

CREADIS3 EMILIA- ROMAGNA ACTION PLAN

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1. General Information

A. Project

CREADIS3 – “Smart Specialisation Creative Districts”

B. Partner Organisation

Emilia-Romagna Region

General Directorate for Knowledge, Labour and Enterprise Economy

Research, Innovation, Energy and Sustainable Economy Unit

C. Other partner organisations (if relevant)

Not relevant

D. Country

Italy

E. NUTS2 Region

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2. Policy Context

A. The Action Plan aims to impact

- Investment for Growth and Jobs programme.
- Other regional development policy instrument.

B. Name of the policy instrument addressed

The initial policy instrument addressed, **ERDF-ROP 2014-2020**, is partly confirmed in relation to the specific actions envisaged in the Emilia-Romagna Action Plan.

In particular, for the **Action 2 - Matching the crowd: crowdsourcing and crowdfunding for CCIs**, the policy instrument addressed is the **Emilia-Romagna ERDF-ROP 2014-2020 - Priority Axis 1 Research and Innovation**, with the specific **Action 1.2.1**, aimed at strengthening the regional and national innovation system by supporting participation among regional actors in specialist technological networks and in complex projects.

Concerning the **Action 1 - Applied research and knowledge transfer in the field of CCI**, a different policy instrument is addressed: the **Regional Programme for Productive Activities** with the related

Regional Programme for Industrial Research, Innovation and Technology Transfer 2012-2015, specifically the **Action 1.2** “Development of industrial research for the technology transfer and of the High Technology Regional Network”.

In the definition phase of the Action Plan, Emilia-Romagna Region realized that the initial policy instrument addressed (with particular regard to the 2 specific actions proposed) was not properly compliant with the regional actions, in the field of CCI, we would like to implement and the targets we would like to achieve.

We observed structural difficulties of CCI companies to participate to regional calls related to the policy instruments to be improved with CREADIS3 (and also others) and to successfully develop projects. We attribute these difficulties to the following elements:

- Low management capabilities and low connection with research and technologies not strictly related to their specific field of activity.
- Very difficult access to credit and finance.

That’s why we decided that we needed some actions for better enabling CCI firms to undertake more complex processes of innovation and develop projects to present to regional calls, especially for the following policy instrument we included in CREADIS3 project.

3. Action Plan Vision

A. General context

With the definition of the Emilia-Romagna S3 strategy, in 2013-2014, cultural and creative industries (CCIs) have been included among regional S3 priorities.

In the framework of the regional S3, CCIs are considered as emerging clusters with a high innovative potential and employment for the future (Priority B of regional S3). CCIs represent one of the fields in which to invest for generating new industries and new employment opportunities, especially for young and creative people.

Emilia-Romagna works for combining cultural, technology and management capabilities, by reinforcing the business dimension and connecting CCIs to other industries and sectors.

In the region there is a need of increasing the integration and contamination of the CC sectors with other fields of the S3 applied research, as well as the need of generating new knowledge and new productive opportunities in order to provide a multidisciplinary approach to the CC sector.

Through the CREADIS3 project, Emilia-Romagna Region is improving its institutional governance in terms of cultural and creative policies. By putting a range of strategies into action, in cooperation with many regional stakeholders such as ART-ER (Attractiveness Research Territory - the Emilia-Romagna

Joint Stock Consortium), the Municipality of Bologna, the Clust-ER CREATE (the Cultural and Creative Cluster of Emilia-Romagna) and other public and private sector bodies, Emilia-Romagna is creating a connection system with own stakeholders to support the region's businesses and creative potential.

A key role has the Clust-ER CREATE, the association gathering CCI companies, research, training and innovation organizations. It also represents a study, analysis and monitoring group about the priorities of the S3 Strategy, collaborating with the Regional Government in the development of strategies.

During the learning phase of the CREADIS3 project, Emilia-Romagna has benefited from the experiences of other project partners, especially about strategies concerning multilevel governance, connection between CCI and other sector, funding tools, fundamental aspects for drawing up the Action Plan.

B. Fields of action

Following the adoption of the regional S3 and the setting up of the Clust-ER CREATE, the need of supporting the existing laboratories of the Regional High Technology Network with new additional structures was highlighted, that is new structures more involved in the arts, culture and entertainment, not only in the strictly technological but also in the socio-humanistic context.

At the same time, we highlight the need for some actions for better enabling CCI firms to undertake more complex processes of innovation and develop projects to present to regional calls.

