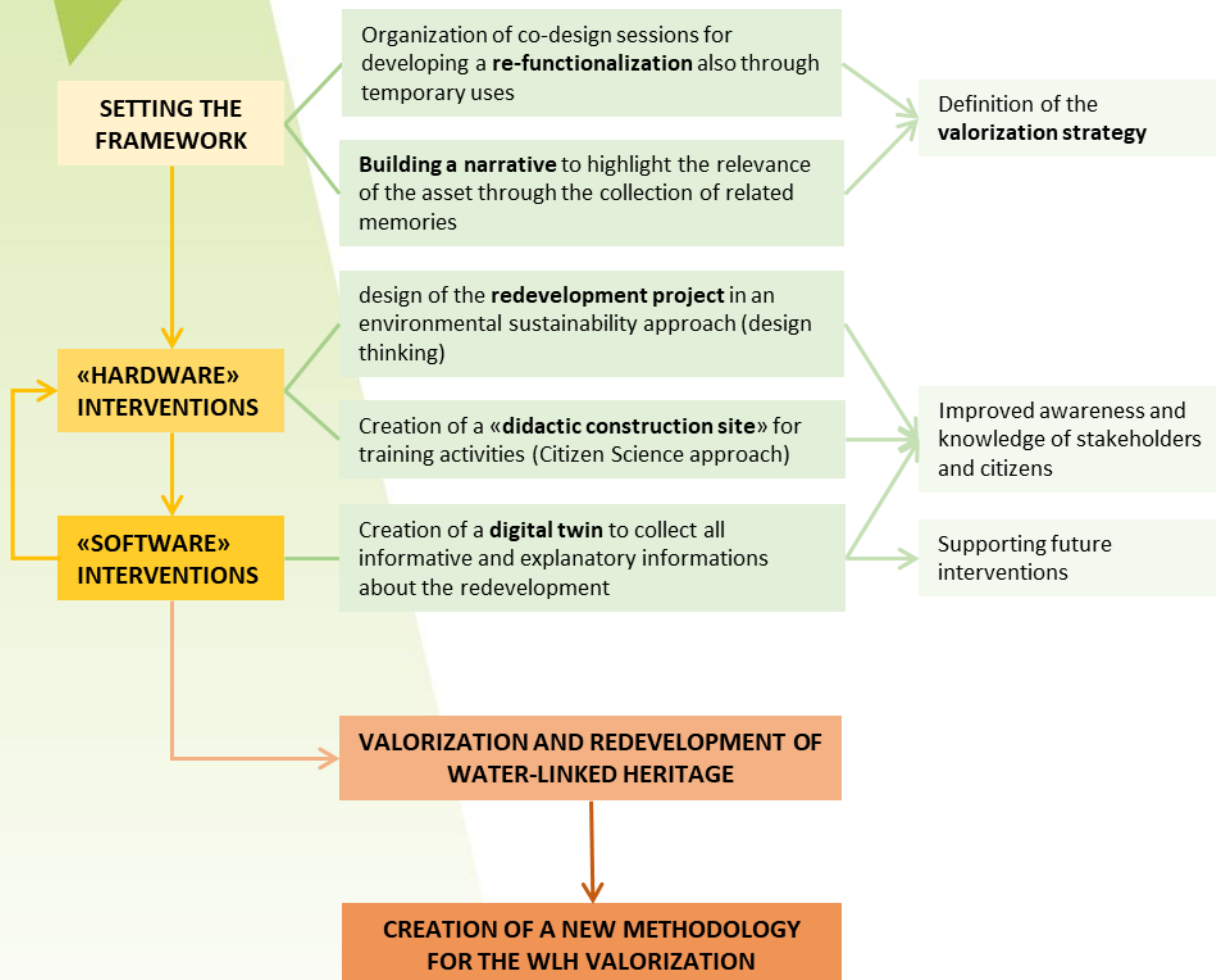
The target project stakeholders will be identified and involved while developing the project proposal described for this action, supported by the project development team and the external experts identified at the early stages of the action implementation.

