HUB-IN

HUB-IN Framework Overview

An overview of our shared context,
vision and values towards HUB-IN Places

with
Long Reads
included

Version 1.1, February 2023

HUB-IN Framework Overview

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Overview

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V1.0, November 2021	
V1.1, February 2023	Incorporating feedback from 1st Periodic Review: • Historic Urban Areas (HUAs) definition p.6 • Cultural Heritage, Innovation and Cohesion Policies p.11, p.42-43, p.46 -47 • Diagram p.12-13 & 44-45

Throughout this document look out for the following icons:

The Long Reads
Papers written as part of the HUB-IN Framework that expand on that written within this overview document

Further reading
Links to relevant further reading, inspiration and tools produced outside of the HUB-IN Project.

End notes are also referenced at the end of this document.

HUB-IN Vision

Welcome to your HUB-IN Place, a Historic Urban Area in your city or town full of exciting opportunities for everyone. Right now it might not be reaching its full potential, but soon it will be a revitalised, vibrant destination, home to a range of innovative and creative entrepreneurs and businesses.

This place is both local and global, grounded by its sense of place, community and cultural heritage, enhanced by being part of a network of hubs all with the same mission:

To promote the urban transformation and heritage-led regeneration of Historic Urban Areas through innovation and entrepreneurship, while preserving their unique cultural, social and environmental identities and values.

We have developed the HUB-IN Place vision as part of the HUB-IN European (Horizon 2020) project, a four year collaborative pilot project aiming to develop a network of Hubs of Innovation and Entrepreneurship in Historic Urban Areas (HUAs).

Collaborating across eight cities, expert organisations, universities, city networks and regional agencies to design and test the HUB-IN Place concept, we will develop the tools and methods to support sustainable implementation, before upscaling the network through Follower Cities and the HUB-IN Alliance; a wider network of historic urban areas with a common interest in sharing views and experiences in delivering sustainable hubs of innovation and entrepreneurship.

Covering a diversity of geographic locations, socio-economic characteristics and local ecosystems, the project pilot locations are:

- Belfast, UK
- Brasov, Romania
- Genova, Italy
- Grand Angoulême, France
- Lisbon, Portugal
- Nicosia, Cyprus
- Slovenska Bistrica, Slovenia
- Utrecht, The Netherlands

We will facilitate intracity and intercity collaboration, between local stakeholders (across academia, industry, government, and civil society) and across the network of hubs, with a common aim of co-creating HUB-IN Places through creative, inclusive and circular means.

The opportunity to network, learn from and work with other cities and stakeholders in the project increases the capacity of teams and intensifies the transfer of knowledge, strengthening both the HUB-IN network and the results more locally.

Adopting a human-connected approach, we envisage long-term impacts such as the revitalisation of historic heritage, the creation of new sustainable opportunities for local traditional businesses, and the development of new creative skills and jobs through the cross-sector collaborations in three clusters of innovation:

1. Cultural & Creative Industries
2. New Lifestyles
3. Resilient & Human-Connected Places

With this mission in mind, we hope to answer the following question:

"To what extent can networks of hubs in Historic Urban Areas incubate and unlock innovative and entrepreneurial actions that contribute to the sustainable transformation and urban regeneration of the Historic Urban Area and its cultural heritage?"

In order to answer the question above, we have developed the HUB-IN Framework to help align and guide cities and project partners towards our vision for HUB-IN Places.

Glossary of terms

The glossary of terms below aims to achieve alignment and clarity between partners, cities and other readers around the terms we use within this Framework document and throughout our thinking and doing as part of the HUB-IN project. Each term has been defined in relation to the particular context of HUB-IN, and in line with recognised resources. This glossary of terms is a living resource and will be added to as the project progresses.

Co-creation[1]

A collaborative innovation approach actively involving stakeholders (and experts) in the design process towards HUB-IN Places. From discovery to implementation (and beyond), stakeholders are informed, consulted, involved and empowered, with their insights and efforts strengthening the outputs and impact, increasing the sense of agency and pride. This results in social, economic and environmental outcomes that are essential and (in combination with greater value creation) are more likely to remain sustainable.

Cultural Heritage

HUB-IN considers the term Cultural Heritage in the broad sense, covering tangible and intangible values, exploring its ecological, economic, and social dimensions. Following work by UNESCO, the concept has been evolving during the last few decades, including not only tangible cultural and natural heritage but also intangible heritage. The tangible heritage includes elements, such as monuments, archaeological sites, paintings, sculptures, cultural landscapes[2]. The intangible cultural heritage includes local know how and cultural identities, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts[3].)

Entrepreneurship

The process by which opportunities to create future goods, services and systems are discovered, evaluated, and exploited. It involves managing risk and judgment to implement innovative ideas from wherever they originate.

Entrepreneurial Ecosystems

A set of interdependent actors and factors coordinated in such a way that they enable urban innovation and productive (value-enhancing) entrepreneurship.

Heritage-led regeneration

Regeneration with the focus on the value of heritage as a powerful catalyst for transformational change – building on the 'spirit of the place', meeting the needs of residents whilst attracting investment, jobs and improving quality of life.[4]

Historic Urban Areas (HUAs)

Draws directly from UNESCO 'Historic Urban Landscapes' defining urban areas as resulting from the historic layering of cultural and natural values and attributes, extending beyond the notion of "historic centre" or "ensemble" to include the broader urban context and its geographical setting[5]. In this way Historic Urban Areas relate to both the tangible and intangible factors that both set the context and shape the historic area's character, identity and values. Within HUB-IN we consider three subcategories of HUA:

1. Historic areas which are, in whole or in part, town or city centres.

2. Historic areas which are outside of the town or city centre. These will typically be part of medium and larger towns and cities.

3. Historic areas that focus on the wider urban values that define the identity and character of the town, city, or place.

HUB-IN Clusters of Innovation

Economic, social and ecological hotspots of innovation at the neighbourhood scale for the heritage and cultural led regeneration of HUAs. The HUB-IN cluster approach considers three interconnected clusters:

- Culture and Creative Industries (CCI) – Cultural heritage is at the centre of innovation and creativity, to nurture socio-economic development.

- New lifestyle (NLS) – Innovative sustainable living patterns, inclusivity, and diversity are the main ingredients to improve wellbeing.

- Resilient & Human Connected Places (RHCP) – Sustainable and regenerative use of resources, community cohesion, digital and human connectivity are key to improve ecological and social resilience of historic places.

HUB-IN Places

A physical or virtual hub of innovation, where cultural wealth and heritage provide a unique competitive advantage – a key resource for enhancing the sustainable regeneration of historic urban areas. HUB-IN Places are distinguished by their local action and their global interconnection. They are local hotspots of creativity, community empowerment and entrepreneurship, bringing together local stakeholders, academia, industry, and local governments. HUB-IN Places are hubs of innovation recognised by their project integrated portfolio approach that blends three HUB-IN clusters of innovation. They are places to co-design, test and develop new solutions, ideas, and creative businesses in a real urban environment. HUB-IN Places are also globally interconnected in a network that favours sharing knowledge, open innovation processes and the development of innovative circular models.

Human Connected Design

An integrated approach that shapes our relationship with people, technology and the planet. Whilst Human *Centred* Design puts people and their needs at the centre of the design process, Human Connected Design moves people from the centre and into networks that acknowledge our interdependence with wider humanity and the planet[6]. This shifts our perspective of how we see and understand ourselves: rather than at the centre, we are part of an ecosystem and ecology. This approach is used throughout HUB-IN, most tangibly as part of the Resilient & Human Connected Places cluster of innovation.

Inclusive & regenerative growth

Socio-economic growth that is distributed fairly across society, creates opportunities for all and benefits the environment, creates liveable environmental conditions. Inclusive[7] & regenerative growth[8] looks at and measures economic performance through the lens of the people's/ stakeholders' priorities and environmental challenges/ balance. (How resilient is your HUB-IN Place and its people. What does post-COVID recovery look like?)

Innovation

Implementation of novel, creative ideas in order to tackle real challenges in a purposeful way. In order to create change, we need to understand interconnections and reality (intelligence), as well as empower people (talent), enable action (technology), developing interventions that shape reality (solutions)[9].

Open innovation

A concept coined by Chesbrough in 2003. "Open Innovation means that valuable ideas can come from inside or outside the company and can go to market from inside or outside the company as well"[10].

For the urban regeneration and sustainability of HUB-IN Places, open innovation processes are much more granulated and requires the development of co-creative partnerships between different groups of actors from industry, academia, citizens and local governments.

Purposeful placemaking

The value and importance of community-oriented spaces, embedded strongly in the local ecosystem with stakeholders, is key for the health and vitality of a place with purpose. Purposeful placemaking[11] has a social, cultural, economic and environmental impact on the development of individuals and neighbourhoods and can serve to spark inclusive/good growth.

Regenerative

A natural process of replacing or restoring damaged or missing parts, connections and (urban, cultural, socio-economic) fabric. Understanding places (cities and towns) as living organisms. (All living organisms have some ability to regenerate as part of natural processes to maintain it's parts, fabric and connectedness). To regenerate is to 'rethink', 'restore', 'replenish'[12].

Resilience

Putting people and local challenges at the heart of the recovery and taking a focused approach to economic and social and environmental wellbeing to build strength and elasticity – competence, confidence, connection, character, contribution – to handle future crises and deliver a fair recovery (from COVID-19 and beyond).

Systems thinking & doing

The guidelines for thinking about networks of interactions and enabling them. Going beyond 'quick fixes' and tracing the often hard-to-understand causes and effects, thinking about consequences and enabling actions. One thing to note about systems is that what matters most is often invisible[13] (this includes: their small-scale subsystems and components, the linkages and interactions between them, the large-scale context on which systems depend, the interdependencies/linkages between systems and that wider context, the rapid, and small, changes that take place inside them, the large, and slow, changes that will in due course transform them beyond recognition).

Introduction to the HUB-IN Framework

The HUB-IN Framework aims to unite project partners (including city teams, city networks, universities, experts and regional agencies) with a clear and integrated vision, through shared values and goals, agreed concepts and synchronised actions towards 'HUB-IN Places' – Hubs of Innovation and Entrepreneurship in Historic Urban Areas.

Led by Future Cities Catapult, this framework has been co-created with Heritage Europe, Lisboa E-Nova and Utrecht University, along with contributions from other HUB-IN partners. Together, we have designed the first version of this Framework (November 2021) to be used as a source of guidance and alignment for all HUB-IN pilot cities, follower cities and project partners, who should use this document both as a point of reference and as a tool to help communicate HUB-IN to their stakeholders.

This document is intended to give an **overview** of the HUB-IN Framework sections. However, more detailed 'Long Reads' have been written about three of the sections which aim to provide a deeper understanding of strategies, research and tangible examples and actions. These sections are:

- HUB-IN Alignment with European and International Policy, led by Heritage Europe

- HUB-IN Clusters of Innovation, led by Lisboa E-Nova

- The Ingredients of a HUB-IN Place, led by Utrecht University

The framework is split into the following five sections

HUB-IN Alignment with European and International Policy

Page 11 (The Long Read page 37)

The international and European policies and standards we integrate with and contribute to.

HUB-IN Principles

Page 15

The aligned values across all HUB-IN Places and partners that guide our efforts, goals and ways of working.

HUB-IN Clusters of Innovation

Page 18 (The Long Read page 50)

The economic, social and ecological hotspots. Each HUB-IN Place focuses their innovation activities in areas where the three clusters meet and interact, for the heritage and cultural-led regeneration of HUAs.

The Ingredients of a HUB-IN Place

Page 26 (The Long Read page 77)

The key factors and considerations that are required to enable innovative and entrepreneurial behaviour to emerge and flourish in Historic Urban Areas (HUAs).

Activities towards a HUB-IN Place

Page 30

The ways in which the HUB-IN Framework strategies, inputs and principles are being put into practice locally.

In order for this framework to remain a useful resource for HUB-IN partners (and follower cities interested in adopting the HUB-IN Places approach), we will create further versions of this document informed by our progress, learnings and experiences.
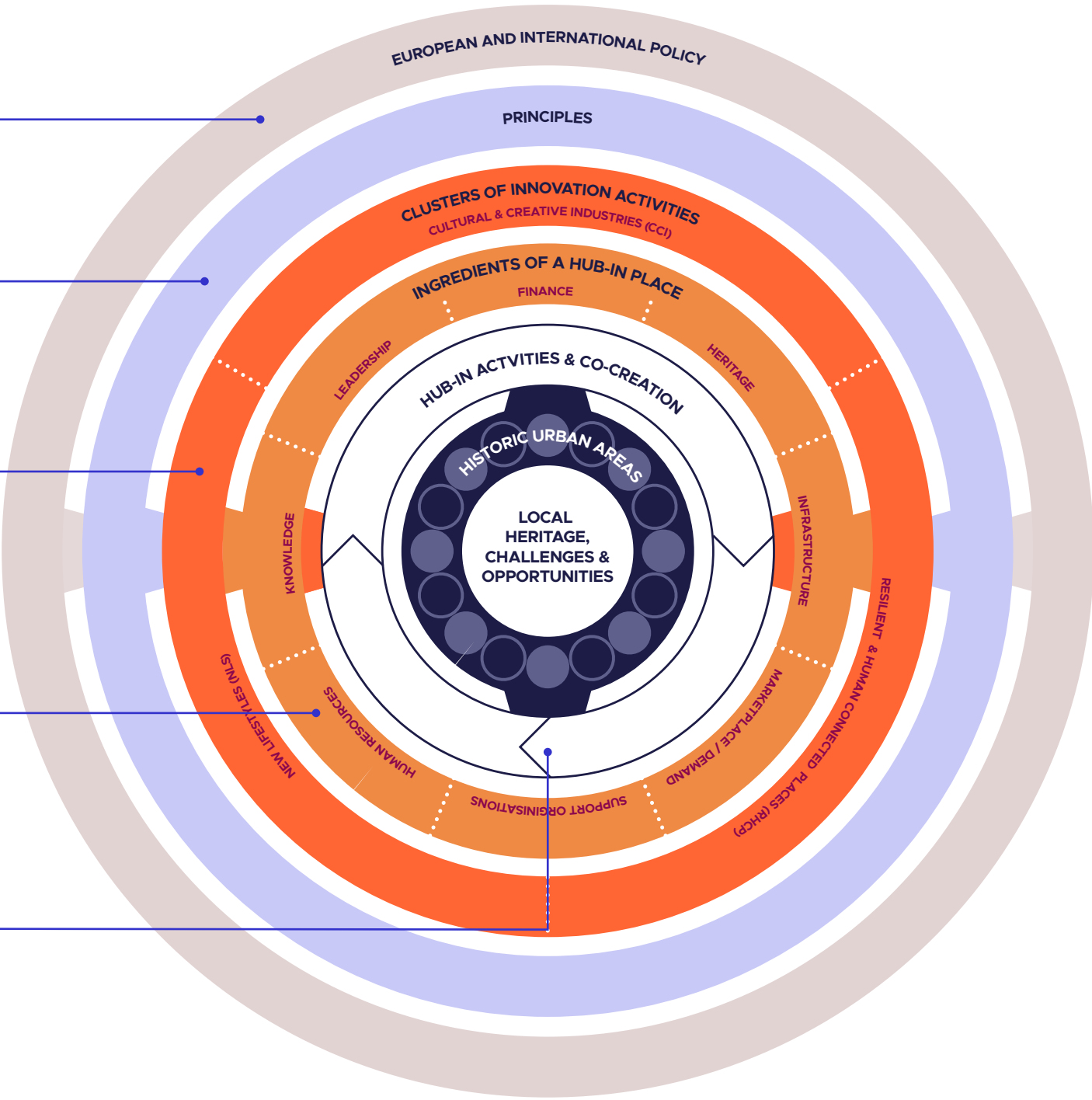
The HUB-IN Framework: HUB-IN Places are informed by their local heritage, challenges and opportunies at the core. The HUB-IN Framework aims to unite project partners (including city teams, city networks, universities, experts and regional agencies), through a clear and integrated vision, shared values and goals, agreed concepts and synchronised actions.

Local heritage, challenges & opportunities

Before delving into the sections which make up the HUB-IN Framework, it is important to remember that local heritage, challenges and opportunities are at the core of every HUB-IN Place. They inform what makes the interventions in each location unique (while also aligning with the framework).

In June 2021, we worked with the eight HUB-IN pilot cities to understand 'where they are now and how they got there', resulting in a Current Landscapes report[14] which communicates the individual narrative and context of each Historic Urban Area in the following areas:

- Hopes, fears & opportunities
- Co-creation
- Stakeholders & local ecosystem
- Clusters of Innovation
- Finance, governance and investment
- Data, assets, skills & infrastructure
- Narratives

HUB-IN Consortium

The HUB-IN project consortium is made up of eight pilot cities, expert agencies, universities, city networks and regional agencies:

HUB-IN Alignment with European and International Policy

Led by Heritage Europe

EU policy has evolved incrementally over the last 10-15 years, retaining a consistent focus on growth, sustainability, and inclusion throughout. The supporting paper for this chapter identifies and explains the key developments relevant to HUB-IN in more detail including the key UNESCO policy statements that remain current today and have influenced important shifts in emphasis in European policy, particularly the increasingly urgent global challenge of climate change. The diagram on the next page illustrates the key steps in this development process.

The Horizon 2020 call in 2019 'Transforming historic urban areas and/or cultural landscapes into hubs of entrepreneurship and social and cultural integration' fully reflects these changes given its focus on societal challenges and its environmental and climate action remit. The HUB-IN project, arising from this call, is by design well integrated and aligned with both international and European policy, as it has developed.

HUB-IN focuses on placemaking and on people and their lifestyles with the promotion of co-creation, diversity, creativity and the sharing and maker economies all linked to helping tackle climate change through delivering more sustainable transformational outcomes. The HUB-IN Place concept consequently is well-placed to go beyond alignment and to contribute to the post-pandemic challenges ahead, given its focus on innovation, and transformational change underpinning and reinforcing the key importance of cultural heritage and Historic Urban Areas to Europe's future prosperity.

While HUB-IN can be seen to align with high-level policy e.g. **The European Green Deal, the Paris agreement on climate change and the UN's Sustainable Development Goals,** specific examples of where HUB-IN Places can directly and proactively contribute to the delivery of both international and European policy include:

Historic Urban Landscapes 2011 – building an understanding of what makes each place special in terms of its social, economic and cultural characteristics, and its heritage and natural values and attributes. This forms the basis of our approach to historic urban areas.

The Urban Agenda – contributing to e.g. the Vienna Partnership on culture and heritage, Bratislava partnership on the circular economy, and the Malta Partnership on climate adaptation and energy transition.

New European Agenda for Culture 2018 and the European Framework for Action on Cultural Heritage 2018 – aligning with the objectives of the New European Agenda for Culture in its mission to harness the power of culture for social cohesion, growth and well-being. HUB-IN directly contributes to all five policy pillars of the European Framework for Action on Cultural Heritage, with pillar four on innovation presenting specific potential for knowledge exchange and future research opportunities for HUB-IN partners.