The specificity of cultural and creative sectors, characterized by an extremely fragmentation, requires to set up:

- **Structures specifically dedicated** to technological innovation and designed to connect CCIs among them and with other sectors;
- **Actions to improve the organizational model** of CCIs and their business structure fostering networking activities with a multidisciplinary and open innovation approach;
- **Innovative match-funding schemes**, looking for private resources matched with public funds to stimulate CCIs to draw up a sustainable business plan and to strongly communicate their own idea.

C. Objectives

Emilia-Romagna aims at **promoting the contamination and integration of cultural and creative sectors with other fields of applied research within the S3 strategy.**

To this end, the basic idea is to set up new industrial research laboratories aimed at developing new technological solutions to support the innovation of cultural and creative industries, with particular reference to the area of audiovisual activities (music, performing arts, cinema) and digital applications to culture. These laboratories can encourage new research and application perspectives, as well as create new products, companies and industries in the CC fields, giving to this S3 area a much stronger relevance in the long run.

Emilia-Romagna Region **aims at supporting Cultural and Creative Industries**, to facilitate the technology transfer and innovation, to reinforce a multilevel administrative collaboration, to stimulate public-private projects, to strengthen the business dimension and internationalization.

Thanks to CREADIS3 project, Emilia-Romagna triggered measures to support these objectives.

A **multilevel administrative collaboration** is ensured by the cooperation of the Regional Government with many stakeholders, at local level, among which the Municipality of Bologna, as well as at regional level, with ART-ER, the Clust-ER CREATE, universities, research centers, etc.

Within the Emilia-Romagna Regional Government different departments deal with initiatives and/or plans related to culture and creativity. There is a strict and useful collaboration among the following departments: Department of Economic Activities, Research and Innovation, Department of Culture, Department of Tourism and Trade, Department of Education, University and Labour and the Delegation to the EU.

The setting up of the Clust-ER CREATE encourages the promotion of a **Creative and Cultural District**.

Action 1 envisaged in the Action Plan **“Applied research and knowledge transfer in the field of CCI”** addresses the setting up of new industrial research laboratories aimed at developing new technological solutions to support the innovation of cultural and creative industries, with particular reference to the area of audiovisual activities (music, performing arts, cinema) and digital applications to culture. These laboratories can encourage new research and application perspectives, as well as create new products, companies and industries in the CC fields, giving to this S3 area a much stronger relevance in the long run.

Action 2 “Matching the crowd: crowdsourcing and crowdfunding for CCIs”, Emilia-Romagna proposes to create a competence unit in order to support the CCIs with a specific toolkit for fine tuning their project ideas, collect the skills needed, set up the most suitable match-funding schemes.

D. Methodology

The Research, Innovation, Energy and Sustainable Economy Unit of the Emilia-Romagna Region (within the General Directorate for Knowledge, Labour and Enterprise Economy) is responsible for the implementation and monitoring of the Action Plan.

The Unit deals with the development of innovation strategies and policies: implementation of the regional innovation ecosystem; industrial research and technology transfer projects; setting up of the High Technology Network and other innovation infrastructures; high-tech and creative startups; interregional cooperation projects in the fields of regional development and innovation.

The Unit collaborates with many regional stakeholders: ART-ER (Attractiveness Research Territory - the Emilia-Romagna Joint Stock Consortium), created from the merger of ASTER (the consortium for innovation and technology transfer among the Emilia-Romagna Regional Government, the six regional Universities, CNR, ENEA, INFN) and ERVET (the Regional Development Agency of Emilia-Romagna); Municipality of Bologna; the Clust-ER CREATE; the Academy of Fine Arts; universities; etc.

The CREADIS3 Action Plan and the measures adopted to strengthen cultural and creative industries are the result of this collaboration between the Regional Government, the local administration and stakeholders.

The actions described in this Action Plan will be managed by the Research, Innovation, Energy and Sustainable Economy Unit of the Emilia-Romagna Region (within the General Directorate for Knowledge, Labour and Enterprise Economy) with a key support from stakeholders, particularly ART-ER, the Clust-ER CREATE, as well as universities and research organizations.

Local stakeholders have played a key role in improving CCI governance and defining the Action Plan. Different face-to-face meetings were organized with them, during the whole period of the project.

For the **Action 1 “Applied research and knowledge transfer in the field of CCI”**, ART-ER and the Clust-ER CREATE have been mainly involved as actors in the design of the action in a multi-level governance perspective.

ART-ER manages the regional High Technology Network, the digital manufacturing network and European projects on CCIs. The Clust-ER CREATE, defining the value chains regarding CCIs, has identified the trajectories of technological innovation.