For this project proposal in particular, the **eligible project stakeholders** are identified as follows:

- **Citizens** – that will be offered a variety of physical spaces as places of reference to learn more about environmental and sustainability issues, not only through educational activities but also through different artistic languages, deepening their awareness. The fruition of physical spaces will be also facilitated by more functional connective infrastructures, easing the movement between different WLH relevant areas
- **Tourists and visitors** – that will be offered more diversified and awareness-raising experiences to better appreciate and understand the territory and its environment.
- **CCI** – forming synergies and alliances among peers and with public/private enterprises, PAs, R&I, art realities, and the third sector to design and carry out educational and performative awareness-raising activities.

- **Knowledge providers** – that will use the physical spaces to reach the city users, disseminating knowledge and understanding of various environmental issues, also having the opportunity to develop new skills aimed at enhancing cultural heritage (from process to project)

Action flowchart:



ACTION STEPS

All details pertaining the Action steps, including the timeframe, strategy for stakeholders engagement, and budget are not yet available as the Emilia Romagna ROP ERDF 2021-2027 is still to be published. All the information will be detailed once the Calls content will be made available.

Preparations and setup of internal project team and thematic experts	Drafting team setup	May 2022	Project coordinator (Certimac team - 3/4 staff)		Cost: € 11.700,00 Source: Self-financing
Partnership definition and organization	Partnership setup	July – September 2022	Project coordinator (Certimac team - 3/4 staff)		
Stakeholders' selection and engagement	- Target groups definition - Engagement strategy	September 2022 – December 2022	Project coordinator + LSG members who expressed interest for project development (partners)	To be defined ongoing in order to guarantee the highest degree of commitment (for example: periodic online alignment meetings)	
Detailed project outline and implementation plan	- Outline - Timetable	October 2022 – December 2023	Project coordinator + partners staff		
Application Form drafting	Project developed	December – February 2023	Project coordinator + partners staff		
Work Plan and work packages definition			Project coordinator + partners staff		
Budgeting			Project coordinator + partners staff		

Administration activities			Project coordinator will be in charge of administration activities (2 staff)		
Project Submission: sub-action - Artificerie Almagià	Submission confirmation	March 2023, prospecting approval by July 2023 at the latest based on approval of the Italian Partnership Agreement.	Project coordinator Municipality of Ravenna will be in charge of the project submission (2 staff)		The estimated total cost of the sub-action, to be funded through ER ROP ERDF or PNRR and Municipality of Ravenna self-financing, will be € 300.000
Project Submission: sub-action– San Marco WaterGate	Submission confirmation	March 2023, prospecting approval by July 2023 at the latest based on approval of the Italian Partnership Agreement.	Project coordinator Certimac will be in charge of the project submission (2 staff)		The estimated total cost of the sub-action, to be funded through ER ROP ERDF and CertiMaC self-financing, will be around 1.2 million euro
Project Submission: sub-action- physical connective infrastructures to bring together WLH areas of the territory	Submission confirmation	March 2023, prospecting approval by July 2023 at the latest based on approval of the Italian Partnership Agreement.	Project coordinator Municipality of Ravenna will be in charge of the project submission (2 staff)		The estimated cost of the sub-action will be <ul style="list-style-type: none"> • €3.000.000 to be funded through PNRR • €500.000 self-financed by the Municipality of Ravenna

POLICY CHANGE

Through this “project type” action we aim to overcoming territorial fragmentation through policies integration, which is a challenge within a challenge: valorising a network of infrastructures as a whole entails bringing together different areas of the local Administration, providing an occasion to improve the inter-sectoral collaboration on complex issues, while bringing more unity to the territory. Moreover, through the redevelopment of public cultural heritage assets, this action contributes to tackle the ever-present Italian issue of an overabundance of heritage in need of protection/valorisation constantly and dramatically overrunning the available resources.

Aiming at overcoming the abovementioned challenges, the three sub-actions composing the overall Action will be submitted to address the 2021-2027 Emilia-Romagna’s ROP ERDF (see pg. 3) calls (which specific details are expected for the second semester of 2022) under the following Priority and Specific Objectives:

- **PO2 “a greener, low carbon Europe transitioning towards a net zero carbon economy”** - priority 2: sustainability, decarbonization, biodiversity, and resilience. The Specific Objectives we aim to with this Action are:
 - **SO 2.1** “promoting energy efficiency and reducing greenhouse gas emissions”, and more specifically:
 - energy redevelopment of public buildings including public lighting.
 - **SO 2.7** “strengthening the protection and preservation of nature, of biodiversity and of green infrastructures also in urban areas, and reducing all forms of pollution”, specifically focusing on:
 - urban and peri-urban green and blue infrastructures.