The New European Bauhaus (NEB) 2021-2024 – Heritage Europe and Energy Cities are appointed as official partners to the New European Bauhaus. HUB-IN and our sister projects Centrinno and T- Factor working together have produced a joint action plan, the relevant parts of which have been submitted to NEB by Heritage Europe. NEB consequently provides a unique opportunity and platform for HUB-IN Places to raise awareness across Europe and beyond, showcasing the many ways in which HUB-IN can help deliver transformational change in historic urban areas.

Innovation and Cohesion Policies – contributing to the key flagship New European Innovation Agenda 2022 by accelerating and strengthening innovation across the EU. Aligning with the Europe 2020 initiative Innovation Union 2010 and utilising the European Innovation Scoreboard 2022 and Regional Innovation Scoreboard 2021. Contributing to the priorities for the 2021 – 2027 New Cohesion Policy.

By integrating with and contributing to the delivery of both international and European policy, HUB-IN Places can improve the sustainability of their interventions, increasing their access to further funding which often align with policy priorities.

Further reading
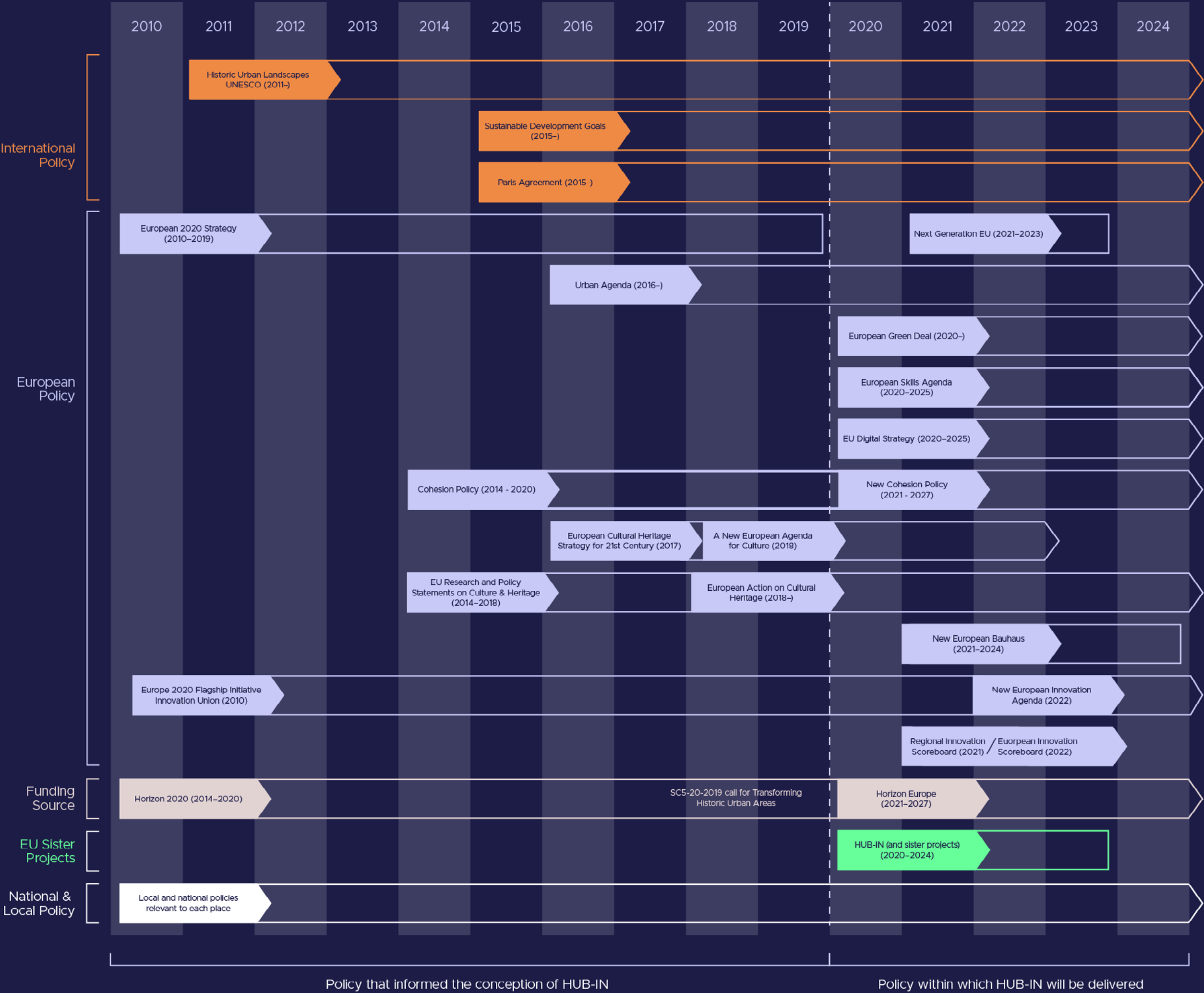Cultural Heritage Counts for Europe

The Long Read
HUB-IN Alignment with European and International Policy, led by Heritage Europe

A supporting paper for this section that explains the key developments in policy relevant to HUB-IN in further detail.

This diagram illustrates the key steps in this development process that have informed HUB-IN and sister projects (Centrinno and T-Factor).

Typical building in Alfama. Photo by Thomas Peham

HUB-IN Principles

We have designed the following four principles to act as a reminder of what we are aiming for, what drives us and how we collaborate and work.

The principles place our values front and centre throughout our process towards (and beyond) HUB-IN Places. As a starting point for informed conversations, they should aid decision-making and help to build a shared understanding of what 'good' looks like in the specific context of HUB-IN. They should be adapted by city partners to their local context and language, communicating the values of HUB-IN to their stakeholders, bringing everyone onto the same page and managing expectations.

Consortium members reviewing HUB-IN principles

Further reading

- European Heritage Alliance Manifesto

- UN 12 Sustainable Development Goals

- Fab City Manifesto

- IFIXIT Repair Manifesto

- Doughnut Principles of Practice

- Sustainism is the New Modernism: A Cultural Manifesto for the Sustainist Era

HUB-IN Places:

1 Use cultural heritage as a source of inspiration, innovation and celebration, strengthening their unique identity and informing their future.

- We embrace, respect and build upon local heritage to learn from and communicate meaningful, rich stories by engaging local culture today.

- We see cultural heritage as a strategic resource – embracing tangible and intangible assets, materials, spaces, skills, knowledge, ecosystem and ecological potential.

- We use digital technologies to create new opportunities for the visualisation, reuse, preservation and restoration of cultural heritage assets.

3 Experiment and enact open innovation through inclusive and informed co-creation.

- We upskill the local community, co-creating HUB-IN interventions and giving under-represented and marginalised communities a voice, leading to increased capacity, agency and legitimacy for change in urban transformation processes.

- We engage stakeholders as an active source of innovation throughout the entire journey. To increase levels of public impact it is essential to engage diverse stakeholders in dialogue, collaborating with them, and for the biggest impact, empowering them. This makes it open.

- We collaborate across academia, industry, government, and civil society (the quadruple helix model) as a path for creativity.

- We highlight that innovative urban regeneration processes need to provide services that continuously enact inclusion and equity.

- We experiment with different processes and methods, sharing our learnings and experiences (both good and bad), bringing value to our failures, learning faster and succeeding with more resilience.

2 Bring together human needs, individual and societal, and the tools to address them, whilst simultaneously staying within the means of the planet.

- We are grounded in 'the local' while embracing 'the global'. Addressing societal challenges and opportunities through a local lens.

- We align with and learn from a wider network of global hubs, shaping informed collaborative 'local' action and processes.

- We are creative and productive catalysers aligning societal, environmental, cultural and economical needs (the UNESCO four dimensions of sustainable development).

- We improve the equity, inclusion and affordability of historic urban areas through our bottom-up process in dialogue with top-down 'policies'. Communities can become productive, sharing and playing an active role in transforming their HUA, creating regenerative places.

- We promote the effective climate adaptation of tangible assets (such as buildings and public spaces), the use of local natural resources (e.g. renewables) and the readaptation of cultural intangible assets (e.g. traditional knowledge in craft industries).

4 Thrive through learning and exchanges of information from people, technology and nature.

- We understand everything is connected and interdependent. The key is for us to connect, share, learn and collaborate as part of a wider network.

- We integrate with and influence existing local, national and international strategies, masterplans and processes to strengthen the interventions and help ensure sustainability of the hubs beyond the project timeframe.

- Nature, its models, systems, and processes are at the core of our actions, changing the human impact on Earth from being predominantly degenerative to being regenerative.

HUB-IN Clusters of Innovation

Led by Lisboa E-Nova

For HUB-IN Places, innovation will be delivered through the development of Clusters of Innovation, with a common goal of economic prosperity, new ways of sustainable life, and new ecological standards for Historic Urban Areas. The creation of clusters of innovation in these sites is a way to unlock the potential contained in their cultural wealth and heritage value. Clusters of innovation increase the geographic concentration of economic activity, providing a strong foundation for a sustainable/regenerative entrepreneurial ecosystem, to create firms and jobs by developing activities which will support entrepreneurs, universities, researchers, and investors, in line with local conditions and environment.

Clusters provide an opportunity to co-create and co-produce across sectors, leading to new discoveries for the market. They are also:

- A way of reducing urban poverty and reversing unintended consequences such as gentrification in urban areas where those problems are normally more acute.

- An opportunity to reduce social inequality by expanding jobs and educational opportunities.

- An approach able to address heritage, land use and environmental degradation creating new mixed use patterns of residential and employment and in some cases help repopulate HUAs.

Three common Clusters of Innovation Activities for HUB-IN Places

HUB-IN Places work across three clusters of innovation:

1. **Cultural and Creative Industries (CCI)**, where cultural heritage is at the centre of innovation and creativity, to nurture socio-economic development.

2. **New lifestyles (NLS)**, for which innovative sustainable living patterns, inclusivity and diversity, are the main ingredients to improve wellbeing.

3. **Resilient & Human Connected Places (RHCP)**, are rooted in regenerative use of resources, community cohesion, digital and human connectedness, that are key to improving ecological, social and economic resilience of historic places.

By their nature these three clusters overlap with each other within Historic Urban Areas. HUB-IN Places are at the heart of this dynamic interaction – maximising the potential for capturing spill-over benefits and realising transformational change.

The Long Read
HUB-IN Clusters of Innovation, led by Lisboa E-Nova

A supporting paper for this section that explains HUB-IN Clusters of Innovation in further detail.

Further reading
- Hubs of Innovation Report by Connected Places Catapult

- Creative clusters and Innovation by Nesta

- Linking Cultural Heritage to Smart Specialisation Strategies

- Clusters and Innovations Districts: Lessons from the United States Experience
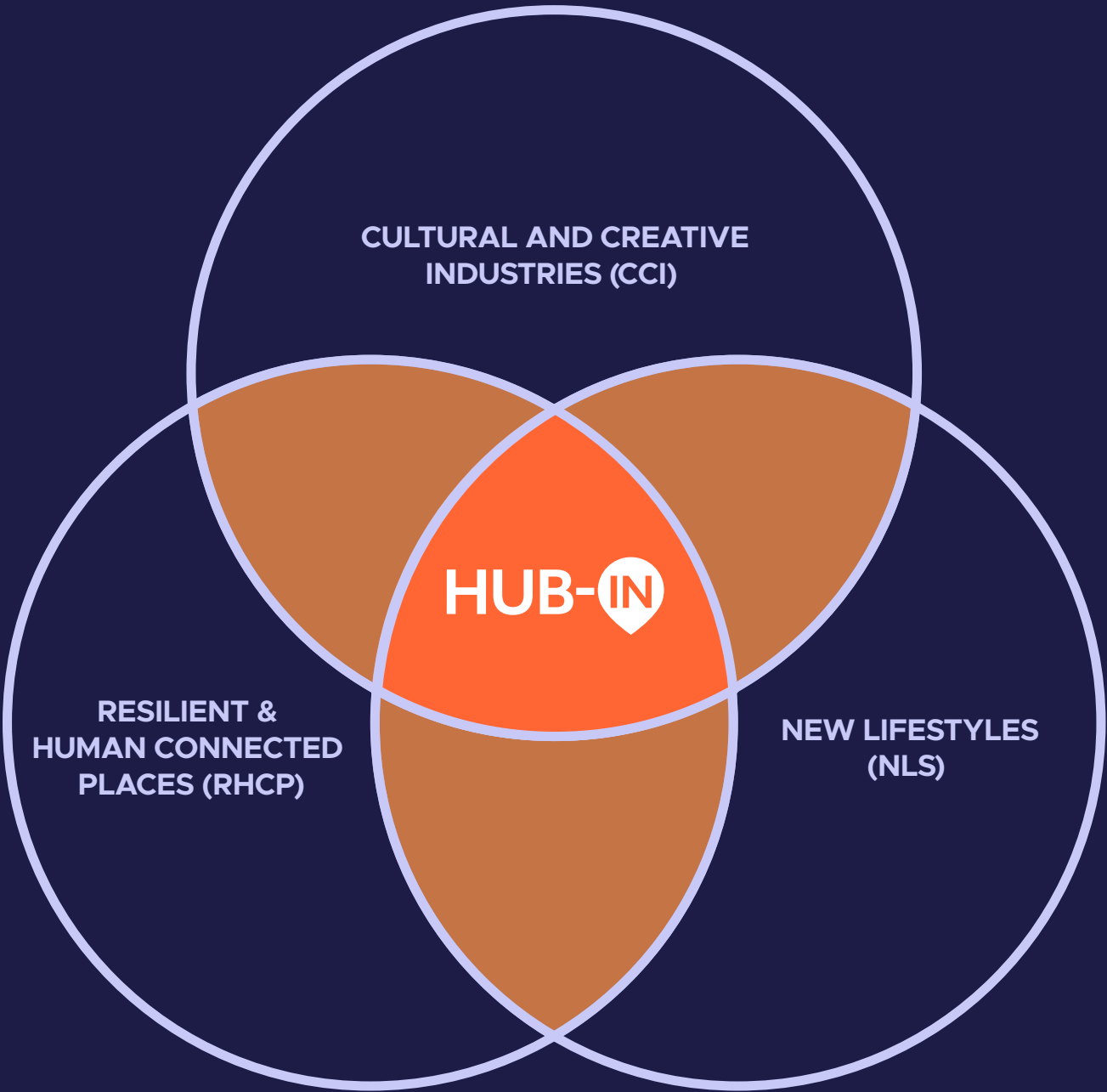
HUB-IN Clusters of Innovation

Culture and Creative Industries (CCI)

Cultural heritage is at the centre of innovation and creativity, to nurture socio-economic development.

Global trends

- Globalisation and digital transition
- COVID-19 accelerated the existing trends
- New ecological transition
- New forms of collaboration
- A new regulatory framework
- Culture tourism towards creative tourism.

Case study

Soho Arts District – Málaga, Spain

In the once degraded and marginalised neighbourhood of Ensanche Heredia in the Centro district of Málaga, Spain, residents and merchants decided to combine their efforts to bring life back into the neighbourhood by creating a cultural district. They formed the Soho Málaga Citizen Association, aimed at fostering business synergy and communal cultural projects in the neighbourhood. Together with The College of Architects and the Municipal Urban Planning Management Soho Málaga, the Art District (Málaga Soho Barrio de las Artes) was realised. A combination of re-utilising abandoned historic buildings, investments in the public space (e.g. to increase accessibility to the area), and support to the creative industries led to a buzzing creative area that is full of cafes, galleries and art spaces that attract many visitors to the area, and is a source of local employment.

Thematic topics & sub-topics to be explored by HUB-IN Places

Innovative products & services

- Boost cultural heritage and creative industries
- Create the right business and cultural environment in each local hub of innovation
- Explore new business models, and support to start-ups and entrepreneurs (e.g creating acceleration programmes).

Through means such as:

- Multimedia: Digital animation, video gaming, film broadcasting
- Design and Fashion: Tangible and intangible cultural heritage, creative, sustainable, and circular businesses, digital fabrication, open spaces for innovation, robotic festivals, music, literature, performing arts.

Adaptive reuse of traditional skills

- Readapt traditional activities by activating ancient skills with an intrinsic value for the HUA
- Promote the creation of new services and jobs
- Traditional knowledge should be combined with creativity and innovation
- Generate new circular business models with profit or non-profit purposes.

Through means such as:

- Traditional Food: Gastronomy and beverages
- Craft Industry: wood crafting, design showcasing, textile and stone carving, ceramics and tiles
- Entertainment/festivals: Music, dance events and traditional festivities
- Traditional and historic local commerce.

Cultural & creative tourism

- Explore new cultural tourism services and solutions in close collaboration with local communities and HUA residents
- Support tourism based on local experiences that are unique, that could promote local heritage and could be hosted by the community in a sustainable and responsible way.
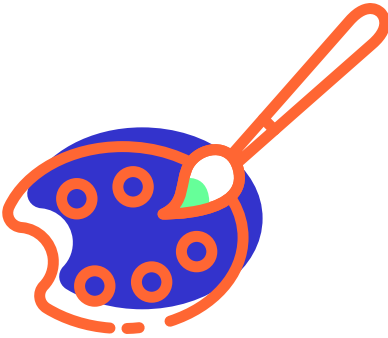
Through means such as:

- Tourism focused on user unique experiences
- Creative work combining business and leisure
- Tourism and social connectivity
- Destination as hubs of creative networks.

New Life Styles (NLS)

New lifestyles for sustainable ways of living – Innovative sustainable living patterns, inclusivity and diversity, are the main ingredients to improve wellbeing.

Global trends

- Healthy ageing
- Qualification and new skills of local communities
- Affordable and accessible housing
- Sustainable mobility
- Cultural memory as an element of wellbeing
- New synergies between local communities and cultural and creative tourism – increased environmental sustainability and value creation for communities.

Health & wellbeing

- Mitigate urban health disparities
- Influence the behaviour of local communities and aim to improve their mental and physical health.
- Promote healthy ageing, well-being and happiness, linked with the cultural memory of the place – intangible heritage.
- Explore the relationship between local communities, public space, nature in urban environment.

Through means such as:

- Inclusion of migrants and refugees
- Local communities' wellbeing and engagement with sustainable tourism
- Nature-based solutions for healthier HUAs
- The role of public spaces in health and happiness
- Exploring cultural memory as a component of wellbeing in HUAs/sense of place, identity and place purpose.

Thematic topics & sub-topics to be explored by HUB-IN Places

Consumption & *prosuming*

- Influence and promote sustainable consuming & prosuming behaviours
- Explore the linkage between new patterns of consumption and the reuse and readaptation of intrinsic heritage values whether tangible or intangible.

Through means such as:

- Cultural services for diverse and inclusive cities
- Sharing economy
- Circular consumption patterns
- Local and sustainable food
- Local energy communities.

Living & mobility

- Influence the way people live (housing conditions, enjoying public spaces)
- Influence the way people move, promoting a sustainable and active behaviour
- To adopt art and cultural heritage as a vehicle to engage people and create awareness about sustainablity issues.

Through means such as:

- Urban poverty mitigation
- Green buildings
- Promotion of inter-generational co-living models
- Public spaces for people, as places of culture, beauty, and sustainability
- Exploring shared mobility solutions for HUAs
- Developing sustainable mobility and accessibility solutions, e.g. 15-minute city
- Testing zero emission zones
- Promoting sustainable and active mobility behaviours
- Exploring micro logistic solutions for HUAs.

