Description of the Cultural and Creative Regional Ecosystems (CCRE-S3)

The richness of Cultural Heritage and the vibrancy of Cultural and Creative Industries (CCIs) in Europe have had an increasingly impact in both economic and social terms, across the EU as well as in national contexts. CCIs contribute to the economy with 5.3% of the total European GVA (Gross Value Added) and employs more than 12 million people in the EU, which is 7.5% of all persons employed in the total economy. From a humanistic point of view, Culture promotes active citizenship, common values, social inclusion and intercultural dialogue within Europe and across the globe. For all of these reasons, the UN has declared a Human Right the participation in cultural life.

This potential for growth is expected to be even more importantly boosted by KET and Digital Technologies (hereinafter, New Technologies or NT):

— CCIs have been increasingly recognised as catalysers of NT enabling innovation. Design is increasingly considered as a strategic tool for user-driven or user-centred innovation. CCI provide content for ICT applications, creating a demand for sophisticated consumer electronics and telecommunication devices.

— Being at the crossroads between arts, business and technology, CCIs are in a strategic position to trigger spill-over effects in other industries. Culture and creativity have a direct impact on sectors such as tourism and are integrated at all stages of the value chain of other sectors such as culinary art, fashion and high-end industries.

— CCIs have the power to improve lives, transform communities and local/regional economies, and generate growth and skilled jobs. The combination of Arts, Design and Technology also owns the potential to be more widely used in low-tech companies and in the service sector related to wellbeing and quality of life.

As proof of its importance for European regions also, out of all the regions registered in the S3 platform, over 70 have identified CCIs and wellbeing related issues as one of their S3 priorities. Additionally, it is realistic to assume that several of the existent S3 Partnerships (e.g. 3-D Printing, Digitalisation and Safety for Tourism, Artificial Intelligence and Human Machine Interface, Sports, Social Economy, Textile Innovation, Safe and Sustainable Mobility) will benefit from the synergies with a new S3 Partnership focused on Experience Economy for CCIs in a more inclusive society.

CCRE-S3 objectives

The Cultural and Creative Regional Ecosystems (CCRE-S3) aims to stimulate new insights and opportunities related to cultural and creative experiences for local communities and residents, through public-private investments that involve four CCIs related groups of professions that use, apply and implement NT for the sector:

- Creative entrepreneurs (including arts and design), architects, urban planners;
- Cultural heritage professionals within cultural institutions;
- Cultural & Creative intermediaries and managers (institutions and cultural operators promoting participation, cultural engagement and communication on cultural experiences/offer enhancement);

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• Publisher professionals and professionals of the audio-visual sector involved in different forms of cultural production (including digital forms).

**CCRE-S3 will promote cooperation investments aimed to strengthen and to develop:**

• New value chains among CCIs and other sectors (e.g. Tourism, High-End industries);
• Enhancing and boosting innovation, promoting accessibility and inclusion of CCIs related services.
• Build resilient CCRE as driving forces for both urban and rural transformation responding to environmental and societal challenges, and more sustainable lifestyles increasing social and cultural demands and cultural quality standards for diverse cultural identities.
• Promote accessibility and inclusion of CCI services regardless of age and disability in respect to the principles of solidarity and equality towards to the creation of a model for Accessible Macro Region. Additionally, minorities should be included not only with access but also with participation and integration in the creation process.
• The ability enhancement of SMEs, particularly social enterprises, to use the results research and innovation conveyed in creative industries and qualified new jobs.
• Speed up recovery and future competitiveness of the CCI SMEs and Cultural institutions from the COVID-19.

**CCRE-S3 technological scope**

Cross-cutting and interregional collaboration in CCRE will allow the involved regions to identify synergies, investments and collaborative projects through the use of the following groups of NT:

1) **DIGITAL TECHNOLOGIES.**
• Georeferenced Information Systems
• IoT protocols, Advanced Multimedia, Mobile App, Smart Guides, Gamification and serious games
• Panoramic 2D and 3D imaging, Virtual Tours, Audio-video setting systems, Interactive video systems, Interactive carpets, Immersive 3D Cave, 3D recording and rendering devices, 3D printing, Digital and virtual Storytelling
• ICT supporting the development and engagement of cultural audience: Social media, Location Based Services –LBS-, Big-data collection, management and profiling, 5G deployments.
• Multimedia totems and robotics
• Seismic, acoustic and ultrasonic sensors
• Drone Remote Sensing –UAV.
• Digital photogrammetry and 3D/4D modelling,
• Multispectral and hyperspectral, geophysical instruments