Referring to the S3 strategy, this action project addresses the following specific priority thematic areas:

- Participatory processes and tools to support urban redevelopment and reactivation paths for citizens’ empowerment in the ecological transition.
- Organizational and project design tools and models to support urban reactivation of redeveloped spaces or spaces undergoing redevelopment, including temporary and participatory management.

Action 3 – Development of a multi-actor innovative entrepreneurial ecosystem for WLH valorisation

ORIGINAL GOOD PRACTICE(S)

Province of Alicante - Blue Routes: Guide to Alicante's Hydrogeological Heritage

For the Good Practice description see pg. 12.

Province of Alicante - Provincial Water Board

The Provincial Water Board of Alicante - a panel of water experts and civil society representatives - is a powerful tool to design consensual strategies about water management and WLH. This idea is adaptable to different contexts, involving different stakeholders according to the local specificities.

Municipality of Breda - (Re)development in dialogue

For the Good Practice description see pg. 12.

Municipality of Ravenna – The Adriatic Sea: a shared heritage

Protection, preservation, promotion and valorization of the existing tangible and intangible cultural heritage connected to sea and salt production, including its systematical exploitation to improve its attractiveness and inclusiveness so as to create new opportunities and trigger new developments. These goals are achieved by converging different projects, funded by different European programs (ROP ERDF funds, EMFF, EAFRD, and other national and regional funds).

Ister-Granum EGTC - Párkány és Vidéke Kulturális Társulás (Cultural Associations of Štúrovo and the Surrounding Area) - Bridge Guard Residential Art

For the Good Practice description see pg. 12.

TRANSFER JOURNEY OF THE GOOD PRACTICE

Action n. 3 was already conceived during IKES 1 as a policy change to be achieved in the 2021-2027 programming period. We were especially interested by Breda's "**(Re)development in dialogue**" especially regarding the cross-sectoral collaboration forming an ecosystem valorising and safeguarding the WLH, and by Ister-Granum's "**The Bridge Guard**". In the second case, we were very impressed by the idea of organizing residencies for artists, scientists, etc. to apply their expertise elaborating a given theme and producing a result that remains as an added value to the territory. During the bilateral meetings held online with WaVE partners we deepened our understanding of other good practices that might be of some interests to our goals, and in particular Alicante's "**Blue Routes**" and "**Provincial Water Board**". The first interested us specifically for their aim to activate business ventures at the identified sites to increase the attractiveness of the territory, while the second let us see the benefits of a multi-actor approach to water management not only for the development and the effectiveness of water related policies and strategies, but also to promote collaboration between conflicting sectors.

The most voted relevant action among the ones shared during our second LSG meeting was taken from Aarhus's GP: "creation of a program of activities to be carried out "with and within water" as a tool to improve human wellbeing in urban contexts", whereas "Implementation of a participatory

approach using co-design methodologies” ranked 4th and the “Storytelling strategy to support and enhance the project” ranked only 9th. The initial reaction did not seem that enthusiastic. In the IKES 1 follow-up meeting we had the opportunity to discuss the LSG meeting results with WaVE PPs and a first outline of our AP was drafted. In summer 2020 we shared our ideas with the municipal relevant administrators/managers and together selected four directions to be further developed for our AP. The four directions were briefly described in our first draft AP and discussed with the partners during IKES 2. On that occasion we had the opportunity to get a clearer view of our partners’ sites and Good Practices thanks to the site visit videos and took advantage of Delft’s hints on improving our AP.

The lessons learnt during WaVE Festival were also useful to define this direction, which was then brought back to the local stakeholders during the 3rd LSG. Stakeholders’ feedback on Action 3 was the following:

keywords: valorisation and redevelopment, co-creation, creating opportunities, digital technologies, attractiveness for talents, open governance and open collaboration systems.

suggested activities: creating a cross-sectoral network, mapping competencies and WLH assets, promote a WLH-driven economic development.

interest for project development: several University departments/institutions expressed their interest to act as a coordinator; whereas Coordinator: Certimac; whereas the Municipality of Ravenna; RavennAntica; University of Bologna - History and Culture Department - Archaeological Research Unit (Partner in TEMPUS project); Land reclamation and drainage Authority; University of Bologna - Cultural Heritage Department - FrameLAB Research Unit (maybe); University of Bologna - Architecture Department expressed their interests to be partners.