Case study

Traditional Meadows – Wuppertal, Germany

For centuries, the Wuppertal Meadows in the region of Bergisches Land in Germany have played a key role in the local economy as their apple, pear and other fruit trees have provided an important local food source and economic model.

In the second half of the 20th century, the majority of meadows disappeared, often in favour of industrial development. Nowadays, a small amount of meadows are restored. Among others through harvest events with the local community and the involvement of a nationwide food sharing initiative, the meadows promote sustainable food production and consumption, support nationwide research into local self-sustainability, and increase awareness of nature-based solutions in an urban setting.

Resilient & Human Connected Places (RHCP)

Regenerative use of resources, community cohesion, digital and human connectedness are key to improving ecological, social and economic resilience of Historic Urban Areas.

Global trends

- Climate change as a global emergency
- Transition from a linear to a circular city
- Smart cities & smart citizens
- Inclusion, equality & equity
- Intergenerational connectedness
- Innovative circular models to rethink and readapt cultural values and heritage by blending tradition with new techniques and solutions.

Liveable and connected places

- Promote actions that contribute to the increase in quality of life and sense of belonging of the community and all shared places and environments
- Promote connectedness, including digital connectivity, environmental and social connectedness, improving inclusiveness.

Through means such as:

- Urban design and public space
- Urban regeneration
- Reuse of spaces and buildings
- Digitalisation
- Sense of place/place purpose
- Immersive technology
- Data science
- Smart cities & neighbourhoods,
- Historical and cultural requalification.

Thematic topics & sub-topics to be explored by HUB-IN Places

Environmental balance

- Improve the territory's environmental balance, tapping into the potential of endogenous resources and social dynamics, promoting sustainable/regenerative use and resilience.

Through means such as:

- Climate resilience (adaptation and mitigation)
- Resource efficiency
- Nature-based solutions
- Ecosystem services
- Energy transition in Historic Urban Landscapes
- Sustainable food and local food production
- Adaptive reuse for circular cities.

Empowering communities

- Develop a new way of looking at heritage, by setting the ground to reframe relations between all involved stakeholders
- Develop initiatives that demonstrate to the communities that local involvement is significantly better than inaction and could lead to more ambitious opportunities and new partnerships.

Through means such as:

- Promotion of participatory processes
- Social cohesion
- Migrant integration and equity
- Local economy.

Case study

Loos in Transition – Loos-en-Gohelle, France

After the mining industry closed in Loos-en-Gohelle in the 1980s, this mining town had to reinvent itself. It decided to transform its past to shape its future. Nowadays, the former mining base, which is a UNESCO World Heritage site, is utilised as a cultural and sustainable development centre, focusing on R&D, education and entrepreneurial activities around renewable energies and green technology.

The site now supports over 600 eco-companies, 150 of which operate in the field of renewable energies. Specific attention has been paid to stimulate ideas and initiatives from the community, for example by providing funding and support for projects arising from the community. In doing so, the former mining base enables the creation of a sustainable future for the town, which is striving to rely completely on renewable energy by 2050.

The Ingredients of a HUB-IN Place

Led by Utrecht University

We believe HUB-IN Places are able to foster and sustain innovative and entrepreneurial activities in Historic Urban Areas by building on their unique history and heritage, and that doing so can help to regenerate these areas in ways that are culturally, economically, socially and environmentally sustainable. To understand how they might achieve this, we need to uncover the 'ingredients' that are required to allow innovative and entrepreneurial behaviour to emerge and flourish in this specific urban context. In HUB-IN, we do this by drawing on insights from the academic fields of urban innovation[16] and entrepreneurial ecosystems[17]. Based on this literature, we have defined eight ingredients and four institutional/cultural arrangements that, combined, can support innovative and entrepreneurial behaviour in Historic Urban Areas.

HUB-IN Places aim to create a configuration of ingredients that aid innovative and entrepreneurial behaviour, contributing to cultural heritage led regeneration. The outputs and outcomes created through this behaviour result in place-specific solutions that are sustainable, inclusive, and are able to sustain and reinvent themselves over time in accordance to local needs, opportunities and threats at different spatial scales.

Alongside these we also show examples of innovative and/or entrepreneurial behaviour already taking place throughout Europe to illustrate these elements. These examples are not directly related to HUB-IN, but provide valuable insights and inspiration into how our framework can work in practice.

This model is intended as a starting point and will be updated and refined from learnings throughout the HUB-IN project to better reflect the realities of HUAs throughout Europe.

The Long Read

[The Ingredients of a HUB-IN Place, led by Utrecht University](#)

Background research and a detailed evaluation of the key ingredients identified illustrated is set out in the supporting paper.

This paper is intended as a starting point of this model and will be refined from learnings throughout the HUB-IN project to better reflect the realities of HUAs throughout Europe.
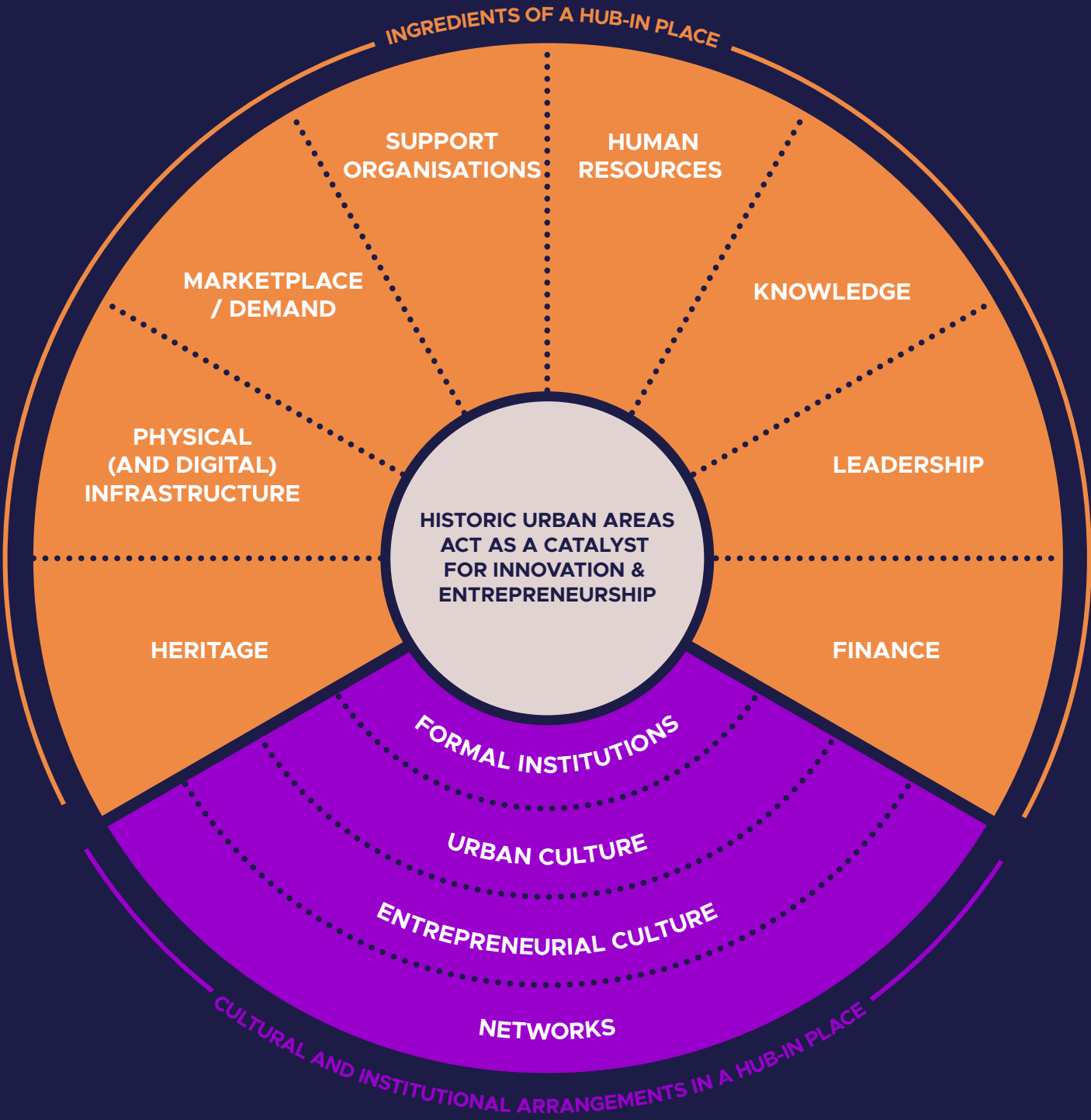

This diagram visualises the eight ingredients and four institutional/cultural arrangements that, combined, can foster cultural heritage-led regeneration, encourage regenerative development and support innovative and entrepreneurial behaviour.

In summary, the eight ingredients include:

Heritage

Heritage, which represents those tangible and intangible elements inherited from the past which reflect and express constantly evolving values, beliefs and traditions.

Case study: Patios de la Axerquia

- For example, in Patios de la Axerquia, Cordoba, Spain, citizens designed a structure for the acquisition and cooperative use of unoccupied historic buildings while respecting tradition, resulting in modern co-living arrangements.

Physical and digital infrastructures

Physical and digital infrastructures, which refer to the availability of structures and facilities (e.g. buildings, energy systems, modes of transportation) that facilitate proximity and interaction between different stakeholders.

Case study: Sugar House Island

- For example, in Sugar House Island, London, UK – This water-bound neighbourhood in East-London still bears reminders of its thriving industrial past. Its historic street plan and old courtyards are maintained to affirm its historic character.

Marketplace/demand

Marketplace/demand, which shows the importance of innovative and entrepreneurial activities addressing a clear need, or a receptive marketplace.

Case study: Sargfabrik

- One example addressing the housing market demand for affordable housing, a challenge many HUAs grapple with, is the renovated Sargfabrik, a former factory complex in Vienna, Austria – which opened its doors as an innovative co-living accomodation in 1996.

Support organizations

A well-developed range of support organizations, like research institutes or incubators, can provide input for innovative and entrepreneurial processes.

Case study: Porta Palazzo

- For example, in the historic Porto Palazzo neighbourhood in Turin, Italy, as part of a wider generation programme, the municipality focused on creating a strong support network for local industries, including arts and crafts, networks of entrepreneurs, and the formation of organisations that provide guidance in business creation within a heritage sensitive setting.

Human resources

Human resources, incorporating the experience, skills and talents of the local population, and of those who are attracted to the area from outside the city.

Case study: Kapana Creative District

- For example, in the Kapana Creative District in Plovdiv, Bulgaria, a neighbourhood that has been home to craftsmen for over five centuries, a programme was launched to support and stimulate the creative industries, develop local artists and attract (inter-)national talent to the area.

Knowledge

Knowledge as an openly accessible resource that both local and extra-local partners can build upon (for example through open-data sources, accessible work and educational spaces), is an important tool for HUB-IN Places.

Case study: Strijp-S

- For example, in Strijp-S, Eindhoven, NL, a creative and innovative mixed-use area built around the legacy of technological innovator Philips, stimulates co-creation and product development in its neighbourhood through a Living Lab where different stakeholders work together to improve the quality of life of those living, working and visiting the area.

Financial resources

Availability of adequate financial resources, which can take the shape of innovative financial models. Finance and funding that support innovation and entrepreneurship are key to enable creative communities.

Case study: Largo Residências

- For example, the cooperative of Largo Residências, Lisboa, PT, utilised a loan from their cooperative members, municipal funding and income generated through organisational activities for the renovation of a derelict building. Key in this process was that the construction contractor agreed to defer his payment until after organisational activities commenced, in essence providing them with an informal loan.

Leadership

Leadership, understood as the presence of individuals or groups that guide and direct collective action.

Case study: Convento delle Cappuccinelle

- For example, in Convento delle Cappuccinelle, Naples, IT, an abandoned convent, and former juvenile jail, has been reclaimed by a local collective as part of an abandoned spaces recovery campaign. Now, it operates with a novel governance structure in which engagement from the local community, support from the local authorities, and a commitment to open democratic principles allow the initiative to address important social and economic needs in the neighbourhood.

In each HUB-IN Place, the availability and level of development of the above ingredients results in a unique mix of resources. The **entrepreneurial culture**, the **urban culture**, (formal and informal) **networks** and the presence and priorities of **formal institutions** all influence the way in which ingredients can be mobilised, combined and employed. These four institutional and cultural arrangements, and the eight ingredients, combine into a complex ecosystem. For HUB-IN Places, our aim is to configure this ecosystem in such a way that it creates supportive conditions for the emergence of innovative and entrepreneurial processes that preserve and build on the unique history and heritage of their place.

The outputs and outcomes created through this behaviour result in place-specific solutions that are sustainable and inclusive, and in an innovative and entrepreneurial ecosystem that is able to sustain and reinvent itself over time in accordance to local needs, opportunities and threats at different spatial scales.

As an important starting point, we believe cities should aim to understand their state of play in relation to the ingredients above. The intention of the HUB-IN project is to inspire and support cities to build on these insights when formulating their roadmaps and action plans to develop Hubs of Innovation.

Further reading

- Neighbourhood Doughnut by Doughnut Economic Action Lab and Civic Square

- Cities as Enablers of Innovation by Politecnico Milano

- Sustainable Product-Service Systems by Fabrizio Ceschin

- Entrepreneurial ecosystem elements by Erik Stam

Activities towards a HUB-IN Place

The goal of this chapter is to explain how we aim to put the framework, ingredients and principles presented earlier in this document into practice locally, towards the creation of sustainable and resilient HUB-IN Places.
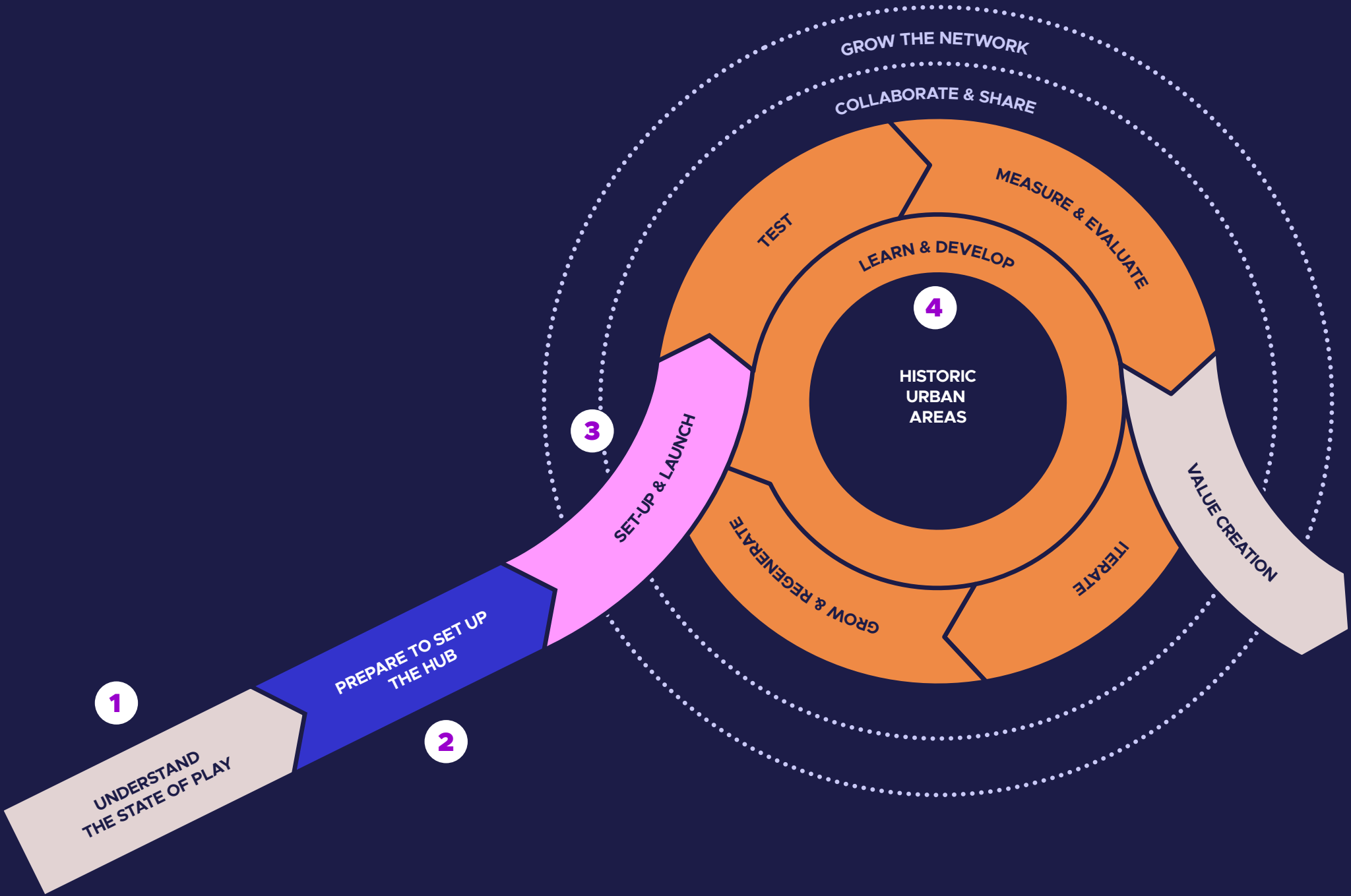
The stages we present below are neither exhaustive nor absolute (there is no one single path), nor should they be seen as a linear 'step by step' journey that has to be followed. We see them as building blocks throughout, each as crucial as the other. There are likely to be occasions where teams identify with more than one stage at a time, or where they find themselves returning to earlier stages to improve, iterate or try alternative routes.

Putting the framework into practice, collaborating and sharing throughout, Historic Urban Areas will follow a common journey towards a 'HUB-IN Place', which is split into four key stages:

1. Understand the state of play

2. Prepare to set up the hub

3. Set-up & launch

4. Learn & develop

In HUB-IN Places heritage-led regeneration creates value in the form of innovative and entrepreneurial behaviour, including new entrepreneurial initiatives and new governance models, which shape the active sustainable development of diverse and inclusive HUB-IN Places, that are resilient and connected – socially, economically, environmentally.

To support each stage, the HUB-IN pilot partners will collaborate in producing a selection of activities and deliverables which will also go on to support follower cities in the future – these have been listed alongside each stage on the following pages.

GROW THE NETWORK

COLLABORATE & SHARE

MEASURE & EVALUATE

TEST

LEARN & DEVELOP

4

HISTORIC URBAN AREAS

SET-UP & LAUNCH

3

VALUE CREATION

GROW & REGENERATE

ITERATE

PREPARE TO SET UP THE HUB

1

2

UNDERSTAND THE STATE OF PLAY

A visualisation of the common journey towards a 'HUB-IN Place'

1. Understand the state of play

We believe that it is essential for cities to understand the context, history and narrative of their chosen HUB-IN location (and ecosystem) in order to identify and tackle the real unique local challenges in those places effectively. This requires a dedicated period of discovery, a chance not only to understand the state of play locally, but also to take inspiration and learn from case studies of global best practice in areas such as innovation, co-creation and business models. This time provides an opportunity to increase engagement with collaborators and other stakeholders, utilising co-creation and open innovation methodologies.