2) **PHOTONICS**
• Laser systems for restoration
• Laser tools for diagnostics and archeometry.
• X-ray and tomographic apparatus, Macro and 3D optical and laser micro-relief
• Fibre optic sensors for monitoring.
• Holography and laser show
3) OTHER KET
   - Advanced Materials: Nanomaterials for deacidification, cleaning, consolidation, new polymeric consolidates, Biomaterials for restoration
   - Micro and Nano-electronics: Microwave treatment systems, Nanotubes for controlled heating

CCRE-S3 disruptive threefold approach

CCRE-S3 aims to tackle challenges and barriers that CCI communities (as a creative and cultural regional ecosystems) face when investing in the deployment of innovative solutions for achieving a stronger impact in inclusive economic development, local communities’ wellbeing and resilience, and nature, rural and urban regeneration.

Investment pipelines and investment platforms will nurture a multi-stakeholder dialogue and will allow CCI to develop disruptive innovations based on a threefold approach:

a) Human-centred long-term development & human-centred design: Human-centred approach places real people and communities, instead than an abstract “consumer”, at the centre of the co-development of new services, products, policies and practices that respond to specific needs of longer-term integrated development strategies through personalized solutions.

b) Circular economy and circular city/territory: The European Green Deal stresses the objective of implementing circular economy models in all productive sectors and industries. CCIs can significantly contribute to develop smart, sustainable solutions for achieving substantial cost reductions and optimise the use of technologies in different regional conditions to overcome territorial handicaps which hinder local economic development. CCIs can also engage local audience in an awareness process to be more alert for all the challenges regarding environmental issues, mobility, AI, biotechnology, etc.

c) Open and Collaborative Innovation: Collaborative innovation can encompass a broad spectrum of external parties (e.g. customers, suppliers, competitors, universities and research institutes) and cover a range of collaboration forms and approaches in relation to an interactive, distributed and open nature of innovation, including alliances, partnerships, networks and cooperative agreements.

To integrate this threefold approach, Digital Innovation Hubs linked to CCI could have an important role as a meeting point for different actors and stakeholders to develop common investment projects and unify outlooks in order to promote new models of CCI based on user experience, circular business models and co-creation and co-innovation paradigms.

An overall, horizontal challenge, shall be the valorisation of the common characteristics of the CCI sector and establishment of a permanent discovery mechanism that will perform activities towards the identification of strategic investments and the use of innovation transfer tools.
S3-Cultural and Creative Regional Ecosystems

CCRE-S3 leading regions and contact details

**ARAGON:** The Aragon Agency for Development (IAF) is the public body in charge of implementing this partnership with the support of the Aragon Exterior Office in Brussels.

Contact persons: Joaquín Crespo (jcrespo@iaf.es) / Francisco Vigalondo, francisco.vigalondo@aragonexterior.es

**TUSCANY:** The Directorate for Culture and Research and the EU Liaison Office of the Tuscany Region are the key actors for the coordination of this partnership.

Contact person: Mariachiara Esposito (mariachiara.esposito@regione.toscana.it)

**REGION OF WESTERN GREECE:** The Development Directorate, Regional Unit of Ilia is the public body in charge of implementing this partnership.

Contact person: Konstantinos Tzamaloukas (ktzam@ilia.pde.gov.gr)

Collaboration with European networks and Macro-regions

The CCRE-S3 Partnership is supported by ERRIN and the AI-NURECC Initiative coordinated by the Conference of Peripheral Maritime Regions (CPMR).

The ERRIN CCI Cluster includes two working groups to promote the use of the New Technologies in the sector of CCI, the Tourism and Cultural Heritage working group and the Design & Creativity, with a total of more than 50 active members.

The Adriatic Ionian Network of Universities, Regions, Chambers of Commerce and Cities (AI-NURECC Initiative) is an initiative involving the key stakeholders of the Adriatic Ionian Regions that have joined their efforts to support the European Union Strategy for the Adriatic-Ionian Region (EUSAIR) implementation, ensuring deep and broad territorial coverage, from all nine countries, namely Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Montenegro, North Macedonia, Serbia, and Slovenia.