A specific focus group on Action 3 was then created. The group met in spring in order to start the co-designing process of the action and some new ideas were proposed and discussed. On that occasion, it occurred to us that also the implementation of our Good Practice “**The Adriatic Sea: a shared heritage**” in Cervia could greatly contribute to this action, referring especially to the intervention on water-related structures to promote economical growth as well as the integration of different sources of funding lines, redeveloping buildings and infrastructures and allowing the establishment of entrepreneurial realities, ultimately transforming the area. In the meanwhile, an extra synergy session was carried out with the Municipality’s relevant Administrators and Managers. The action was fully supported by the Municipality and the connection with Tempus project was welcomed as an occasion to further encourage the commitment of active CCIs. Soon after the last synergy session was held online for a final discussion with the relevant municipal decision makers and division managers. Eventually in July 2021, the key local stakeholders were all summoned at the final online LSG meeting and on that occasion the territorial competence of the action was defined and the connected activities agreed upon.

ADAPTED GOOD PRACTICE - Action summary

This action consists in developing a project proposal to be submitted under the upcoming 2021-2027 Emilia-Romagna’s ROP ERDF calls, which is expected to be published within WaVE project duration (ending in July 2023).

The information that will guide the drafting of the project idea to be further detailed once the Call content will have been made available, are listed below.

Coordinator: University of Bologna (CRICC - Research Centre for the interaction with CCI; History and Culture Department; Cultural Heritage Department - FrameLAB Research Unit)

Sites: Focussing mainly on the Darsena Docks, positively impacting the other sites and the overall WLH valorization and promotion.

Project details:

This action project aims at improving the **collaboration** between the public sector, the Cultural and Creative Industries and the research authorities for the valorisation of the WLH through the consolidation of a **multi-actor ecosystem of innovative processes** aimed at increasing the Darsena's potential to attract new talents, spreading co-creation practices for new models of social innovation, and expanding, diversifying, and qualifying the local tourism offer by promoting the development of a conscious and responsible tourism. With its abundance of water-linked industrial archaeology remains and the investments planned/made to activate a regeneration process in the area, the Darsena Docks is gaining more and more relevance for the citizens perception of the water-related identity of the city (see pg. 7 for more details). For this reason, taking after "The Adriatic Sea: a shared heritage" experience in Cervia and Breda's "(Re)development in dialogue" Good Practice, we were inspired to valorise this heritage by identifying economical assets and activating a new entrepreneurial mindset focused on cross-sectoral collaboration for the WLH heritage support, valorisation, and protection, which is a pivotal aspect of our strategy to realize our vision (pg. 9).

So far, the project idea is composed by the following **activities** (subject to possible modifications depending on the ROP ERDF 2021-2027 calls content):