HUB-IN project outputs particularly relevant for this step:

- HUA 'state-of-play' analysis (D2.2)
- HUA Business Model Catalogue (D2.3)
- HUA Financing Model Catalogue (D2.4)
- HUA Atlas (D2.5)
- Current Landscapes (D3.1)
- HUB-IN Geotool (D4.1)

2. Prepare to set up the hub

Once cities have an understanding of their local context, challenges and opportunities, the setup stage is where strategy building and ecosystem engagement accelerates. It is in this stage that city teams will define a vision for their HUB-IN Place, while starting to consider exactly what physical and digital form HUB-IN takes in their location through co-creation.

HUB-IN project outputs particularly relevant for this step:

- Interactive Dialogue Tool (D2.6)
- Roadmaps (D3.5)
- Business models/Finance/Governance report (D3.6)
- HUB-IN Geotool (D4.1)
- Action Plans (D4.2)
- Common Impact Assessment Framework (D5.1)
- Adapted monitoring methodology to each pilot (D5.2)

3. Set-up & launch

City teams will launch, implement and pilot their Hub of Innovation strategy, introducing the wider community to their hub and its offer through place-branding, further communication efforts and innovation activities, events and initiatives.

HUB-IN project outputs particularly relevant for this step:

- Match & Ignite (D3.4)
- HUB-IN Geotool (D4.1)
- Action Plans (D4.2)
- Adapted monitoring methodology to each pilot city (D5.2)

4. Learn & develop

A loop of testing ideas, measuring the success, iterating based on learnings and growing and regenerating. Continuing to collaborate and share learnings across the network, this stage will see the hubs go from strength to strength.

HUB-IN project outputs particularly relevant for this step:

- Match & Ignite (D3.4)
- HUB-IN Geotool (D4.1)
- Action Plans (D4.2)
- Eight HUB-IN City Story Telling booklets (D4.3)
- Adapted monitoring methodology to each pilot city (D5.2)
- Quarterly evaluation reports (D5.3)

Collaborating, sharing and growing the network

Alongside the core activities relevant to each HUB-IN Place, the pilot project also aims to upscale the HUB-IN Place concept beyond the project timescale and to other locations across Europe and beyond. In order to achieve this, key processes, tools, learnings and insights will be recorded throughout the project. These will be captured in a selection of deliverables that will be shared openly for the benefit of 'future HUB-IN Places'.

HUB-IN project outputs particularly relevant for this step

- HUB-IN Toolkit (D3.3)
- Eight HUB-IN City Story Telling booklets (D4.3)
- Final HUB-IN Storytelling (D4.5)
- Production of Exploitation Plan Framework (D6.1)
- Final economic, social and environmental appraisal lessons learned (D5.4)
- HUB-IN Guidebook for cities (D5.5)
- HUB-IN Alliance (D6.2)
- Historic Urban Areas Leadership Guide (D6.3)
- HUB-IN Digital Space (including the HUB-IN Academy) (D7.3)
- Infographic videos (D7.6)
- HUB-IN Final International Conference (D7.7)

Consortium members reviewing the Activities towards a HUB-IN Place

External links

- Hubs of Innovation: A Playbook for Place Leaders by Connected Places Catapult, The Business of Cities and UK Innovation Districts Group

HUB-IN deliverable descriptions

See below descriptions for each of the deliverables highlighted as part of the *Activities towards a HUB-IN Place* section of this document. Descriptions for **all** deliverables can be found in the grant agreement[18].

HUA 'state-of-play' analysis (D2.2)

A working paper with an overview of current conditions, barriers and opportunities to developing a HUA entrepreneurial ecosystem, as well as an identification of at least five best practices for each of the HUB-IN activity clusters.

HUA Business Model Catalogue (D2.3)

An overview of the most successful and/or promising business models applied in the context of HUA's.

HUA Financing Model Catalogue (D2.4)

An overview of public/private and blended financial instruments that are promising for HUA's.

HUA Atlas (D2.5)

An online tool that can be used to access Europe-wide HUA best practices relevant to HUB-IN.

Interactive Dialogue Tool for cities (D2.6)

An interactive offline game for cities to co-create and develop their own local model, based on best-practises and the Business Model Catalogue.

Current Landscapes (D3.1)

A report summarising the individual narrative and context of each pilot Historic Urban Area in themes such as co-creation, stakeholders, data and hopes and fears. A reminder of where they are at the start of the project and how they got there.

HUB-IN Toolkit (D3.3)

A digital resource collating key tools and resources to support the creation of HUB-IN Places, for the benefit of both HUB-IN pilot cities and 'follower cities'.

Match & Ignite (D3.4)

A programme (online and offline) attracting, engaging and connecting innovators & social entrepreneurs, start-ups and investors across the HUBs.

Roadmaps (D3.5)

The result of in-depth co-creation with stakeholders such as local government, industry, universities, citizens and local associations. An important strategic planning document for each individual HUB-IN Place where the main challenges, goals and strategies are identified.

Influenced by local (and European) strategy priorities, they should also be strong enough to inform future local policy. Therefore, the recognition of the roadmap by local governments is essential.

Business models/Finance/Governance report (D3.6)

A report showcasing the different business models and structures being envisioned for each HUB.

HUB-IN Geotool (D4.1)

A GIS web-based tool supporting the characterization of the entrepreneurial and innovation ecosystem within each HUA, and allowing an understanding of the spatial diffusion of innovation.

Action Plans (D4.2)

Operational programmes with an implementation schedule of actions and activities that are selected as effective responses to the strategies previously co-designed as part of the Roadmaps.

Eight HUB-IN City Story Telling booklets (D4.3)

Eight booklets, one per city, capturing the main activities, achievements, experiences and opinions of innovators, citizens, investors and decision makers.

Final HUB-IN Storytelling (D4.5)

Publishable report highlighting activities that have taken place, risks encountered, corrective actions taken, and lessons learned.

Common Impact Assessment Framework (D5.1)

Report capturing the specific evaluation targets, relevant evaluation indicators and appropriate data standard.

Adapted monitoring methodology to each pilot city (D5.2)

Report capturing and explaining the monitoring logic model to be applied in each city.

Quarterly evaluation reports (D5.3)

Regular analysis on the performance of each pilot.

Final economic, social and environmental appraisal lessons learned (D5.4)

Report on the final assessment of the overall economic, social and environmental impacts of the pilots

HUB-IN Guidebook for cities (D5.5)

A report explaining how to apply the piloted service in other cities' context, and providing lessons learned.

Production of Exploitation Plan Framework (D6.1)

Report on the strategy and commitment from key stakeholders in historic urban areas to take up and apply the tools, methodologies, products and services generated by HUB-IN.

HUB-IN Alliance (D6.2)

A promotional strategy and plan to secure interest and commitment from Historic Urban Areas across Europe to upscale the findings and methods of HUB-IN beyond the project's timescale.

Historic Urban Areas Leadership Guide (D6.3)

A practical guide for decision makers and key stakeholders providing guidance on how to deliver hubs of innovation and entrepreneurship.

HUB-IN Digital Space (including the HUB-IN Academy) (D7.3)

A living web-tool gathering the main outputs of the project, serving as a platform for collaboration and innovation intra and inter cities.

Infographic videos (D7.6)

Eight infographic videos on the main activities conducted in each city and explain replication process in practice.

HUB-IN Final International Conference (D7.7)

A one day event to disseminate HUB-IN results, covering the main areas and topics of HUB-IN project.

The Long Reads

The following 'Long Read' papers provide a deeper understanding of strategies, research and tangible examples and actions mentioned.

HUB-IN Alignment with European and International Policy

Led by Heritage Europe

HUB-IN Clusters of Innovation

Led by Lisboa E-Nova

The Ingredients of a HUB-IN Place

Led by Utrecht University

HUB-IN Framework Long Read

HUB-IN Alignment with European and International Policy

HUB-IN Framework: Alignment with European and International Policy

PREPARED BY

The HUB-IN Framework – Alignment with European and International Policy is one of four parts of the HUB-IN Framework led by Future Cities Catapult (WP3).

The HUB-IN Framework – Alignment with European and International Policy is authored by: Brian Smith (Heritage Europe)

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STATEMENT OF ORIGINALITY

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Cover: Photo by Jon Tyson on Unsplash

Contents

VERSION	Content Change Log
V1.0, November 2021	
V1.1, February 2023	Incorporating feedback from 1st Periodic Review:
	• Historic Urban Areas (HUAs) definition p.6
	• Cultural Heritage, Innovation and Cohesion Policies p.11, p.42-43, p.46 -47
	• Diagram p.12-13 & 44-45

This document focuses on HUB-IN Alignment with European and International Policy. It is one of three *Long Reads* related to elements of the HUB-IN Framework. You can also find:

- HUB-IN Framework Long Read – HUB-IN Clusters of Innovation
- HUB-IN Framework Long Read – The Ingredients of a HUB-IN Place

For information on the framework as a whole, please read the **HUB-IN Framework Overview.**

To access these papers, visit the HUB-IN project website or get in touch with the authors of this document.

Introduction to HUB-IN Alignment with European and International Policy

To understand how the HUB-IN project aligns with international and European policy, as well as being well-placed to contribute to the post pandemic challenges ahead, this reference paper provides the background research and analysis of 'Pre 2020 Policy', 'Post 2020 Policy' and 'How the HUB-IN project aligns with International and European Policy'.

This 'Long Read' is intended as a starting point and will be refined from learnings throughout the HUB-IN project to better reflect the realities of HUAs and contributions to post-pandemic challenges – given HUB-IN's focus on innovation, and transformational change underpinning and reinforcing the key importance of cultural heritage and historic urban areas to Europe's future prosperity.

Pre-2020 policy

The HUB-IN[19] and sister projects (SPs), T Factor[20] and Centrinno[21], were **conceived** within European policy set towards the end of the policy period 2010-20 as part of the Horizon 2020 Climate Action, Environment, Resource Efficiency and Raw Materials 2018-20 programme – specifically the SC5-20-2019 call for projects. As innovation actions under the topic "Transforming historic urban areas and/or cultural landscapes into hubs of entrepreneurship and social and cultural integration", all of the SPs broadly aim at the regeneration of abandoned and/or unused urban areas through the creation of a network of hubs dedicated to the fields of social innovation, social inclusion, entrepreneurship, creativity, culture and heritage, with its own specificities. These overarching similarities and own specificities open up valuable opportunities for the development of synergies and cross-pollinations[22].

This might initially seem a surprising home for projects focusing on transforming historic urban areas. Indeed the prevailing European strategic policy at that time was '**Europe 2020: A European Strategy for Smart, Sustainable and inclusive Growth**'[23] set in the aftermath of the 2008 financial crisis and focused mainly on jobs and growth with no mention of cultural heritage or historic urban areas.

From 2010 - 2018 however some major shifts of emphasis in strategic policy had taken place both within the EU and internationally. The main landmarks relevant to HUB-IN:

- In 2010 the Europe 2020 Flagship Initiative Innovation Union[24] supported innovation to tackle growing societal challenges and growth and aimed for smart, sustainable and inclusive growth

- In 2011 UNESCO adopted a new recommendation on the **Historic Urban Landscape[25]** – its first such instrument in 35 years. It advocates a holistic approach seeing urban heritage as a social, cultural, and economic asset for the development of cities.

- The **Paris Agreement[26]** – a landmark international accord that was adopted by nearly every nation in 2015 to address climate change and its negative impacts.

- The **Urban Agenda[27]** for the EU in 2016 – a key influence on delivering the EU's strategic objectives to provide an integrated and coordinated partnership approach to deal with the urban dimension of the EU, including cultural heritage and historic urban areas.

- The parallel developing focus on **Innovation and Cohesion policy** also strengthened the urban dimension of regional policy in particular the **2014 – 2020 New Cohesion Policy.**

- A series of complementary European cultural heritage studies, recommendations, and EU policy statements from 2014 onwards leading to the **European Agenda for Culture[28] and European Framework for Action on Cultural Heritage[29]** – – these policies underpin the Council's New Work Plan for Culture from 2019 to 2022 and align with the **Council of Europe's European Cultural Heritage Strategy for the 21st century[30]** adopted in 2017.

- The key influence on European policy development however was perhaps the United Nation's '**Transforming our world: the 2030 Agenda for Sustainable Development**'[31] – successor policy to the Millennium Goals and before that, Agenda 21. With 17 Sustainable Development Goals (SDGs) adopted at the UN Sustainable Development Summit in 2015 it sets out a comprehensive agenda for change by 2030 that would heavily influence the next phase of European strategic thinking.
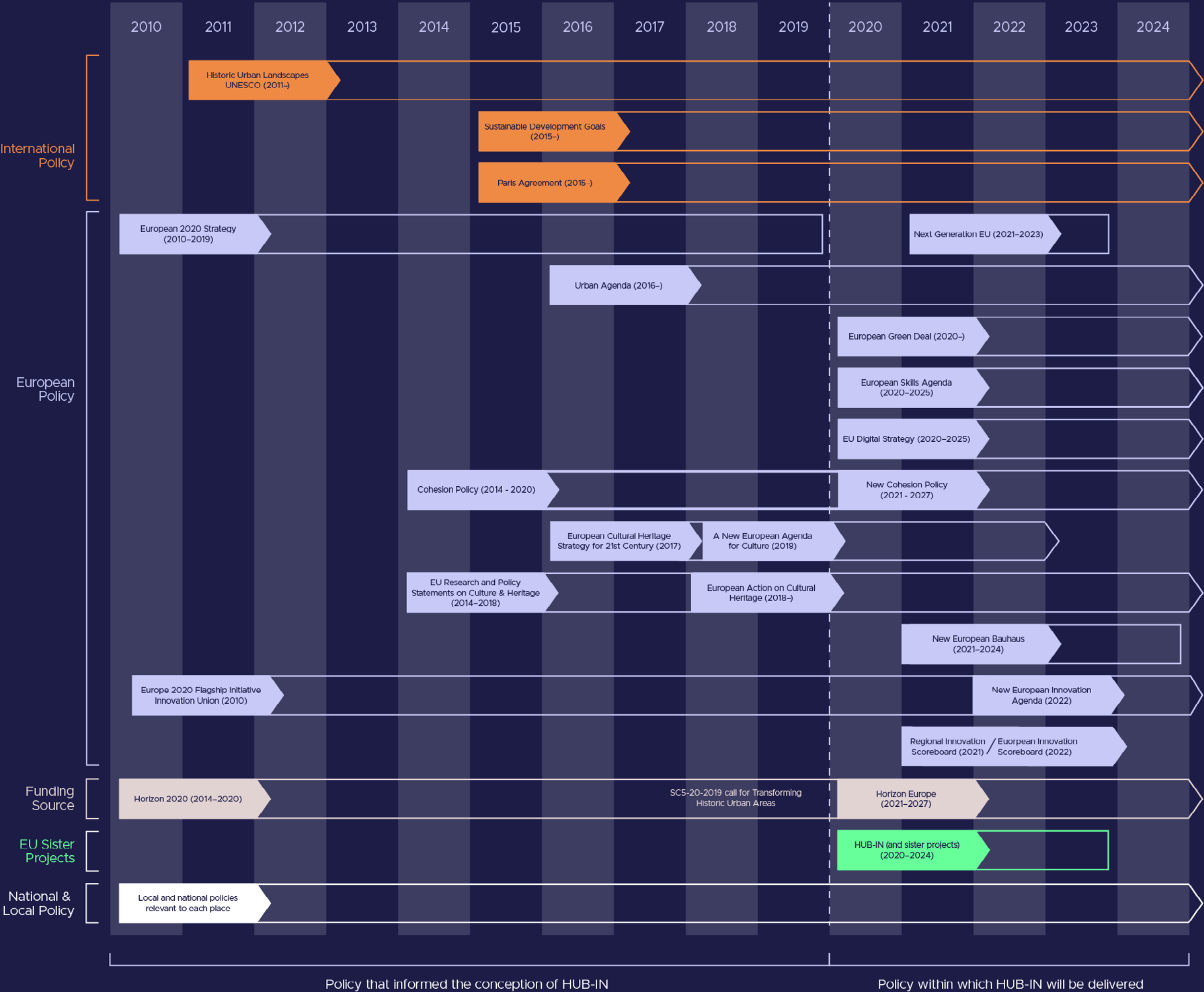
Post-2020 policy

HUB-IN and its sister projects (SPs) will of course be implemented within the successor policy to the **Europe 2020 Strategy – The European Green Deal[32]**. The new strategy sets out Europe's overarching policy framework from 2020 onwards and it aims for a reduction in greenhouse gas emissions of 55% by 2030 and a carbon-neutral society by 2050. While the strategy focuses on the environmental dimension of sustainable development, it sits alongside a **European Digital Strategy** and new **Industrial Strategy** collectively aiming for a "just and inclusive transition" to generate jobs by supporting both industry and the green economy.

There are many overlaps between the Green Deal and its associated strategies with the earlier Europe 2020 Strategy including having to respond to an unprecedented world crisis – in this case the Covid-19 pandemic. The resultant recovery plan – **Next Generation EU[33]** breaks new ground as the centrepiece of a powerful long-term EU funding programme worth EUR 1.8 trillion. The plan, in adapting to the new circumstances, places the twin green and digital transitions even more firmly at the core of strategic policy delivery with new resources to accelerate Europe's transformation. Key further policy developments relevant to HUB-IN and closely related to the delivery of the

Green Deal and Digital Transformation include:

- The **European Skills Agenda[34]** – a five-year plan launched in July 2020 to help individuals and businesses develop more and better skills and to put them to use, by strengthening **sustainable competitiveness**, as set out in the European Green Deal, ensuring **social fairness** and building **resilience** to react to crises such as the COVID-19 pandemic.

- The **New European Bauhaus – Beautiful, Sustainable, Together[35]** – – a new flagship EU initiative begun in 2020-21 to make the Green Deal a cultural, human centred, positive, and tangible experience; to imagine and build together a sustainable and inclusive future that is beautiful for our eyes, minds, and souls. It brings a new dimension to European policy with a transformational agenda to inspire fresh, innovative, and creative thinking, especially important post pandemic.

- The **New Cohesion Policy** focus for 2021 – 2027 on a more competitive, smarter Europe, a greener economy, a more connected Europe with social cohesion and inclusivity with sustainable development and a focus on smart specialisation.

- The **New European Innovation Agenda in 2022[36]** (36) has put a greater emphasis on innovation and

Timeline: 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

International Policy

Historic Urban Landscapes UNESCO (2011–)

Sustainable Development Goals (2015–)

Paris Agreement (2015–)

European Policy

European 2020 Strategy (2010–2019)

Next Generation EU (2021–2023)

Urban Agenda (2016–)

European Green Deal (2020–)

European Skills Agenda (2020–2025)

EU Digital Strategy (2020–2025)

Cohesion Policy (2014 - 2020)

New Cohesion Policy (2021 - 2027)

European Cultural Heritage Strategy for 21st Century (2017)

A New European Agenda for Culture (2018)

EU Research and Policy Statements on Culture & Heritage (2014–2018)

European Action on Cultural Heritage (2018–)

New European Bauhaus (2021–2024)

Europe 2020 Flagship Initiative Innovation Union (2010)

New European Innovation Agenda (2022)

Regional Innovation Scoreboard (2021) / Euorpean Innovation Scoreboard (2022)

Funding Source

Horizon 2020 (2014–2020)

SC5-20-2019 call for Transforming Historic Urban Areas

Horizon Europe (2021–2027)

EU Sister Projects

HUB-IN (and sister projects) (2020–2024)

National & Local Policy

Local and national policies relevant to each place

Policy that informed the conception of HUB-IN   Policy within which HUB-IN will be delivered

This diagram illustrates the key steps in this development process that have informed HUB-IN and sister projects (Centrinno and T-Factor).