These stakeholders have the role of:

- Supporting the Emilia-Romagna Region in understanding the needs of cultural and creative companies;
- Driving technological and digital innovation in the creative cultural sector;
- Collaborating with research centres during project development.

Moreover, for the Action 1, the University's research centres are the key players because they work as catalysts of researchers with knowledge and skills in different fields. Research centres are the beneficiaries of Action 1.

Role:

- Developers of the stakeholder network (academics, researchers and companies);
- Developers of projects of the Action 1 (Lab living, applied research, technological roadmaps, product or service prototypes based on the exploitation of technologies applied to CCI-oriented activities, developing innovative interfaces, Machine and Deep Learning algorithms, software).

All stakeholders will work together for the dissemination of the results: creation of the specific website, participation in B2B events, creation of a service brochure, collaboration with ART-ER for the periodic update of the Report on the Orange Economy of the Emilia-Romagna Region and drafting of a specific chapter on the impact of technologies enabling in the CCI, planning of the CCI technology fair event on a regional scale.

For the **Action 2 “Matching the crowd: crowdsourcing and crowdfunding for CCIs”**, ART-ER is the main actor involved.

Thanks to the lessons learned from the CREADIS3 project, we had confirmation that, also in the other partners regions, like I Emilia-Romagna, CCIs have difficulty in accessing funding sources. The Emilia-Romagna Region, in collaboration with ART-ER, wants to reinforce this aspect of the CCI value chain.

ART-ER, in addition to the participation in European projects (*RegionARTS*, enhancing SME growth by the integration of artists in ICT projects, and CHEBEC, to experiment internationalization services for companies and professionals in the creative cultural sector), is engaged in the study and identification of match-funding strategies and models. In fact, it is a member of European Crowdfunding Network AISBL (ECN), since January 2017. Moreover, ART-ER manages the so-called *Kick-ER*, the crowdfunding

campaign orientation service; it edited a paper as coordinator of the working group of the European crowdfunding Network - Italian strategic Group that investigates the Italian experiences of match-funding between public funds and crowdfunding (October 2019); it organized event about the civic crowdfunding and the matching between crowdfunding and European structural funds.

For the Action 2, ART-ER:

- Has supported the Emilia-Romagna Region in defining needs and action;
- Will manage the EROI platform (*described in the specific box “B. Action 2 – 5. Details of the Ac-tions”*)
- Will provide services to the CCl.s.

or both Actions, the Research, Innovation, Energy and Sustainable Economy Unit of the Emilia-Romagna Region will monitor all the development phases by verifying technical reports and cost reporting.

E. Endorsement

This Action Plan is endorsed by the Research, Innovation, Energy and Sustainable Economy Unit of the Emilia-Romagna Region, within the General Directorate for Knowledge, Labour and Enterprise Economy, whose legal representative will sign it.

4. List of Actions

1. ACTION 1 - Applied research and knowledge transfer in the field of CCI.
2. ACTION 2 - Matching the crowd: crowdsourcing and crowdfunding for CCIs.

5. Details of the actions

A. Action 1

| ACTION NUMBER | ACTION NAME | ACTION LINE |
|---------------|---|-------------|
| 1 | Applied research and knowledge transfer in the field of CCI | |
| BACKGROUND | <p>The biggest and complicated effort is that of linking firms belonging to CCIs with knowledge and technological institutions in highly systematic forms. The typical, generally little formalized or even informal organization of firms in this type of industry, makes it difficult to establish structured relationships with knowledge institutions in order to better stimulate innovation.</p> <p>The cases of Wallonia Region and Basque Countries concerning Innovation Hubs represent the best examples that inspired Emilia-Romagna to reinforce this type of relationship and create a link between creativity, technology and management.</p> <p>In particular, this specific action has been mainly inspired by the CLICK' Living Lab in Wallonia, the Walloon Living Lab dedicated to technologies and creative industries. The working methodology of CLICK' includes a succession of phases of exploration, experimentation and evaluation (in laboratories and in the field), by putting the user at the heart of the process (co-creation and feedback from end-users - user experience). CLICK' connects creative people, researchers from NUMEDI-ART (Institut de recherche de l'Université de Mons) and companies.</p> | |