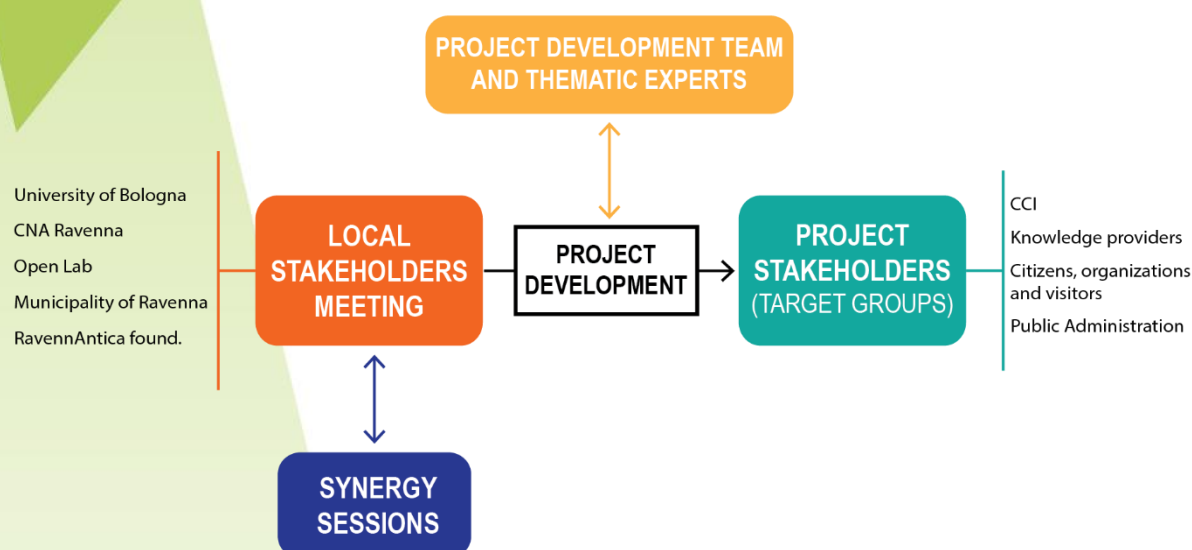
1. the identification of an **urban area (urban lab)** that can act as a reference HUB for the ecosystem, to be equipped with spaces and technologies to support cross-innovation paths between the Research and the business sectors. The economical valorization through funding integration experimented by "The Adriatic Sea: a shared heritage" Good Practice would be applied here for the implementation of the Urban Lab: the ER ROP ERDF 2021-2027 funding (pg. 55) will integrate those already secured by the TEMPUS and DARE projects, allowing respectively the first steps in the realization of the Urban Lab, and the attraction of talents from different sectors through Calls for innovators aimed at the creation of the ecosystem. The initial unit of the ecosystem is expected to be hosted within the temporary uses that will be realized through the TEMPUS project. To facilitate the collaboration between research and business, in addition to cultural and creative businesses and the related services, the establishment of University of Bologna's laboratories or research centres will be encouraged, particularly pertaining the Departments of Cultural Heritage and the Department of Architecture (acting in coordination with other important realities such as the laboratories of analysis and restoration of the RavennAntica Foundation). In addition, the physical location will act as a **show-room** for the solutions promoted by the ecosystem, providing training/education moments addressed to citizens in an open science approach and carried out directly by researchers and innovators.
6. **Evidence collection** for the identification of potentially adaptable practices in the area, and **pondered mapping** of Ravenna's architectural and landscape WLH aimed at selecting the most suitable location for establishing an ecosystemic entrepreneurial network able to valorize the

selected locations carrying out both material and immaterial (use as a set for events or artistic productions) operations. The objectives connected to the different assets can vary over time, according to an incremental logic guided by the needs and opportunities that will progressively emerge. This activity is inspired by Alicante's "Blue Routes" experience, especially regarding the enhancement of the territory attractiveness by establishing entrepreneurial activities (also CCIs) in the context of the identified sites.

7. Application and testing of Breda's "(Re)development in dialogue" approach with an added entrepreneurial angle, by creating an **Observatory of skills** gathering the already available local skills and the emerging new job profiles, with the aim of strengthening the territory's ability to tackle new challenges. The observatory will contribute to develop the physical and digital HUB, connected to supra-local competence centres, and acting as an infrastructure to support the organization and transfer of knowledge, as a necessary prerequisite for the development of a business culture based on collaboration and continuous learning. In line with the "(Re)development in dialogue" approach, the Observatory must include also **expert facilitators** to ease the dialogue between the territory (PA and public/private entities) and the entrepreneurial ecosystem.
8. Following Ister-Granum's "The Bridge Guard" Good Practice regarding the involvement of different experts in expanding a given theme and producing something that brings a change in the area, construction of **open innovation** calls addressed to CCI aiming at identifying the most suitable solutions to specific issues related to the protection, restoration, or valorisation of the WLH,. Open innovation pathways could be constructed so as to become market research actions or expressions of interest in solving a given problem; therefore, they could influence the contents of **public tenders and/or private bids**, allowing the clients to become more aware in their demand for products and services.
9. Inspired by the experience of Alicante's "Provincial Water Board" Good Practice in valorizing the WLH through multi-actor collaboration and the development of common strategies, establishment of an **open governance** model for the ecosystem, possibly by signing an agreement or a network contract, identifying the person in charge of organizing the activities and acting on behalf of the group. The governance model structure aims to guarantee and facilitate the collaboration, the continuity, and the effectiveness of the ecosystem.