How does the HUB-IN project align with International and European Policy?

As can be seen, EU policy has evolved and developed incrementally over the last 10-15 years whilst retaining a consistent focus on growth, sustainability, and inclusion throughout. There have nevertheless been important shifts in emphasis responding to both global and local events particularly the increasingly urgent global challenge of climate change.

The Horizon 2020 SC5-20-2019 call 'Transforming historic urban areas and/or cultural landscapes into hubs of entrepreneurship and social and cultural integration' fully reflects these changes given its focus on societal challenges and its environmental and climate action remit. The HUB-IN project, arising from this call, is therefore by design well integrated and aligned with European policy, as it has developed.

HUB-IN focuses not only on place making but people and their lifestyles with the promotion of co-creation, diversity, creativity and the sharing and maker economies all linked to helping tackle climate change through delivering more sustainable transformational outcomes. While HUB-IN can be seen to align with high level policy e.g. The European Green Deal, the Paris agreement on climate change and the UN's sustainable Development Goals, specific examples of where HUB-IN and its sister projects can directly and proactively contribute to the delivery of both international and European policy include:

Historic Urban Landscapes, 2011

The Hub-In approach starts with the Historic Urban Area and draws explicitly from the UNESCO concept of historic urban landscapes in order to build an understanding of what makes each place special in terms of its social, economic and cultural characteristics and its heritage and natural values and attributes.

In this way historic urban areas provide the context within which innovation and entrepreneurship can flourish – acting as a key driver of sustainable regeneration and transformation - exploiting the potential of cultural heritage to add value whilst protecting and enhancing the character and identity of the historic urban area.

European Cultural Heritage Strategy for the 21st Century, Council of Europe, 2017

The EU Review of the Urban Agenda in 2019 shows the focus of the many partnerships created and the range of urban priorities that HUB-IN can/will directly contribute to e.g. the Vienna Partnership on culture and heritage, Bratislava partnership on the circular economy, and the Malta Partnership on climate adaptation and energy transition.

HUB-IN will support the implementation of the Council of Europe's European Cultural Heritage Strategy for the 21st Century and its key areas of convergence; social, territorial and economic development and knowledge and education. The HUB-IN project collaborates across multiple stakeholders in academia, industry, government and civil society as a path for creativity and thus reinforces the inclusive approach of the strategy. By embracing tangible and non-tangible heritage assets, the project promotes diversity and the empowerment of heritage communities. HUB-IN seeks to create synergy between existing tools and policies and to improve and supplement them to help construct peaceful societies, conscious of their diversity and the richness this represents to bring about inclusive and regenerative growth.

The Urban Agenda, 2019

The EU Review of the Urban Agenda in 2019 shows the focus of the many partnerships created and the range of urban priorities that HUB-IN can/will directly contribute to e.g. the Vienna Partnership on culture and heritage, Bratislava partnership on the circular economy, and the Malta Partnership on climate adaptation and energy transition.

A New European Agenda for Culture, 2018

HUB-IN will contribute to implementing A New European Agenda for Culture and aligns with the recognition that culture and creativity are vital assets for the economy. The project focuses on the three specific eco-systems within the policy; education and training, cities and regions and the cultural and creative industries themselves, in order to create supportive environments for culture-led innovation. With a focus on historic urban areas, HUB-IN aligns with the policies recognition that investment in heritage and culture can reap substantial rewards in creating growth and jobs. HUB-IN Places will promote culture and creative thinking and promote the skills needed by cultural and creative sectors, including digital, entrepreneurial, traditional and specialised skills, by combining knowledge and skills by co-creation.

European Framework for Action on Cultural Heritage, 2018

The Framework focuses on five pillars:

• Cultural heritage for an inclusive Europe

• Cultural heritage for a sustainable Europe

• Cultural heritage for a resilient Europe

• Cultural heritage for an innovative Europe

• Cultural heritage for stronger global partnerships.

HUB-IN will align and directly contribute to all these policy priorities with pillar 4 on innovation presenting specific potential for knowledge exchange and future research opportunities.

New Cohesion Policy, 2021 – 2027

HUB-IN's hubs of innovation are directly aimed at the regeneration of historic urbans areas to foster social innovation, social inclusion and entrepreneurship. In this way the project will contribute to the implementation of the five priorities for the 2021 – 2027 cohesion agenda with its focus on a more competitive and smarter Europe. Specifically HUB-IN will support and encourage innovation, digitisation and economic transformation, focus on sustainability and climate change and help build a greener economy. With resilient and human connected places of innovation and sharing of knowledge, HUB-IN contributes to a more digitally connected Europe.

European Innovation Policy

The **Europe 2020 Innovation Union** flagship policy from 2010 recognises the importance of broad ranging innovation and that the creativity and diversity of people and the strength of European creative industries offer huge potential for growth and jobs through innovation. The policy highlights the importance of 'social innovation' for all regions in Europe, each focusing on its own strengths with smart specialisation, in partnership with each other. HUB-IN by creating European Hubs of Innovation and Entrepreneurship in historic urban areas helps to support growth by smart specialisation and through co-creation will support social and territorial cohesion across Europe.

A key outcome of the Innovation Union is the **European Innovation Scoreboard**[37] and the Regional Innovation Scoreboard which indexes the level of innovation within European countries and regions. HUB-IN Pilot cities include **'emerging innovators'** in Romania and **'moderate innovators'** in Slovenia, Portugal and Cyprus.

0 Summary Innovation Index
Source: European Innovation Scoreboard 2022
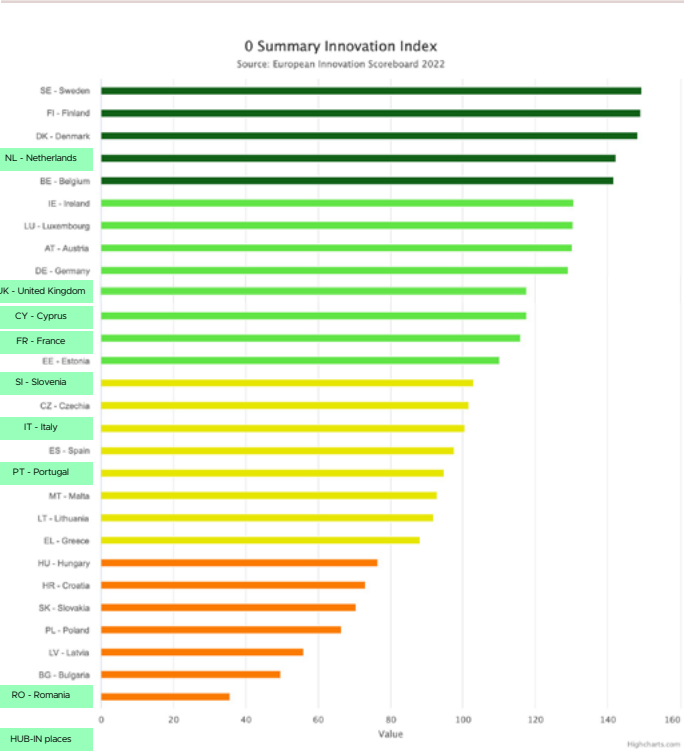
Performance indicators, EIS (european-innovation-scoreboard)[37]

The New European Innovation Agenda, 2022

This strengthens innovation policy and further supports the promotion of entrepreneurial and innovation culture as a key part of future European policy. HUB-IN will contribute to the key aims of accelerating and strengthening innovation across the EU, through promoting innovation ecosystems and helping tackle the innovation divide by helping cities and regions to identify their strengths and assets as a means for innovation and entrepreneurialism.

The New European Bauhaus 2021-2024

The HUB-IN Consortium is well placed to contribute to the development and implementation of the New European Bauhaus with both Heritage Europe and Energy Cities appointed as official partners.

Many of the stated aims of the New European Bauhaus (NEB) resonate with the work of HUB-IN and our sister project's Centrinno and T-Factor. All three projects see the added value and synergy from working together and have produced a joint action plan. Drawing on this plan and working with the three projects, Heritage Europe has submitted to NEB a programme of deliverables tailored to align with NEB's phased timetable up to 2024.

Phase 1 – Understanding Ecosystems

Inspiring examples of cultural heritage led transformation through co creation: CENTRINNO's City Ecosystem Mapping Guidebook: T-FACTOR's Context Mapping: documenting 'meanwhile' related policies, and HUB-IN's GEO Tool: characterisation of the entrepreneurial and innovation ecosystem and the spatial diffusion of urban innovation. Report on the 'state of play' of Hubs of Innovation across Europe with an online Atlas of 100 case studies.

Phase 2 – Sharing Tools and Methodologies

HUB-IN will produce catalogues on innovative business models and financial models, HUB-IN Places toolbox, CENTRINNO's Fab City Hubs Toolkit will be a hands-on toolkit for cities, whilst T-Factor Toolkit will publish tools for innovation in meanwhile spaces.

Phase 3 – Densifying Networks of Innovation and Guiding Replication

CENTRINNO will create a FAB city network across Europe and beyond; T-FACTOR proposes a network of universities, cities, businesses, and grassroots communities experimenting and exchanging practices of creative and collaborative place-making; and HUB-IN an operational network of Hubs of Innovation with city pilots augmented by 20 follower cities becoming a HUB-IN Alliance of Hubs of Innovation.

In terms of knowledge transfer CENTRINNO will produce a Blueprints and Policy Development Guidelines for replication of Fab City Hubs as change catalysts and promoters of digital manufacturing: T-Factor's Six steps guide for transformative meanwhile will be focused on strategies, approaches, business and financial models for meanwhile spaces and HUB-IN's guidebook for cities and HUB-IN Academy will support regeneration of Historic Urban Areas to deliver open innovation through co-creation led 'Hubs of Innovation'.

NEB provides a unique platform to raise awareness across Europe and beyond and showcase the many ways HUB-IN and its sister projects can help deliver transformational change in historic urban areas.

The HUB-IN Place

In HUB-IN we identify the characteristics, conditions and delivery mechanisms in Europe's towns and cities that lead, in practice, to successful innovative and entrepreneurial solutions to the key challenges facing historic urban areas today.

The HUB-IN Place concept is consequently not only fully aligned with international and European policy, but it is well-placed to contribute to the post pandemic challenges ahead, given its focus on innovation, and transformational change underpinning and reinforcing the key importance of cultural heritage and historic urban areas to Europe's future prosperity.

Photo (right) by Rose Almond on Unsplash

HUB-IN

HUB-IN Framework Long Read

HUB-IN Clusters of Innovation

Version 1.0, November 2021

HUB-IN Framework Long Read –
Clusters of Innovation

PREPARED BY

The HUB-IN Framework – Clusters of Innovation is one of four parts of the HUB-IN Framework led by Future Cities Catapult (WP3). It is authored by Vera Gregório and Victor Vieira (Lisboa E-Nova).

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STATEMENT OF ORIGINALITY

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

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Contents

This document focuses on HUB-IN Clusters of Innovation. It is one of three *Long Reads* related to elements of the HUB-IN Framework. You can also find:
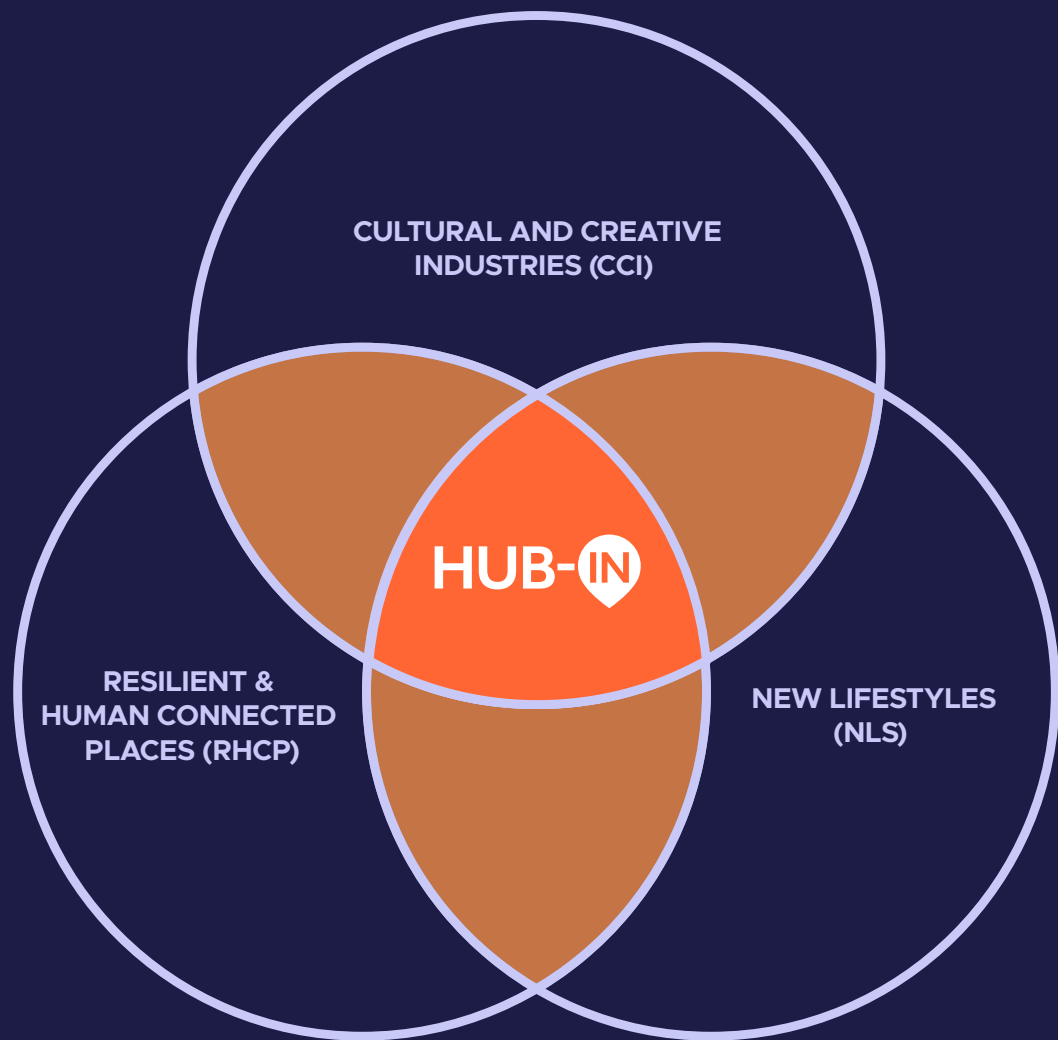
- HUB-IN Framework Long Read – HUB-IN Alignment with European and International Policy
- HUB-IN Framework Long Read – The Ingredients of a HUB-IN Place

For information on the framework as a whole, please read the **HUB-IN Framework Overview.**

To access these papers, visit the HUB-IN project website or get in touch with the authors of this document.

Introduction to Clusters of Innovation

HUB-IN Places as Innovation Districts

The HUB-IN Framework concept adopts a strategic cluster approach to the regeneration of Historic Urban Areas through innovation and entrepreneurship. This Long Read paper provides the theoretical background to this approach and expands on the focus of each cluster and their interaction with each other to deliver transformational change.

Clusters of Innovation

HUB-IN clusters of innovation are economic, social and ecological hotspots of innovation at the neighbourhood[38] scale for the heritage and cultural led regeneration of HUAs.

There is a broad understanding that clusters contribute to productivity and economic performance but there are different models and approaches to understand their role in regional and local development. Some economists, among others, the Nobel Prize winner Paul Krugman, highlight the importance of density of economic activity within a cluster as one of the main success factors for the economic performance and the increase of productivity. Porter Diamond is a clustering model to explain and analyse the competitive advantage of nations in specific industries. It has six main components: factor conditions, home-country demand, related and supporting industries, competitiveness of the home industry, public policy, and chance (Porter Diamond, 1990)[39].

From clusters of industries to science parks, a new urban model in the geography of innovation is now rising known as 'Innovations Districts'. They are by definition, clusters of innovation located in "geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators. They are also physically compact, transit-accessible, and technically-wired and typically offer mixed-use places e.g. including housing, office, and retail." They are resource pots of new ideas and creativity, generated by firms and workers where knowledge can be transferred more quickly and effortlessly. They are places of open Innovation "driving economy activity supported by formal and informal networks of collaboration. In this way "Innovation districts have the unique potential to spur productive, inclusive and sustainable economic development." (Katz & Wagner, 2014)[40].

In the context of HUB-IN Places, our focus is on Historic Urban Areas that we propose to transform into (or contribute to) a very special type of Innovation District where its cultural wealth and heritage provide a unique competitive advantage – a key resource for enhancing the regeneration of historic urban areas[41].

The ingredients of a HUB-IN Place set out the key elements that we consider of importance in order to build a HUB-IN Place (Twuijver, M. v., et. al., 2021)[42]. One step further, each HUB-IN Place will find – by methods of territorial diagnosis, stakeholders' involvement and by testing intervention models in practice – the specific

combination of these ingredients that will lead to a successful innovation process. In each HUB-IN Place, innovation will be delivered through the development of Clusters of Innovation, with a common goal of economic prosperity, new ways of sustainable life, and new ecological standards for HUAs. We see the creation of clusters of innovation on these sites as a way of increasing the geographic concentration of economic activity, providing a strong foundation to create firms and jobs by developing activities that will support entrepreneurs, universities, researchers, and investors. It is an opportunity to co-create and co-produce across sectors, that will lead to new discoveries for the market. It is also a practice which will help reduce urban poverty and help reverse gentrification processes in urban areas where those problems are normally most acute – a form of reducing social inequality by expanding jobs and educational opportunities. In unlocking these processes clusters of innovation also have the potential to address heritage and environmental degradation creating new mixed-use patterns of residential and employment and in some cases help repopulate HUAs.

Three Common Clustering Areas for HUB-IN Places

According to the vision and principles of HUB-IN, we identified three main common clusters of innovation that should not be seen as silos of activities, but rather intertwining activities across the three clusters complementing and contributing to the development of HUB-IN Places as Innovation Districts:

- **Culture and Creative Industries (CCI)** – Cultural heritage is at the centre of innovation and creativity, to nurture socio-economic development.

- **New Lifestyle (NLS)** – Innovative sustainable living patterns, inclusivity, and diversity, are the main ingredients to improve well-being.

- **Resilient & Human Connected Places (RHCP)** – Sustainable and regenerative use of resources, community cohesion, digital and human connectivity, are key to improve ecological and social resilience of historic places.