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| <p>DESCRIPTION</p> | <p>The action consists in the promotion of new research labs generated by Universities, research centers or any other research organization, that can combine:</p> <ul style="list-style-type: none"> • Technology and digital competencies. • Socio-humanistic competencies. • Artistic applications. • Cognitive and communication technologies. • Management competencies. <p>The scope of labs is that of elaborating new enabling solutions, methodologies through prototypes, demonstrators, pilot projects that can facilitate the access of firms (especially small and micro) for business applications.</p> <p>Labs should also make available some technology equipment for experimental activity by firms. Two main areas of research are expected:</p> <ol style="list-style-type: none"> a. Digital media, communication and entertainment. b. Cultural heritage valorization. |
| <p>POLICY ENDORSEMENT</p> | <p>The new labs should be accredited according to regional rules and become part of the Regional Highch Network and, of course, they should be members of the Clust-ER CREATE.</p> <p>Both the Industry and the Culture Department, of the Emilia-Romagna Regional Government, are strongly sustainers of this initiative.</p> |
| <p>RESPONSIBLE ORGANISATION</p> | <p>Research, Innovation, Energy and Sustainable Economy Unit. (within General Directorate for Knowledge, Labour and Enterprise Economy)</p> |
| <p>ACTORS INVOLVED</p> | <p>Emilia-Romagna Region</p> <p>ART-ER</p> <p>Universities</p> <p>Research organizations</p> <p>Clust-ER CREATE</p> |

| | | | |
|-------------------------|--|------------------------|--|
| BEGINNING DATE | June 2019 | ENDING DATE | December 2021 |
| EXPECTED COSTS | Approx. 800.000€ | FUNDING SOURCES | Regional funds |
| EXPECTED IMPACTS | Young researchers involved Prototypes, demonstrators, pi-lots. | INDICATORS | <ul style="list-style-type: none"> • Number of researchers. • Number of firms involved. • Number of startups generated. |

Regarding **Action 1**, the Research, Innovation, Energy and Sustainable Economy Unit of the Emilia-Romagna Region launched a call about the setting up of laboratories for innovation and research in the field of creative industries, in June 2019. The invitation was to present projects aimed at developing new technological solutions to support innovation in the cultural and creative industries, with particular reference to the area of audiovisual activities (from music, to performing arts and the screen) and digital applications to culture. Beneficiaries could be: universities, research institutes, consortia, foundation, companies registered at the Chamber of Commerce.

The call financed 70% of the eligible costs for each approved project (lasting 18 months), for a maximum of Euro 400,000.00. Eligible expenditures are: staff costs, new equipment and research equipment, including specialist software, consultancy, other direct expenditure.

The winning projects were decreed in October 2019:

- The **C.R.I.C.C.** project - “Research Center for Interaction with the Cultural and Creative Industries”, managed by the Alma Mater Studiorum - University of Bologna;
- The **DHMoReLab** project “For a digital cultural enterprise: protection services, study and dissemination of cultural heritage”, managed by the University of Modena and Reggio Emilia (Interdepartmental Research Center on Digital Humanities).

The **C.R.I.C.C.** project, managed by the Alma Mater Studiorum - University of Bologna, intends to create an interdepartmental center or consortium. This center will operate in close connection with the Clust-ER CREATE and ART-ER and will aim to develop innovation in the cultural and creative sector, through the application of digital and enabling technologies. It will have the structure of a living lab and will operate in areas such as education, wellness, tourism and culture. Innovations in new products or services will be tested on users to assess their impacts.

Some examples of innovative products and services that the centre can design, prototype and develop: semantic web applications for profiling behaviors in educational services or for social, cultural inclusion and integration actions; software for the creation of new types of multi-channel narration; immersive gamification applications (also for training sector); experimentation of new technologies (e.g., 3D scanning) for representation / fruition of contents according to participatory and interactive methods (e.g., virtual museums, virtual realities); design of immersive supports for the multi-channel transmission of the cultural heritage, landscape and environmental heritage; study of innovative business models that can be adapted to musical production and the relationship between live and deferred performances.

The **DHMoReLab** project, managed by the University of Modena and Reggio Emilia, intends to create laboratories for innovation and research in the creative industries, developing innovative interfaces, Machine and Deep Learning, algorithms, software, production-ready solutions for cultural enterprises.

The project aims to set up two industrial research laboratories for the protection and enhancement of cultural heritage, with specific attention to museums, libraries and archives:

- Laboratory of digital cataloging and increased fruition (algorithms and software for the reproduction of cultural goods - high-resolution scanners, LIDAR, depth cameras, semi-automatic cataloguing, augmented fruition through innovative 3D interfaces and Augmented Reality);
- Laboratory of manuscripts and automatic comprehension (algorithms based on artificial intelligence techniques, creation of algorithms for automatic recognition of manual writing, software of digitized manuscript management).