Stakeholders' engagement:

The stakeholders' engagement pattern identified for this Action is shown in the following diagram:



Img. 24 – Stakeholders' engagement pattern for Action 3

The local stakeholders meeting is composed by the following key LSG members:

- CNA Ravenna;
- CIFLA (Flaminia Foundation Innovation Centre) - Open Lab;
- Municipality of Ravenna;
- RavennAntica.

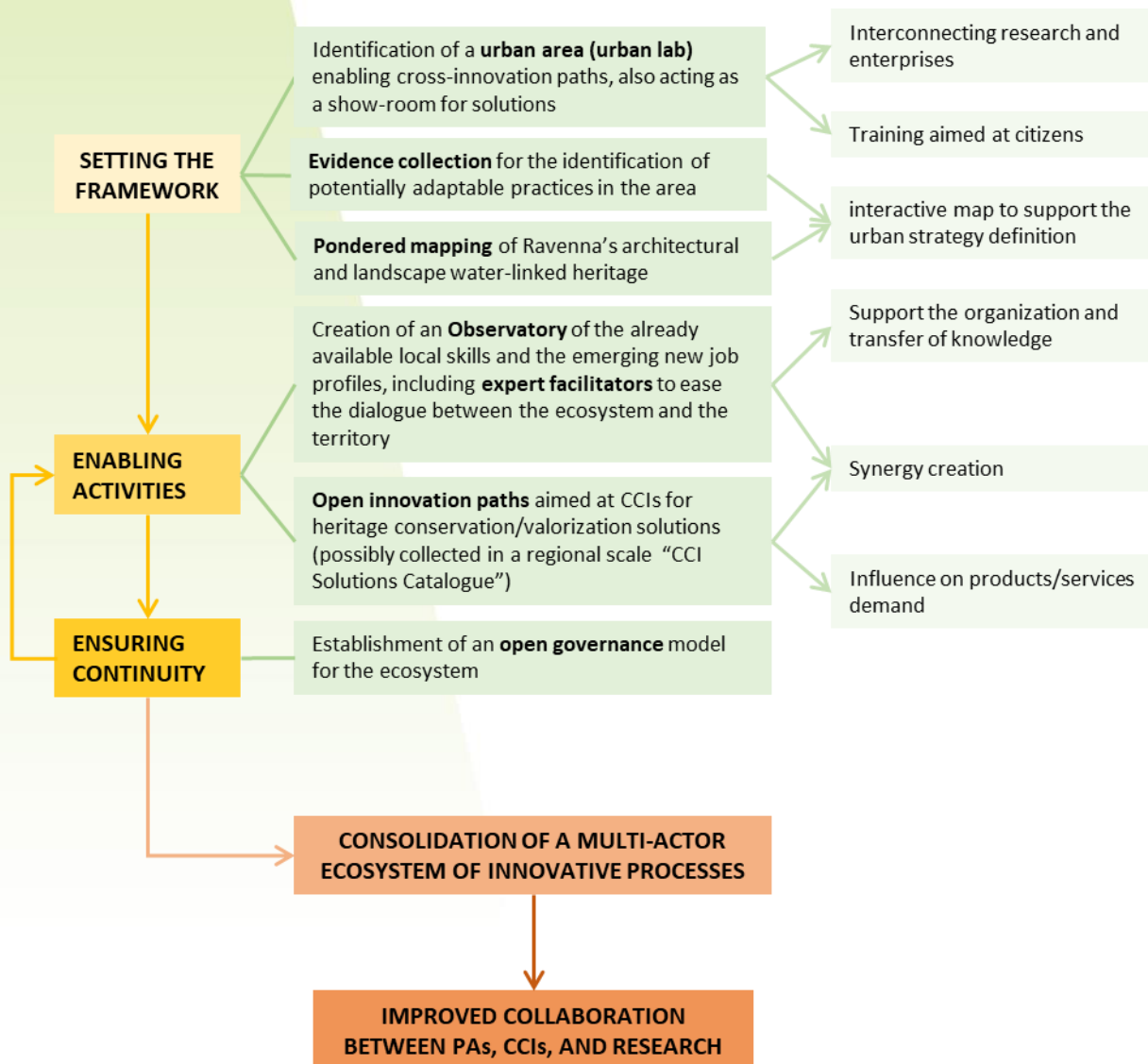
The target project stakeholders will be identified and involved while developing the project proposal described for this action, supported by the project development team and the external experts identified at the early stages of the action implementation.