CULTURAL AND CREATIVE INDUSTRIES (CCI)

HUB-IN

RESILIENT & HUMAN CONNECTED PLACES (RHCP)

NEW LIFESTYLES (NLS)

HUB-IN Clusters of Innovation

Culture & Creative Industries (CCI)

Cultural heritage is at the centre of innovation and creativity, to nurture socio-economic development.
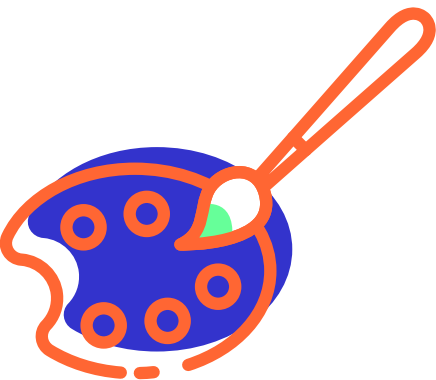
The importance of heritage and culture for the revitalization of urban areas and in particular for HUAs is strategically framed by the Urban Agenda for the EU (Smith, B. 2021)[43] and specifically by the European partnership on culture and cultural heritage. Here, the development of Culture and Creative Industries[44] (CCI) are a priority cluster of activities that could support the economic development of HUB-IN Places, directly contributing for the creation of new jobs and innovative services and products.

The Culture and Creative Industries (CCI) have an important role in the European creative economy and are key in the continuous process of transition of our societies. These industries are knowledge intensive and mainly based on individual creativity and talent. In addition to the economic wealth that they generate they are critical to strengthen a shared sense of European identity, culture, and values. In CCI, employment, especially for young people, as well as companies, have grown strongly at and above 4% CAGR since 2013. Furthermore, important spill-over effects from CCI to other sectors exists such as cultural tourism and digital services for music film and video games. With the increasingly complexity of value chains and business models, CCI industries are becoming an important component in every product and service.

CCI Overview

Global trends

- Globalisation and digital transition
- COVID-19 accelerated the existing trends
- New ecological transition
- New forms of collaboration
- A new regulatory framework
- Culture tourism towards creative tourism.

Thematic topics and sub-topics to be explored by HUB-IN Places

Innovative products & services
- Boost cultural heritage and creative industries
- Create the right business and cultural environment in each local hub of innovation
- Explore new business models, and support to start-ups and entrepreneurs (e.g creating acceleration programmes).

Through means such as:
- Multimedia: Digital animation, video gaming, film broadcasting
- Design and Fashion: Tangible and intangible cultural heritage, creative, sustainable, and circular businesses, digital fabrication, open spaces for innovation, robotic festivals, music, literature, performing arts.

Adaptive reuse of traditional skills
- Readapt traditional activities by activating ancient skills with an intrinsic value for the HUA
- Promote the creation of new services and jobs
- Traditional knowledge should be combined with creativity and innovation
- Generate new circular business models with profit or non-profit purposes.

Through means such as:
- Traditional Food: Gastronomy and beverages
- Craft Industry: wood crafting, design showcasing, textile and stone carving, ceramics and tiles
- Entertainment/festivals: Music, dance events and traditional festivities
- Traditional and historic local commerce.

Cultural & creative tourism
- Explore new cultural tourism services and solutions in close collaboration with local communities and HUA residents
- Support tourism based on local experiences that are unique, that could promote local heritage and could be hosted by the community in a sustainable and responsible way.

Through means such as:
- Tourism focused on user unique experiences
- Creative work combining business and leisure
- Tourism and social connectivity
- Destination as hubs of creative networks.

Case study

Soho Arts District – Málaga, Spain

In the once degraded and marginalised neighbourhood of Ensanche Heredia in the Centro district of Málaga, Spain, residents and merchants decided to combine their efforts to bring life back into the neighbourhood by creating a cultural district. They formed the Soho Málaga Citizen Association, aimed at fostering business synergy and communal cultural projects in the neighbourhood. Together with The College of Architects and the

Municipal Urban Planning Management Soho Málaga, the Art District (Málaga Soho Barrio de las Artes) was realised. A combination of re-utilising abandoned historic buildings, investments in the public space (e.g. to increase accessibility to the area), and support to the creative industries led to a buzzing creative area that is full of cafes, galleries and art spaces that attract many visitors to the area, and is a source of local employment.

CCI trends and challenges

Several global key trends are reshaping CCI and inspiring new business models and new ways of working:

- The **digital transition** is driving the growth of the sector and leading to an increasingly access to CCI contents. The consumer behaviour has been gradually changed due to the wide use of internet, social media, mobile apps and formats like podcasts, specially targeting the younger population.

- **COVID-19 accelerated the existing trends** driven by globalization and digital transition. The CCI were strongly affected by the combination of COVID-19 related restrictions on society and economic recession which generated immediate drops in revenues and accelerated structural changes. In this context, there is an urgent need to pull resources and support activities that promote the recovery and resilience of cultural operators, artists and other cultural professionals.

- The CCI are assuming a leadership role to the **new ecological transition** in society. In sub-sectors like art and architecture collective movements are emerging to engage artists and other creators into environmental and climate change causes. CCI due to their need to think creatively and user-centred they are influencing consumer choices and behaviour towards the ecological transition. Several sustainable solutions are being adopted as a response to the environmental emergencies. (e.g. use of eco-friendly and/or recycled materials in production practices, reduction of carbon emissions during construction, maintenance and re-use of historic buildings, new business models in the fashion industry to extend the longevity of clothes, such as smart fashion or fashion as a service)

- **New forms of collaboration** and new models of creative spaces are responding to the needs of a high number of freelancers and micro-companies. These types of entrepreneurs need to be agile and cooperate in different CCI sub-sectors. In this context creative hubs and co-working spaces are expanding all over the world, allowing professionals and companies to benefit from financial, administrative, and accounting shared services, and from shared space and more affordable rentals. The major benefit of these collaborative models is the development of new community networks and new commercial collaborations as well as the positive social impact of the projects and initiatives themselves.

- Creative spaces also promote the regeneration of urban areas and to reconvert abandoned places and buildings, since they contribute to attract human capital and local investment.

- **A new regulatory framework**, the revised Directive 2019/7906 on Copyright in the Digital Single Market[45] opens up untapped revenue streams and strengthens the protection of creators' rights: newly introduced measures aim to increase rights holders' revenues by improving the licensing system of copyrighted material to online content-sharing providers, contributing to a level playing field in the digital market.

- **Cultural tourism** is one of the main forms of tourism in Europe which is estimated to account up to 40% of tourism in Europe. With the mobility restrictions imposed by COVID-19, the tourism sector is facing their worldwide biggest crise. The UNWTO, indicated that between January and May 2021 the international tourist arrivals were 85% below 2019 levels (UWTO. 2019)[46]. In this context the integration of place-based experiences and digital solutions are emerging. Museums and other cultural institutions are offering new solutions, not only virtual tours, but far beyond they are developing new digital forms of exploring the museums contents (podcasts, apps, video content, video games...). Moreover, several cultural organizations are using digital tools to reconnect local communities and increase proximity tourism.

- The global pandemic crisis is also an opportunity to move away from unsustainable practices of past towards more resilient and efficient models of tourism more aligned with Sustainable Development Goals (United Nations, 2015)[47]. Heritage Europe in its Guidelines for Sustainable Cultural Tourism identified three main areas of intervention:

  1. Improving the destination

  2. Identifying and supporting sustainable new businesses relevant to the place

  3. Identifying and supporting new products relevant to the place.

  It identifies a key role for local authorities in HUAs to take the lead post pandemic (Smith & Ripp, 2020)[48].

- One of the global trends of cultural tourism worth highlighting in the HUB-IN context is its slow change to a new model – **the Creative Tourism**. This new generation of tourism involves tourists and locals in the co-creation of tourist products and unique experiences.

CCI & HUB-IN thematic topics

Informed by the trends and challenges identified for the CCI cluster, we structured the most important thematic topics to be covered by HUB-IN Places into three main areas of activity:

Innovative products and services

Main goal: Develop innovative businesses to boost cultural heritage and creative industries in HUAs by identifying and supporting the creation of new products and services. HUB-IN Places will create the right business and cultural environment in their hubs of innovation to explore new business models, will provide support to start-ups and entrepreneurs by creating several activities including acceleration programmes to foster those processes.

For HUB-IN Places, the development of innovative businesses in creative industries could have a major role as economic activity that has the potential to underpin the regeneration of HUAs. On one hand, this is because these industries can make productive use of historic buildings that can be readily converted into workspaces, and on the other hand, in a more intangible way, because of the ambiance offered by historic areas in terms of culture, heritage and the type of associations and entities that exist there.

The challenge of attracting creative industries to historic areas is consequently much more than the existence of historic buildings available for this use. It is essentially about creating the necessary atmosphere in order to increase the attractiveness of the historic area. The development of initiatives that lead to the reinforcement of HUB-IN place branding and the creation of creative hubs are factors that can contribute to the construction of the cluster of CCI.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Multimedia: digital animation, video gaming, film broadcast

- Design and Fashion: linked with tangible and intangible cultural heritage, design (including fashion design)

- Creative, sustainable and circular businesses: construction (e.g. adaptive reuse heritage buildings), food and fashion

- Tangible and intangible cultural heritage: exploring the interconnections between both aligning with the principles of New European Bauhaus (NEB) that links form and function of heritage values and assets

- Digital Fabrication: reintroducing the making economy into HUAs

- Open Spaces for Innovation

- Robotic: opportunities for latest technological developments to contribute to innovative and entrepreneurial activity

- Festivals, music, literature, performing arts.
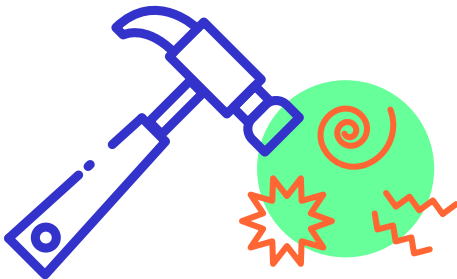
Adaptive reuse of traditional skills

Main goal: Readapt traditional activities by activating ancient skills with an intrinsic value for the HUA thus creating new services and jobs. Traditional knowledge should be combined with creativity and innovation with the purpose of generate new circular business models with profit or non-profit purposes.

Some traditional activities that are dying out or are no longer practised may have an intrinsic value for HUAs. Those traditional activities are directly linked with local communities and can be an important resource for the self-regeneration and reactivation of neighbourhoods. The traditional activities, which still preserve local knowledge, possessed only by the older population, are essential elements of the intangible heritage of these historic areas.

How to improve the effective restoration of these activities? How to reactivate these knowledge and skills that are part of the history of the place? How to reinvent these traditional businesses and create new demands for them? How to boost "new" traditional businesses with

symbioses with the cultural ecosystem, using circular business models? These are some of the questions that can drive the development of activities in the hubs of Innovation in each HUB-IN city.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Traditional Food: gastronomy and beverage

- Craft Industry: wood crafting, design showcasing, textile and stone craving, ceramic and tiles

- Entertainment / festivals: music, dance events and Traditional Festivities

- Traditional and historic local commerce: including the historic shops that preserve traditional commercial activities

- Language: sustaining traditional languages which can be an important part of the identity of the HUB-IN place.

Cultural and creative tourism

Main goal: For HUB-IN, new cultural tourism services and solutions should be explored in close collaboration with local communities and HUA residents. The aim is to support tourism based on local experiences that are unique, that could promote local heritage and could be hosted by the community in a sustainable and responsible way.

The development of these initiatives aims to encourage new local economic activities, especially oriented towards new businesses models, favouring small entrepreneurs with greater difficulty in accessing global markets. It should also be noted that the new solutions and businesses to be developed in this segment of cultural tourism should preferably create synergies and strengthen the link between the creative industries. The innovation processes and solutions should contribute to reverse the negative impacts of tourism in historic urban areas, by improving the quality of life of residents, by offering methods and tools that may manage the flow of tourists HUAs, by exploring innovative businesses and

services that valorise that cultural identity of each HUA and promoting the local traditional businesses.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Tourism focused on user unique experiences (e.g. Exchange of skills between host and visitors, Creative gastronomy, Live like a local to develop transformational experience)

- Creative work combining business and leisure

- Tourism and social connectivity (e.g. visitor's engagement in volunteer programmes with benefits for local communities)

- Destination as hubs of creative networks. Visitors choose connected places for specific creative activities or knowledge. that links form and function of heritage values and assets.

New Lifestyles (NLS)

New lifestyles for sustainable ways of living – Innovative sustainable living patterns, inclusivity and diversity, are the main ingredients to improve well-being.

The Historic Urban Landscapes approach (UNESCO, 2011)[49] due to their holistic dimension is also a reference for our understanding about what is the cluster New Lifestyles (NLS) under HUB-IN project. In this context the heritage (tangible and intangible) are sources of social cohesion as well as creativity and innovation. To leverage this resource and revitalise HUAs, new ways of life need to be "re-invented". The balance between new and old, goes far beyond the necessary balance between preservation and renewal of the built environment. It is about a new social interaction between local communities, new generations of residents, new workers, who are essential sources of creativity, innovation, and important drivers for changing mentalities.

The cluster NLS captures in first place the social dimension of HUB-IN Places, it is focused on citizens and social innovation. It considers activities that are meaningful as responses to improve the way of living in HUA and effectively overcome the global challenges of HUAs.

NLS Overview

Global trends

- Active ageing
- Qualification and new skills of local communities
- Affordable and accessible housing
- Sustainable mobility
- Cultural memory as an element of well-being
- New synergies between local communities and cultural and creative tourism – increased environmental sustainability and value creation for communities.

Case study

Traditional Meadows – Wuppertal, Germany

For centuries, the Wuppertal Meadows in the region of Bergisches Land in Germany have played a key role in the local economy as their apple, pear and other fruit trees have provided an important local food source and economic model.

In the second half of the 20th century, the majority of meadows disappeared, often in favour of industrial development. Nowadays, a small amount of meadows are restored. Among others through harvest events with the local community and the involvement of a nationwide food sharing initiative, the meadows promote sustainable food production and consumption, support nationwide research into local self-sustainability, and increase awareness of nature-based solutions in an urban setting.

Thematic topics and sub-topics to be explored by HUB-IN Places

Consumption & *prosuming*

- Influence and promote sustainable consuming and prosuming behaviours
- Explore the linkage between new patterns of consumption and the reuse and readaptation of intrinsic heritage values whether tangible or intangible.

Through means such as:

- Cultural services for diverse and inclusive cities
- Sharing economy
- Circular consumption patterns
- Local and sustainable food
- Local energy communities.

Living & mobility

- Influence the way people live (housing conditions, enjoying public spaces)
- Influence the way people move, promoting a sustainable and active behaviour
- To adopt art and cultural heritage as a vehicle to engage people and create awareness about sustainablity issues.

Through means such as:

- Urban poverty mitigation
- Green buildings
- Promotion of inter-generational co-living models
- Public spaces for people, as places of culture, beauty, and sustainability
- Exploring shared mobility solutions for HUAs
- Developing sustainable mobility and accessibility solutions, e.g. 15-minute city
- Testing zero emission zones
- Promoting sustainable and active mobility behaviours
- Exploring micro logistic solutions for HUAs.

Health & well-being

- Inclusion, diversity, nature based solutions, HUAs and sense of place
- Influence the behaviour of local communities and aim to improve their mental and physical health
- Promote active ageing, well-being and happiness, linked with the cultural memory of the place – intangible heritage
- Explore the relationship between local communities, public space, nature in urban environment.

Through means such as:

- Inclusion of migrants and refugees
- Local communities' well-being and engagement with sustainable tourism
- Nature-based solutions for healthier HUAs
- The role of public spaces in health and happiness
- Exploring cultural memory as a component of well-being in HUAs/sense of place, identity and place purpose.

NLS trends and challenges

Encourageing new lifestyles in historic areas is inseparable from their pre-existing demographic conditions. Overall Europe is ageing rapidly. We currently have the highest median age in the world and the proportion of people aged 65 and over will increase from 14% in 2010 to 25% in 2050. Although people are living longer, the likelihood of maintaining a healthy and happy life in their later years is extremely variable between different regions and cities across Europe and very dependent on socio-economic conditions (WHO – World Health Organization, 2020)[50]. In historic areas, this problem is even more accentuated and aggravated by the gentrification tendencies of these territories and in some cases by desertification and abandonment of places.

Creating new lifestyles in HUAs means developing initiatives that encourage active lifestyles, well-being, healthy ageing and age-friendly environments especially important where these areas often have ageing populations, that combat poverty in these territories and help reducing the problems of isolation and loneliness of the elderly. It also means creating socio-economic and environmental conditions, including new jobs that will attract new residents, encourageing an intergenerational dynamic.

A large part of the historic areas in Europe, due to their heritage and cultural assets promote and rely on tourism as the main economic activity. On the one hand these HUAs have enormous touristic potential that can and should be activated as an economic resource. However, on the other hand this can lead to mass tourism that has the perverse effect of destroying the heritage value of the place, and impacting adversely on both local communities and the local environment. It is critical therefore that Europe's historic areas evolve from the conventional cultural tourism policies to new forms of sustainable and creative tourism, with focus on activities that will foster creativity and innovation, favouring the offer of unique experiences for visitors by reinforcing their connection with local communities and their skills and capabilities towards a smart specialisation of products and services. By developing initiatives based on these principles HUB-IN is not only contributing to the economic development of HUAs but also to residents' sense of belonging and quality of life through improved lifestyles.

The development of new sustainable ways of living it is also one of the major European priorities, clearly expressed in many cross-sectorial policies and initiatives, where we highlight the European Urban Agenda, the Green Deal and the New European Bauhaus Initiative.

NLS & HUB-IN thematic topics

Informed by the sustainable ways of living (Backhause, et al., 2011)[51] and the trends and challenges identified for the NLS cluster, we structured the most important thematic topics to be covered by HUB-IN Places into four main areas of activity:

Consuming & prosuming

Main goal: Influence and promote sustainable consuming & prosuming behaviours along with the reuse and readaptation of intrinsic heritage values, whether tangible or intangible.

New consumption patterns are emerging due to an increased awareness of sustainability issues among many European citizens. This is an opportunity to develop new forms of collaborative consumption (eg sharing, lending, trading, swapping) that could reinforce local communities' interactions in HUAs and it could be also an opportunity to mitigate in certain circumstances urban poverty and improving social cohesion. There is also a global increase in responsible prosuming trends in several areas, from energy to food. These movements have been leading for example to a growth in urban agriculture practices or to the development of local energy communities where neighbours become electricity producers. For example, urban agriculture practices to produce local and sustainable food could be combined with activities to recover ancient practices or reintroducing old and healthy food recipes in the local diet.

The adoption of these trends in HUAs, will contribute to improving the health and well-being of the populations.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Cultural services for diverse and inclusive cities
- Sharing economy
- Circular consumption patterns
- Recycling & upcycling, material reuptake (sustain) & Rethink, restore & replenish (regenerate)
- Local and sustainable food
- Local energy communities.

Living

Main goal: Influence the way people live in HUAs, namely in terms of housing conditions and its accessibility as well as how they enjoy public spaces. To adopt art, cultural heritage, and aesthetic sense as a vehicle to engage people and create awareness about sustainable issues to improve indoor conditions as well as outdoor. Ensure that all the activities implemented will contribute to increase diversity and inclusion of local communities.