B. Action 2

| ACTION NUMBER | ACTION NAME | ACTION LINE |
|--------------------|---|-------------|
| 2 | Matching the crowd: crowdsourcing and crowdfunding for CCI | |
| BACKGROUND | <p>Emilia-Romagna Region sets the second action focused on facilitating the process of project networking and access to finance of firms belonging to CCI, in order to:</p> <ul style="list-style-type: none"> • Stimulate a “business thinking” in CCI (that is an idea of sustainability in the future). • Develop cooperation agreements between complementary firms, in order to share competencies and technologies to finalize the projects, activate new partnerships and explore news business models. • Encourage public-private projects (with a high social impact). • Improve the capacity of the CCI to communicate their business projects implementing new tools of marketing. • Improve access to finance of the CCI through the use of crowdfunding combined with public funds. <p>Emilia-Romagna Region developed a service to support crowdfunding initiatives in order to clearly define needs, objectives and teams for collecting partners and financiers (Kick-ER). In addition, the Region developed an Open Innovation platform for creating a digital context for business cooperation, research collaboration, funding of projects</p> <p>EROI https://emiliaromagnaopeninnovation.aster.it/</p> <p>Combining these two instruments we can strive for innovation processes in CCI and partly overcome the problem of financial difficulties of firms belonging to CCI.</p> | |
| DESCRIPTION | <p>We propose the creation of a competence unit in order to support the CCI with a specific toolkit for fine tuning their project ideas, collect the skills needed, set up the most suitable match-funding schemes. Especially, we intend to work on two areas of activity.</p> <p>First of all, we aim at the creation of a dedicated action based on EROI platform in order to foster CCI to launch challenges starting from their projects, with the purpose of:</p> <ul style="list-style-type: none"> • Fostering Open Innovation processes to set up CCI project ideas. • Identifying useful skills and technologies to the development of CCI projects within the enlarged community of EROI (composed of companies, professionals, researchers, students);- facilitating team recruitment. • Individuating partners able to accompany the CCI in projects implementation and promotion. • Creating a community of CCI practitioners within EROI platform. | |

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| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">DESCRIPTION</p> | <p>Secondly, we intend to establish this competence unit to support the definition and set up of innovative match-funding schemes that share public resources (i.e. ESIF) and private resources (crowdfunding). Emilia-Romagna Region will act as enabler of the process, involving local public administrations and stakeholders (both CCIs and financial institutions).</p> <p>The idea is that, after setting up the framework and the match-funding model, project ideas could be financed according to a matchfunding system that will allow the activation of the local communities.</p> <p>Through such models, public authorities will have more instruments such as strategies, policies, tools to:</p> <ul style="list-style-type: none"> • Foster the role of CCIs within the local innovation ecosystems and the related RIS3. • Promote investments in this sector. • Facilitate their development through an easier access to finance. • Favour positive spillover effects towards traditional sectors (i.e. manufacturing). |
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">POLICY ENDORSEMENT</p> | <p>Emilia-Romagna ERDF-ROP 2014-2020 - Priority Axis 1 Research and Innovation, Action 1.2.1, aimed at strengthening the regional and national innovation system by supporting participation among regional actors in specialist technological networks and in complex projects.</p> |
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">RESPONSIBLE ORGANISATION</p> | <p>Research, Innovation, Energy and Sustainable Economy Unit (within General Directorate for Knowledge, Labour and Enterprise Economy)</p> |
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">ACTORS INVOLVED</p> | <p>Emilia-Romagna Region</p> <p>ART-ER</p> <p>Cluster CREATE</p> <p>Local Public Administration</p> <p>Finance players</p> |

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|-------------------------|--|------------------------|---|
| BEGINNING DATE | 2020 | ENDING DATE | 2021 |
| EXPECTED COSTS | 100.000€ | FUNDING SOURCES | Regional Funds |
| EXPECTED IMPACTS | <p>By equipping local CCI with a dedicated competence unit, the Region will support the growth path of the local CCIs, which are also facing social issues perceived and reported by citizens.</p> <p>Through this initiative, the Region will be able to foster the feasibility and sustainability of projects thanks to the engagement generated by crowdsourcing and crowdfunding.</p> <p>By integrating public subsidies with collective financing, the transparency of the processes in the Public Administration is promoted and innovative accountability methods are experimented.</p> | INDICATORS | <ul style="list-style-type: none"> • Number of firms involved. • Number of challenges launched on the platform. • Number of crowdfunding campaigns launched. |