For this project proposal in particular, the **eligible project stakeholders** are identified as follows:

- **CCI** – committed to develop new ideas, open new opportunities, and create new synergies. prendi da casting – sinergie, collaborazioni, connessione con ricercar per condividere spazio: insediamento in temporaneo cfr tempus – fra CCI e
- **Knowledge providers** – committed to enhance the existing complementarity between research and business by accelerating the creative chain from idea to development. Their close collaboration with CCIs can contribute to supporting the ecosystem with innovative projects aiming at obtaining EU funds.
- **Citizens/organizations/visitors** – the settlement of the ecosystem in a physical place such as the Darsena aims to transform the district into a reference point for the showcasing of the results of the collaboration between research and CCIs, where city users can get in touch with innovative solutions, raising their awareness and stimulate the creation of new products or services.

- **the Public Administration** – benefitting from the collaboration with researchers and CCIs for a strategic valorisation of the WLH, for a better focus on the priorities of intervention and a wider availability of solutions for the protection of the heritage, and also for a more varied touristic offer and for the improvement of the economy in the area.

Action flowchart:



ACTION STEPS

All details pertaining the Action steps, including the timeframe, strategy for stakeholders engagement, and budget are hypothetical as the Romagna ROP ERDF 2021-2027 is still to be published. All the information will be further detailed once the Calls content will be made available.

Preparations and setup of internal project team and thematic experts	Drafting team setup	May 2022	Bologna University coordinator LSG members who expressed interest for project development (partners)	Meeting to define the objectives of the implementation plan and collect feedbacks.	Cost: €25.000,00 Source: self-financing
Partnership definition and organization	Partnership setup	June 2022	Bologna University	Setup and identification of specific Working Groups and respective leaders for each working task	
Stakeholders selection and engagement	-Target groups definition -engagement strategy	September – November 2022	All partners involved in the development of engagement strategy, according also with S3 and Green Deal priorities	Creation of a team of local activists who will engage on drafting a baseline study analysing the target groups and the stakeholders involved in local CCI ecosystem	
Detailed project outline and implementation plan	-Outline -timetable	December 2022	Bologna University and Working groups' leaders	Development of GANTT and allocation of tasks. Specific one-to-one working meetings to correlate expertise and activities	
Application Form drafting	Project developed	December – February 2023	Bologna University	Requesting specific contributions to each partner	
Work Plan and work packages definition			Bologna University and Working groups' leaders	Specific one-to-one working meetings	

Budgeting			Bologna University	Specific one-to-one working meetings	
Administration activities			Bologna University	Specific one-to-one working meetings	
Project Submission	Submission confirmation	March 2023, prospecting approval within July 2023 at the latest based on approval of the Italian Partnership Agreement.	Bologna University		The estimated total cost of the project, to be funded through ER ROP ERDF, will be around € 350.000,00

POLICY CHANGE

The challenge we are aiming to tackle with this project type of action is to overcome the lack of communication and collaboration between the R&I and the entrepreneurial sectors. We aim to boost the local ecosystem innovation, involving especially the CCIs as promoters of the local growth. We will address the issue accordingly by submitting this action project in response to the Emilia Romagna's ROP ERDF 2021-2027 calls under the following Objectives:

- **PO1 “a more competitive and smarter Europe”** – priority 1: research, innovation, and competitiveness. Within this priority, we aim to address the following Specific Objectives:
 - **SO 1.1** “developing and strengthening the research and innovation capacities and the introduction of advanced technologies”, more specifically:
 - supporting the development of incubators and accelerators;
 - strengthening the research and innovation ecosystem;
 - supporting strategic innovation projects for the production chains.
 - **SO 1.3** “strengthening the SMEs’ sustainable growth and competitiveness, and the creation of employment within the SMEs also thanks to production investments”, more specifically:
 - supporting the tourism enterprises;
 - supporting the cultural and creative enterprises.

Referring to the S3 strategy, this action project addresses the following specific priority thematic areas:

- New formats, tools, and means of communication for artisanal/cultural/creative products and for the territorial tourism.
- CCI and digital technologies to support the competitiveness of regional productive sectors.