The COVID-19 pandemic exacerbated a pre-existing crisis in affordable housing with regard to its quality and lack of availability. During this period, cities in severe lockdown saw their urban regeneration projects postponed and many people who suffered loss of income were at risk of losing their homes. With the change in the patterns of staying at home, both in the lockdown phase and due to remote work, the quality of housing, namely in terms of thermal comfort, or the existence of larger and more airy spaces, became decisive for the physical and mental health of its inhabitants.

Another unique phenomenon that has been witnessed in the last 10 years in Europe is a significant increase in homelessness. At the same time this has been accompanied by a change in the profiles of the homeless, reflecting the widespread shortage of suitable affordable houses and also the increase in the number of people seeking asylum in Europe.

Historic areas have been particularly affected by these problems, both because of the age of their buildings and the fact that many of these areas are occupied by elderly and low-income populations. Overall, there has been a worsening of inequalities that can only be overcome with more incisive policies aimed at social housing, cooperative models or other models of affordable rent.

The habitability of historic centres also depends, to a great extent, on the correct balance between conservation policies for buildings with historic value, which sometimes limit more profound interventions, and the renovation policies necessary to ensure the required comfort appropriate to contemporary lifestyles.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Urban poverty mitigation (including homelessness situation)

- Energy poverty mitigation

- Housing affordability and quality

- Social housing/affordable renting/cooperative models

- Green buildings

- Promotion of inter-generational co-living models

- Building conservation vs regeneration to improve life conditions

- Public spaces for people, as places of culture, beauty, and sustainability.

Mobility

Main goal: Influence the way people move in HUAs, contributing to promote a sustainable and active behaviour by encourageing walking, cycling and public transport use and minimise the use of private vehicles. Experiment with new solutions to make HUAs more accessible and liveable. Explore urban mobility innovation and the deployment of new mobility services considering the integration between socio-cultural aspects and functional aspects.

Urban mobility faces several challenges, including increasing traffic congestion, air and noise pollution, the negative impact of climate change on transport infrastructure and the need to make an energy transition to alternative modes of transport to fossil fuels. In many historic areas of Europe, due to old infrastructure and narrow streets, mobility problems are aggravated. Mass tourism in these historic locations has also contributed greatly to the increase in congestion and the degradation of the quality of public space.

We are witnessing a paradigm shift where cities are primarily for people and not for the car. In this context, the development of shared mobility solutions, the encouragement of walking and bicycling and the use of public transport, contribute in a complementary way to the development of healthier historic areas. In these historic sites it is also essential to promote accessibility in a neighbourhood logic, in which to access services and basic commerce, people do not need to make journeys on foot longer than 15 minutes. To make this 15-minute city model feasible in historic areas it is necessary not only to promote the use of soft modes, but also to promote the adequate supply of commerce and services following a logic of multifunctional historic areas.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Exploring shared mobility solution for HUAs

- Developing sustainable mobility and accessibility solutions: 15-minute city

- Testing zero emission zones

- Promoting sustainable and active mobility behaviour

- Exploring micro-logistic solutions for HUAs

- Exploring new mobility services with impact on decarbonisation, air quality and social inclusion

Health & well-being

Main goal: Influence the behaviour of local communities and foster the development of solutions, which aim to improve their mental and physical health, more active lifestyles and their well-being and happiness. In this way, health and well-being are intrinsically linked with the cultural memory of the place (intangible heritage), with how local communities enjoy public space and how they relate to nature in an urban environment.

The urban environment affects health and well-being in two potentially conflicting ways. On the one hand, there are obvious urban health advantages resulting in easier access to health infrastructure and services, good sanitation, better health literacy levels and overall higher incomes. On the other hand, health in urban areas can also generate negative situations. Due to high population density the spread of infectious diseases is much higher than in rural areas, or with regard to air quality which is in many cases much lower. However, where people live within a city is a determining factor for the health and well-being of its inhabitants. There is now a growing recognition that urban health disparities must be analysed in a broader societal context to understand the varied environmental conditions to which individuals are exposed. Historic urban areas are typically the places within the city where urban health disparities are most acute due to a predominance of disadvantaged and low-income populations. Another major trend that affects urban areas and in particular HUAs are the ageing population which implies additional healthcare support not only for the physical well-being but also for their mental health including aspects related to social exclusion.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Healthy ageing

- Well-being and inclusion of migrants and refugees

- Local communities' well-being and engagement with sustainable tourism

- Nature based solutions for healthier Historic Urban Areas / the role of public spaces in Health and happiness

- Health and built environment (e.g. effect of Urban Heat Island, or poor indoor thermal comfort, lack of indoor ventilation)

- Exploring cultural memory as a component of well-being in HUAs / sense of place identity

Slovenska Bistrica. Photo by Nino Verdnik

Resilient & Human Connected Places (RHCP)

Regenerative use of resources, community cohesion, digital and human connectedness are key to improving ecological, social and economic resilience of Historic Urban Areas.

The concept of urban resilience has been explored over the last few decades by several scientific areas. Commonly associated with the fields of catastrophes and natural/man-made disasters, as an indicator of capacity of systems to absorb, recover, restore and prosper following an impacting event, it has gradually grown with the introduction of other components associated with natural and social systems[52] (Alberti, V. et. al , 2019).

The connection of the concept of resilience to the theme of cities has been one of the topics explored and with very interesting contributions in terms of introducing new domains to the concept of resilience. Among them, the exploration of methodologies focused not only on the amount of disturbance that an urban system can absorb and remain functional, but also on the exploration of components such as the level of opportunity to increase the capacity of territories to learn from risk factors and observed vulnerabilities and, in the face of them, adapt to disturbing factors[53] (Folke, C., 2006).

The interest dedicated by cultural sectors to resilience introduced the perspective of exploring how disturbances in city systems impact on the historical components and preservation of neighbourhood identities. This highlighted the contribution of a set of long-term relationships between cultural identity of a community and how the socio-ecological relationships, on which that identity was founded, have the capacity for resilience as a whole in a territory[54] (Rotarangi & Stephenson, 2014).

At the European level, investment in the consolidation of urban spaces as resilient territories has become one of the relevant themes of European policies[55] (Council of the European Union, 2016). It is also one of the concerns of the UN's 2030 Agenda embedded in their ODS. Specifically, for Goal 11 "Making cities inclusive, safe, resilient and sustainable".

In addition to the unexpected and sudden events that can cause disruptions in the balance of cities, namely, earthquakes, floods, terrorist acts, cities can be subjected to gradual stress phenomena (population abandonment, disruption of local economic systems, increased poverty and environmental and quality of life degradation). It is in this perspective that the Cluster Resilient & Human Connected Places (RHCP) emerges as one of the pillars of change intended within the scope of the HUB-IN Project. This cluster intends to deepen through the analysis of the different threat and vulnerability factors identified in Historic Urban Centres, in their natural and socioeconomic components, and through innovative and participating processes of change, contribute to their resilience, resources sustainability and stability of the social and economic system.

RHCP Overview

Global trends

- Climate change as a global emergency
- Transition from a linear to a circular city
- Smart cities & smart citizens
- Inclusion, equality & equity
- Intergenerational connectedness
- Innovative circular models to rethink and readapt cultural values and heritage by blending tradition with new techniques and solutions.

Case study

Loos in Transition – Loos-en-Gohelle, France

After the mining industry closed in Loos-en-Gohelle in the 1980s, this mining town had to reinvent itself. It decided to transform its past to shape its future. Nowadays, the former mining base, which is a UNESCO World Heritage site, is utilised as a cultural and sustainable development centre, focusing on R&D, education and entrepreneurial activities around renewable energies and green technology.

The site now supports over 600 eco-companies, 150 of which operate in the field of renewable energies. Specific attention has been paid to stimulate ideas and initiatives from the community, for example by providing funding and support for projects arising from the community. In doing so, the former mining base enables the creation of a sustainable future for the town, which is striving to rely completely on renewable energy by 2050.

Thematic topics and sub-topics to be explored by HUB-IN Places

Environmental balance

- Improve the territory's environmental balance, tapping into the potential of endogenous resources and social dynamics, promoting sustainable/regenerative use and resilience.

Through means such as:

- Climate resilience (adaptation and mitigation)
- Resource efficiency
- Nature-based solutions
- Ecosystem services
- Energy transition in Historic Urban Landscapes
- Sustainable food and local food production
- Adaptive reuse for circular cities

Empowering communities

- Develop a new way of looking at heritage, by setting the ground to reframe relations between all involved stakeholders.
- Develop initiatives that demonstrate to the communities that local involvement is significantly better than inaction and could lead to more ambitious opportunities and new partnerships.

Through means such as:

- Promotion of participatory processes
- Social cohesion
- Migrant integration and equity
- Local economy

Liveable and connected places

- Promote actions that contribute to the increase in quality of life and sense of belonging of the community and all shared places and environments.
- Promote connectedness, including digital connectivity, environmental and social connectedness, improving inclusiveness

Through means such as:

- Urban design and public spaces
- Urban regeneration
- Reuse of spaces and buildings
- Digitalisation
- Sense of place/place purpose
- Immersive technology
- Data science
- Smart cities & neighbourhoods,
- Historical and cultural requalification

RHCP trends and challenges

Given the urban characteristics found in almost all historic urban areas, contributing to their improvement, in terms of resilience, is a challenge. Not only in terms of preserving the unique cultural identity, by interacting with system components that sometimes require the introduction of innovation factors that could have a negative impact on the territories' identity. In this context, reference is made to the classic example of energy efficiency. In this field, the introduction of improvements often requires dedicated and fully integrated interventions in terms of construction materials or the introduction of equipment with an aesthetic and visual impact, so as not to negatively detract from the area identity and sense of place.

Promoting resilience and connectivity in historic urban areas implies the interaction and optimisation of a wide range of factors that affect their potential as endogenous natural and social resources. In practice, leverageing and taking advantage of factors such as water, wind and solar availability, the human potential intrinsic to their communities, the characteristics of their public space, among many others.

RHCP & HUB-IN thematic topics

The RHCP cluster is designed in three main thematic areas with the objective of aggregating in a comprehensive way the main topics associated with the concepts of resilience and connected places.

Environmental balance

Main goal: Improve the territory's environmental balance, taking advantage of the potential of endogenous resources, as well as promoting their sustainable use. Identifying opportunities and barriers for their implementation and exploring current examples of best practices.

The increasing impact of natural phenomena on the daily life of Historic Neighbourhoods has been shown as to be one of the emergent aspects of improving the attractivity and the quality of life in these territories. An example of this is the increasing frequency of changes in rainfall patterns, humidity, and temperature, as well as greater exposure to severe weather events with severe consequences in human and material losses (Sesana, E. et al., 2018).

In order to improve the resilience level of territories, it is also the objective of this topic to explore innovative and integrated solutions that allow adapting HUAs to natural phenomena related to climate change, both in terms of adaptation and mitigation, combined whenever possible with nature-based solutions and with the real aim of being active through the global climate emergency.

From another perspective, the historical heritage values of HUAs can be used to promote the ecosystem services component. Exploring its potential by linking endogenous ecological structures to their functionality in favour of cultural values is also one of the objectives to be integrated into the design of the pilots to be developed. Approaches of this type promote balance in addition to acting as facilitating agents in the processes of communication and articulation between the different existing stakeholders.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Climate resilience (adaptation and mitigation)
- Resource efficiency (use of water, energy, and materials)
- Nature-based solutions
- Ecosystem services
- Sustainable food (Consumption and production)
- Energy transition in Historic Urban Landscapes
- Adaptive reuse for circular cities and sustainable food production.

Empowering communities

Main goal: Develop a new way of looking at heritage, by setting the ground to reframe relations between all involved stakeholders. In this perspective it is also relevant to develop initiatives that demonstrate to the communities that local involvement is significantly better than inaction and could lead to more ambitious opportunities and new partnerships.

Problems and challenges common to several historical areas are identified as situations of economic crisis/generalised gentrification, abandonment of the territory by more qualified population groups, as well as the ageing of the population. In this sense, the promotion of participatory practices and engagement of the local community for the preservation and reactivation of cultural heritage becomes more complex.

It is in this context that the engagement processes to be carried out must be structured. While being a challenging task, it is important to balance with innovative methods of participation that promote the participation of all stakeholders that make up the community, leaving none behind. It is believed that only in this way will it be possible to reinforce the sense of community and the feeling that everyone has the same level of importance in the community context.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Social cohesion
- Migrant integration
- Equity and local economy
- Participatory processes.

Liveable and human connected places

Main goal: Promote actions that contribute to the increase in quality of life and in the sense of belonging of the community and all shared places.

Implement emblematic measures that improve the use of spaces and, at the same time, take advantage of the inherent cultural identity, harmonising them with innovative and technological solutions that facilitate the daily lives of populations (smart solutions).

Common spaces in the HUAs are often presented with levels of stagnation and lack of conservation that reduces their use by residents or workers in these areas. This is one of the main causes of the increase of security.

Shaping relationships with technologies, with people and with the endogenous natural resources promote new possibilities, creating solutions that are purposeful, desirable, feasible – as well as inclusive, regenerative, and strategic that are just and ethical.

A lot of efforts to promote usage and frequency are being applied to other urban areas. Its adaptation to the context of the HUAs becomes important. Measures such as renaturalisation by investing in a rehabilitative design through the introduction of new equipment and components, for example, infrastructures that promote meeting, conviviality and debate among the population are very important aspects. On the other hand, another weak point associated with these locations is also the lack of spaces or green spots. The effort to introduce alignment trees or small vegetation spots should be considered in the context of the work to be developed in the pilots to be built.

Main sub-thematic topics to be potentially explored by HUB-IN Places:

- Urban design and public space
- Urban regeneration
- Reuse of spaces and buildings
- Digitalisation
- Sense of place/place purpose
- Immersive technology (virtual & augmented reality, XR, metaverse, artificial intelligence, digitally enabled social innovation solutions with communities in a smart district)
- Data science
- Smart cities & neighbourhoods,
- Historical and cultural requalification

Interrelation among the three clusters and cross-cutting topics

The activities and trends in these three clusters do not represent strictly demarcated areas of operation. There is considerable overlap and interaction between them. As an analytic tool, the three clusters bring together different dimensions of a HUA, at the base of which lie different assumptions about value creation. Broadly speaking, CCI is focused more on economic value creation, NLS more on social value creation and RHCP on environmental value.

The development of activities in one cluster will have an influence on, and are influenced by, activities and trends in the other clusters. Innovations are likely to happen in areas where the three clusters meet and interact. Activities developed in one cluster, for example the support of a creative cluster based on traditional industries, provide opportunities and challenges in the other clusters (e.g. opportunities related to educational activities in CCI or sustainable (re)-use of materials in RHCP). By taking into account the opportunities and challenges those actions in one cluster create in the other clusters, this approach supports development that is sensitive to different types of value creation. The cluster approach, and in particular a HUA-specific analysis of the interrelation between activities developed in the three clusters, thus contributes to the sustainable and inclusive regeneration of Europe's HUAs.

In addition to these inextricable links between clusters, the innovation processes to be developed in each of the HUB-IN places should consider three transversal topics:

- **Integrated and interdisciplinary governance** approaches, which means working collaboratively across sectors, breaking silos and creating a portfolio of activities covering the three clusters of innovation

- **Adopting a Baukulture perspective** by addressing the gap between cultural heritage conservation and high-quality built environment. This high quality promotes crucial societal values such as well being and social cohesion and creates conditions to generate positive economic value

- **Leveraging funds** and financial sustainability is crucial to ensure that innovation based on cultural heritage will generate economic value.

The Ingredients
of a HUB-IN Place

HUB-IN Framework: The Ingredients of a HUB-IN Place

Cover: Photo by Jon Tyson on Unsplash

Contents

This document focuses on The Ingredients of a HUB-IN Place. It is one of three *Long Reads* related to elements of the HUB-IN Framework. You can also find:

- HUB-IN Framework Long Read – HUB-IN Alignment with European and International Policy

- HUB-IN Framework Long Read – HUB-IN Clusters of Innovation

For information on the framework as a whole, please read the **HUB-IN Framework Overview.**

To access these papers, visit the HUB-IN project website or get in touch with the authors of this document.

Introduction to the Ingredients of a HUB-IN Place

To understand how HUB-IN Place might achieve regenerative growth – in ways that are culturally, economically, socially and environmentally sustainable, we need to uncover the 'ingredients' that are required to allow innovative and entrepreneurial behaviour to emerge and flourish in this specific urban context – in Historic Urban Areas by building on their unique history and heritage.

This reference paper provides the background research and a detailed evaluation of the key ingredients identified illustrated with a case study, and indicates that the combination and interaction with each ingredient to achieve transformation change / inclusive and regenerative growth.

This paper is intended as a starting point of this model and will be refined from learnings throughout the HUB-IN project to better reflect the realities of HUAs throughout Europe.
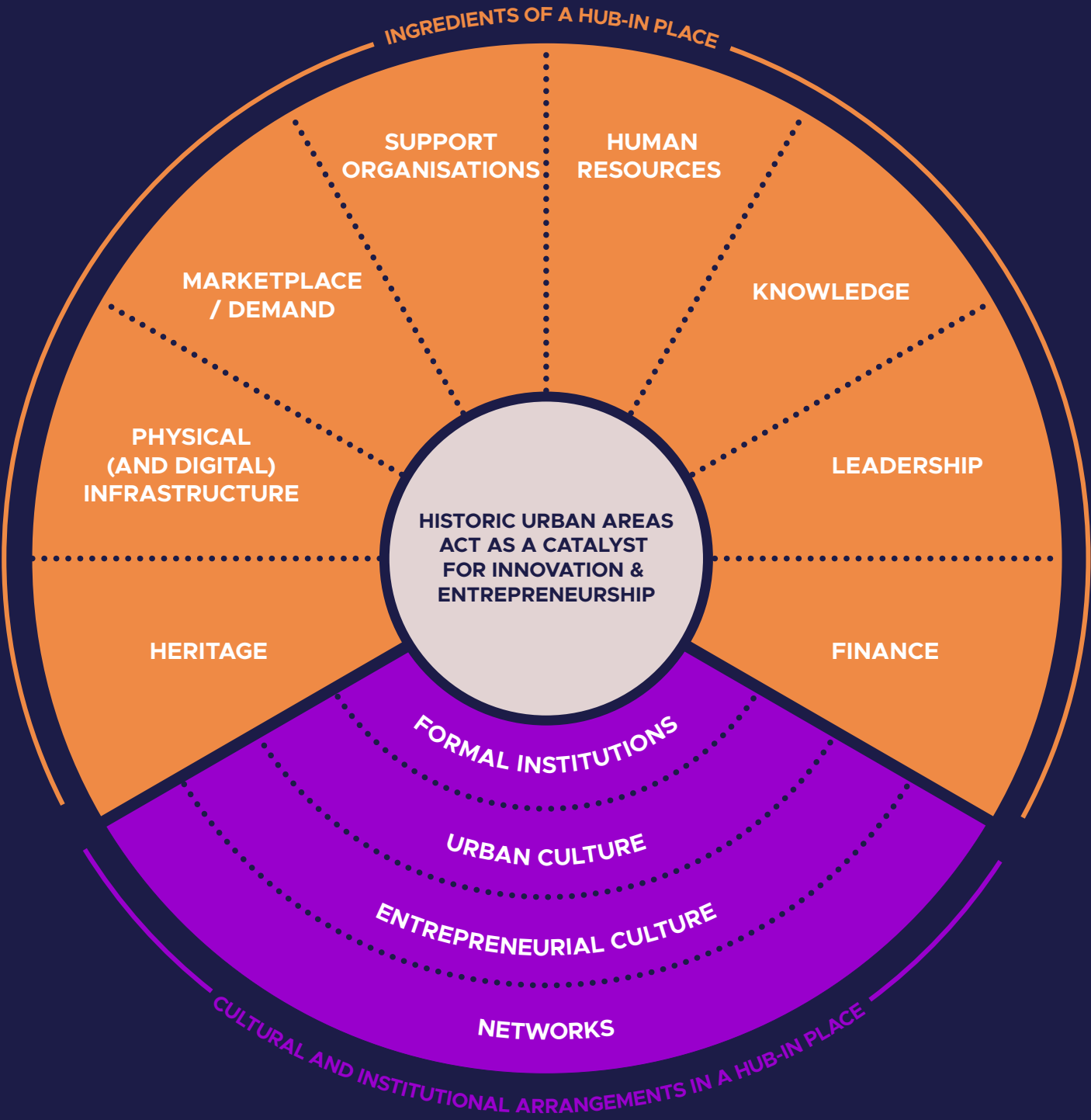
This diagram visualises the eight ingredients and four institutional/cultural arrangements that, combined, can foster cultural heritage-led regeneration, encourage regenerative development and support innovative and entrepreneurial behaviour.

What a HUB-IN Place is

HUB-IN Places provide fertile ground for innovative and entrepreneurial behaviour. They are able to foster and sustain innovative and entrepreneurial processes in Historic Urban Areas, to regenerate these areas sustainably while building on their unique history and heritage. This leads to historic areas that are dynamic and vital, embodying a spirited culture, a vibrant and inclusive social life, and a flourishing local economy while being environmentally sustainable.

HUB-IN Places have a vision for the future that creates bridges between the needs of local citizens, local businesses, visitors and the environment, and they operate with a clear focus, for example, on creating a circular economy, or on supporting creative industries. There is space for bottom-up initiatives to develop, evolve and inspire others, and room to experiment with, and embed, novel co-creation, co-financing and co-governance structures.

HUB-IN Places are thus able to utilise historic elements to create a brighter future. To understand how they achieve this, we need to uncover the components that are required to let innovative and entrepreneurial behaviour emerge and flourish in this specific urban context. In HUB-IN, this is done by drawing on insights from the academic fields of urban innovation[56] and entrepreneurial ecosystems[57]. Based on this literature, a Historic Urban Area can be viewed as a melting pot of (potential) resources, made up of (among others) people, organisations and infrastructures. In the remainder of this chapter, the components that we consider of importance for HUB-IN Places are discussed.

During the HUB-IN project, these ingredients, arrangements, and their configurations, will be analysed more closely and a description of the components of a HUB-IN ecosystem, one that is tailored to innovation and entrepreneurship for sustainable heritage-led urban regeneration, will form one of the future outputs of the project.

Hence, the ingredients and arrangements described below should be considered a starting point of this journey. Throughout the text we use examples of innovative and/or entrepreneurial behaviour already taking place throughout Europe to illustrate the ingredients and arrangements described. The cities and initiatives mentioned in these examples are not directly related to HUB-IN, but provide us with valuable insights into how our framework can work in practice.

Further reading

- Neighbourhood Doughnut by Doughnut Economic Action Lab and Civic Square

- Cities as Enablers of Innovation by Politecnico Milano

- Sustainable Product-Service Systems by Fabrizio Ceschin

- Entrepreneurial ecosystem elements by Erik Stam

Photo of Angoulême urbanscape by Jaël Vallée on Unsplash

Eight ingredients of a HUB-IN Place

Heritage

Both tangible and intangible heritage provide unique resources that are rooted in a specific Historic Urban Area. The HUB-IN approach is, as shown earlier, directly linked to the concept of Historic Urban Landscapes[58] to build an understanding of what makes each place unique in terms of its social, economic and cultural characteristics and its heritage and natural values. Heritage represents those tangible and intangible elements inherited from the past which reflect and express constantly evolving values, beliefs and traditions.

For a HUB-IN city, preserving, developing and (re-) valorising heritage is a key priority, and therefore, heritage is an important ingredient in the innovative and entrepreneurial activities taking shape within the Historic Urban Areas of HUB-IN Places and can act as a catalyst for urban regeneration. This shows for example in activities where (cooperative) re-use of historic buildings is stimulated, or where traditional crafts, for instance tapestry, acts as a base for new entrepreneurial initiatives.

Case study: Patios de la Axerquía, Córdoba, Spain

In the historic city centre of Córdoba, a combination of gentrification and unoccupied courtyard houses motivated a group of citizens to design a structure for the **acquisition and cooperative use of these historic buildings.** Traditionally, the patio houses were inhabited by a constellation of families and individuals, creating small communities. This tradition is respected and modernised by setting up individual cooperatives for each patio-house, resulting in modern co-living arrangements in a historic setting.

Physical (and digital) infrastructure

The physical infrastructure of a Historic Urban Area refers to the availability of structures and facilities (e.g. buildings, energy systems, modes of transportation). The availability of physical infrastructure influences the physical proximity of different stakeholders, and the ease with which others can be met.

In a HUB-IN city, the physical infrastructure can provide unique resources, like heritage buildings, unique streetscapes, or an unrivalled ambience. At the same time, the physical infrastructure can be the object of innovative and entrepreneurial efforts, for example by implementing energy-efficient solutions in historical structures or through the adaptive re-use of physical heritage.

Nowadays, next to physical infrastructure, digital infrastructures also gain importance in supporting connectivity and cooperation, and provide opportunities to (re-)produce and capture heritage, and make it accessible to new audiences. This can for example take shape through digital solutions, like websites or mobile applications, that provide information on, and help navigate, Historic Urban Areas.

Case study: Sugar House Island, London, UK

This water-bound neighbourhood in East-London still bears reminders of its thriving industrial past. In the redevelopment of the area, the historic street plan and old courtyards are respected and maintained, contributing to the preservation of the historic industrial character and strengthening the unique ambience of the neighbourhood.

Marketplace / demand

To increase the chance of success of innovative and entrepreneurial initiatives, they need to address a clear need, or a receptive market place in which the target population has the means to benefit from the products/ services offered. An awareness of new needs and/ or market opportunities can spark innovative and entrepreneurial behaviour.

HUB-IN Places find novel ways to utilise their heritage to fulfil emerging needs and market opportunities, either related to local citizens, local businesses, visitors to the area, or the environment, or combinations of all four. Throughout this process, HUB-IN Places are sensitive to the unique character of their Historic Urban Area, and are mindful of competing demands on their urban space and a diversity of purchasing powers within their citizen base, helping to shape markets in inclusive ways that do right to different target groups in their population.

Case study: Sargfabrik, Vienna, Austria

Many Historic Urban Areas grapple with challenges related to providing affordable housing to their citizens. In 1996, the renovated Sargfabrik, a former factory complex in Vienna, opened its doors as an innovative co-living accommodation. Soon, the waiting list for new residents grew so long that in 2000, the initiators of the Sargfabrik decided to acquire a nearby building to extend their concept, known as Miss Sargfabrik, thus showing how historic buildings aid to address crucial demands in historic urban areas.

Support organisations

A wide range of support organisations, including but not limited to research institutes, incubators and intermediaries, can provide input for innovative and entrepreneurial processes. From an entrepreneurial perspective, incubators are important to facilitate new entrepreneurial initiatives and start-up organisations.

At the same time, cultural institutions can act as 'cultural incubators' through which culture and heritage are preserved and/or (re-)produced, and hence can prove to be important support for heritage-driven initiatives. Furthermore, the availability of fablabs and co-creation spaces can foster creativity and invention, thus fuelling innovative and entrepreneurial processes.

HUB-IN Places are able to connect and utilise these different support structures in a way that facilitates connectivity, creativity and co-creation.

Case stidy: Porta Palazzo, Turin, Italy

As part of a wider generation programme of the historic Porta Palazzo neighbourhood in Turin, the municipality focused on creating a strong support network for local industries. It supported the creation of networks of entrepreneurs, and the formation of organisations that provide guidance in business creation. Furthermore, collaboration with the Artisan Restorers School meant a great impulse to the local arts and craft industry, all establishing a solid base for new entrepreneurial and creative initiatives to evolve within a heritage sensitive setting.

Human resources

The experience, skills and talent of the local population, and of those who are attracted to the area from outside the city, are important resources embedded in Historic Urban Areas. The available human resources can range from specialised skills and experience, for example connected to a certain sector, to a broad and diversified pallet of talents.

HUB-IN Places aim to empower the local population by reinforcing the skills, experience and talents of those living in their Historic Urban Areas, building on place-based expertise, craftsmanship and artisanship that have developed over generations. This can, for example, show through educational programmes related to traditional crafts that are offered to the local population, or through funding programmes that stimulate artists or craftsmen to settle in a Historic Urban Area.

Case study:
Kapana Creative District, Plovdiv, Bulgaria
The Kapana district has been home to craftsmen for over five centuries. In an attempt to revive the neighbourhood and reinvigorate local skills, the 'Kapana Creative District' programme was launched in 2019. It aimed to provide a supportive and stimulating environment for the creative industries, in order to stimulate the development of local artists and attract (inter-) national talent to the area.

Knowledge

Historic Urban Areas have capacity to sustain, create and advance knowledge of/on historical realities, culture, and (inform) future realities. New applications of existing knowledge, as well as the development of new knowledge, fosters creativity, innovation and entrepreneurship. Hence, HUB-IN Places invest in the (re-) generation of knowledge that aids fulfilment of emerging needs in novel and sustainable ways.

Knowledge as an openly accessible resource, thus allowing it to be shared and built upon, is an important tool for HUB-IN Places. Here, knowledge is not a static given, but a fluid concept that flows and advances through different relations, associations, networks and life-long learning.

HUB-IN Places draw on local knowledge but also have an openness to absorb new knowledge, for example knowledge that is generated in other cities or regions. Flows of knowledge can be stimulated through active knowledge infrastructures, for example by creating places for experimentation and co-creation, like fablabs or living labs, or by actively stimulating knowledge exchange, for example through participation in (inter-) national research projects or conferences.

Case study: Strijp-S, Eindhoven, The Netherlands
Strijp-S, a creative and innovative mixed-use area built around the legacy of technological innovator Philips, stimulates co-creation and product development in its neighbourhood. It has implemented a Living Lab, which provides space for the development, demonstration and scaling of novel products and services that improve the quality of life for residents, users and visitors of the area in a sustainable way. In the Living Lab different stakeholders work together to stimulate a flow of knowledge from one partner to another.

Finance

The availability of adequate financial resources is important to facilitate innovative and entrepreneurial initiatives and support creative communities. Financial resources can be provided by a range of stakeholders, including, but not limited to, the government, banks, corporate investors, foundations and the local community.

HUB-IN Places dare to experiment with new financial structures, combining traditional public funding streams with other (private) sources of funding. In creating novel financial structures, HUB-IN cities carefully balance potential shifts in the distribution of power and influence, making them contribute to inclusive and sustainable development of their city.

Case study: Largo Residências, Lisbon, Portugal
In order to set up a hostel/hotel and artist-in-residence programme in the deprived Intendente neighbourhood in Lisbon, the cooperative of Largo Residências utilized a loan from their cooperative members, municipal funding and income generated through organisational activities for the renovation of a derelict building. Key in this process was that the construction contractor agreed to defer his payment until after the hostel's opening, in essence providing them with an informal loan.

Leadership

To enable collective action, visionary individuals or collectives are needed to guide and direct this action. Strong leadership can help to create a shared vision, (re-)invigorate a sense of place, and coordinate cooperation. HUB-IN Places have leaders that are visible, committed and accessible. This role can be taken on by a wide range of actors, including but not limited to the local government, entrepreneurs, artists and/or citizens.

In Historic Urban Areas, leadership can become visible through the presence of influential individuals or groups, for example a visionary local politician or a citizens collective formulating a shared vision for their neighbourhood. Leadership can also manifest itself through partnerships that facilitate the cooperation between stakeholders with a shared vision, for example the local authority and a group of entrepreneurs or citizens. In that way, leadership provides important input for the creation of novel governance structures.

Case study:
Convento delle Cappuccinelle, Naples, Italy
A local collective reclaimed this abandoned convent, and former juvenile jail, as part of an abandoned spaces recovery campaign. The municipality of Naples recognised the important social work initiated in the building by the collective, and offered its cooperation. This has resulted in a novel governance structure in which engagement from the local community, support from the local authorities, and a commitment to open democratic principles have led to an initiative that addresses important social and economic needs in the neighbourhood.

Cultural and institutional arrangements in a HUB-IN Place

Each Historic Urban Area will draw on its own unique mix of resources. Moreover, how the available resources are combined and utilised is influenced by the historic urban landscape and the broader urban context in which they are embedded.

The urban culture, the entrepreneurial culture, (formal and informal) networks and the presence and priorities of formal institutions all influence the way in which the available resources are mobilized, combined and employed. On the following pages, each of these four contextual factors is discussed:

Urban culture

Each city has a unique urban culture influencing the lifestyle of its inhabitants. This urban culture includes the sense of place and symbolic meanings that those living in, working in, and visiting Historic Urban Areas attach to these places, as well as a specific ambience in (parts of) the city.

The urban culture of HUB-IN Places is greatly linked to the values and meanings attached to their Historic Urban Area(s). On the one hand, elements of urban culture, like specific values or traditions, provide inspiration for innovative and entrepreneurial initiatives. On the other hand, the urban culture can be strengthened through such initiatives, creating a unique ambience and an attractive setting for the local community, local enterprises, and visitors.

Urban culture can manifest itself through (recurring) cultural activities, like an annual celebration of a traditional craft, but also through the built environment and streetscapes, for example through architectural influences or street art.

Case study: RAW-Gelände, Berlin, Germany

This former railroad workshop in the Friedrichshain-Kreuzberg district in Berlin nowadays hosts a wide range of socio-cultural activities, and promotes a strong urban ambience, with among others night-clubs, bars, an indoor skate park, an urban art gallery and a weekly flea market. With its abundant graffiti walls and richness in street art, the area breathes a unique urban atmosphere which is a key part of the image of the neighbourhood.

Entrepreneurial culture

Another important element of the local culture is the entrepreneurial culture. Among others the opportunities innovative actors have to learn from each other, the general attitude towards risk and risk-sharing, and the chances of spontaneous interactions that spark creative processes play a role in this. In HUB-IN Places, being entrepreneurial is encouraged, and places for experimentation and enactment of ideas are stimulated. This shows for example through a lively scene of activities aimed at connecting and inspiring (potential) entrepreneurs, including incubator and mentoring programmes

**Case study:
Gamlestadens Fabriker, Gothenburg, Sweden**

In the historic district Gamlestaden, the re-use of former industrial spaces has created a modern entrepreneurial district. It is a place where large companies and small start-ups work side by side. It is also home to an incubator hub for entrepreneurs and innovators, creating a setting in which entrepreneurs can find support and inspiration. This incubator is part of a city-wide initiative "The entrepreneurial Gothenburg", aiming to create structures in the city that facilitate entrepreneurship and innovation.

An innovative and entrepreneurial ecosystem for heritage-led regeneration

Networks

Networks represent the (social) connectedness of organisations and stakeholder groups. The presence and density of social infrastructures and networks (or lack thereof) plays a role in how easy knowledge, information and ideas can circulate in a community, and in how easily different stakeholders can connect to each other.

HUB-IN Places acknowledge the value of networks, both on a local level as instruments to strengthen connectivity, creativity and co-creation, and on an extra-local level, to access inspiration and fresh knowledge. Providing dedicated physical places where different stakeholders can meet, for example a co-creation space, is an example of how networks in Historic Urban Areas can be stimulated.

Case study: Chiostri San Pietro, Reggio Emilia, Italy
This former Benedictine monastery now hosts an urban 'Open Lab' that functions as a meeting place for citizens, businesses, researchers and the local authority. This physical space allows for new connections and new networks to emerge between different stakeholders, both from within and outside the locality, and opens the door for cultural experimentation and entrepreneurship that contributes to urban regeneration of the wider area.

Formal institutions

Because formal institutions set out rules and regulations, they greatly influence the 'rules of the game' that need to be followed by, among others, entrepreneurs and innovators.

In HUB-IN Places, formal institutions create space for experimentation and innovation, and are open to adapt the existing rules of the game in line with novel, tried and tested, activities. This can for example manifest in local authorities creating space for innovation outside existing policy structures, and in existing policies that are adjusted based on successful pilot programmes.

Furthermore, citizen engagement, and local needs are a focal point of action, and materialise for example through participatory governance or budgeting arrangements.

**Case study:
Marineterrein, Amsterdam, The Netherlands**
In Amsterdam, the development of a former Navy Yard into an innovative urban neighbourhood is managed by the project organisation 'Bureau MarineTerrein'. The Dutch Central Government, the owner of the site, and the Municipality of Amsterdam, have agreed to give a broad mandate to this organisation in order to allow an organic process of development to take shape, one that is more agile and responsive to emerging needs from local citizens and entrepreneurs then if traditional development policies had been followed.

The different components described as Ingredients that make a HUB-IN Place do not operate in isolation from each other, but they influence and interact with each other. For example, a strong entrepreneurial culture can have a positive effect on the availability of entrepreneurial skills in the local population, the availability of investment capital and the quality of support organisations. At the same time, strong support organisations might stimulate an entrepreneurial culture. Hence, there is a two-way interaction between the different components and the assumption is that such interactions are essential in creating a self-sustaining ecosystem that fosters innovative and entrepreneurial behaviour.

Furthermore, the interaction of different components can lead to novel solutions and new ways of cooperation between stakeholders. This is for example the case when strong leadership, active networks and accessible formal institutions combine into novel governance structures. In HUB-IN Places, the configuration of individual elements can support openness to explore and implement such novel governance structures, for instance by embracing participatory governance models that provide space for bottom up initiatives or that stimulate co-creation and co-responsibility between stakeholders. HUB-IN Places are looking for ways in which governance can contribute to diversity and inclusivity in heritage-led urban regeneration.

Overall, each HUB-IN Place can draw on different resources and a diverse set of institutional arrangements, making each HUB-IN Place unique. What these places have in common is that they are able to mobilise, combine and employ the above components in a productive aggregate of supportive local conditions for the emergence of innovative and entrepreneurial processes that preserve and build on the unique history and heritage of a place. In this way, HUB-IN Places aim to create a configuration of ingredients that aids innovative and entrepreneurial behaviour that contributes to cultural heritage led regeneration. The outputs and outcomes created through this behaviour result in place-specific solutions that are sustainable and inclusive, and in an innovative and entrepreneurial ecosystem that is able to sustain and reinvent itself over time in accordance to local needs, opportunities and threats at different spatial scales.

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