

ecoRIS3 project

# Policies & Measures to Support Local & Regional Innovation Ecosystems

The action plan of the Metropolitan City of Turin



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## Foreword by Metropolitan councillor Dimitri De Vita



"There is a clear need to improve and connect regional challenges and opportunities of RIS3 to local innovation policies and stakeholders, highlighting the role of the territory as the place where interlinkages happen and knowledge flows" (cit. *EcoRIS3 application form – project abstract*).

It is exactly in this sentence that we, as metropolitan public administration, identified our role and the added value of our participation in ecoRIS3 project. After 3 years of intense and inspiring collaborative work, we can say that the project gave us the opportunity to shorten the distance, involve and improve the dialogue among the local stakeholders and consequently raise the awareness and the territorial impact capacity of the RIS3 policies.

This opportunity was particularly important to us because even if our ecosystem is rich and dynamic, suffers from excessive fragmentation and dispersion.

The knowledge exchange opportunities offered by the Interreg Europe Program and the collaboration with the ecoRIS3 partners – Fomento de San Sebastian (Lead partner), Cork Institute of Technology, Sunrise Valley Science and Technology Park, Kainuun Etu Ltd, Vidzeme Planning Region, Atlantic Cities, Ave Intermunicipal Community - has been fruitful and enriching for the Metropolitan City of Turin and we hope it could further continue in the future. All the territories and all the governance levels should feel engaged with the same dignity in European programs and policies: Interreg Europe and ecoRIS3 project gave us this opportunity and we hope to have been able to meet the project's expectations. The response of the local stakeholders was recorded in particular during the international seminar on "eHealth and Ecosystem" held in Turin in June 2019 and on the occasion of the study visits and this evidence reassures us in this regard.

With this Action Plan we want to continue to contribute to the implementation process of RIS3 at the metropolitan level, through a bottom up approach, which is expected to provide frameworks for reflection, suggestions for the execution and a valuable contribution thanks to the experiences of the Metropolitan City of Turin.

The main purpose of this Action Plan is in fact to identify a set of actions aimed at supporting processes of territorial innovation and local development, in connection and complementarity with the regional measurement identified and the regional policies in general, since it is believed that working in an integrated way between different levels of governance and different policies is a winning strategy.

We also hope that this work will contribute to improving the role of the metropolitan cities and areas at European level, supporting a concrete territorial cohesion process for the next future also considering that the COVID-19 pandemic highlighted the need to strengthen the institutions closest to citizens so that they can effectively and quickly respond to new problems and needs.

A handwritten signature in black ink, appearing to read "Dimitri De Vita".

# ACTION PLAN

## PART I – GENERAL INFORMATION

**PROJECT:** Policies & Measures to Support Local & Regional Innovation Ecosystems – ecoRIS3

**PARTNER ORGANISATION:** Metropolitan City of Turin

**COUNTRY:** Italy

**NUTS2 REGION:** Piemonte

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## PART II – POLICY CONTEXT

### THE ACTION PLAN AIMS TO IMPACT:

- 
- Investment for Growth and Jobs programme
  - European Territorial Cooperation programme
  - Other regional development policy instrument

### NAME OF THE POLICY INSTRUMENT ADDRESSED:

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**ROP ERDF - Action I.1b.4.1** (Support for creation and consolidation of innovative start-ups with high intensity of knowledge application and research spin-off initiatives).

#### Title of the Measure

*Support of the programs for the consolidation and growth of start-ups, to strengthen and complement investment projects of shareholders and/or third-party investors.*

This measure supports the development, implementation and dissemination of innovative ideas proposed by micro and SMEs in the form of start-ups, in sectors consistent with the S3, without neglecting other areas, which may represent opportunities with high development potential. It is open to small enterprises configured as start-up with the characteristic of innovative enterprise (ref. art. 22, Reg. (UE) 651/2014).

This regional measure is part of a context analysis that highlights:

- a relative concentration of start-ups registered in the special section of the Companies Register (fifth place among the Italian regions), but a rear-guard position if we consider the density quotient in relation to the population.
- an average size of start-ups lower than that of the other northern Italian regions (Lombardia, Veneto, Emilia-Romagna);
- a continuing undersizing, common to the entire Italian system, of the capital market in support of the various phases of growth of start-ups, with the share of professional venture capital funds at 6%, and the share of other companies (corporate venture capital) at 4%;



this despite the fact that international trends indicate a strong growth of these processes, and in particular corporate venture capital is increasingly establishing itself as a tool, for investing companies, of privileged access to innovations and technologies developed by start-ups in a perspective of open innovation;

- consolidated regional policies to support: the creation of innovative start-ups, carried out through the support of the ESF ROP (Measure "Support services to innovative start-ups, public research spin-offs"), and a system of university incubators of recognized quality and effectiveness; the innovation processes of SMEs, through the support of the ERDF ROP, with a role of increasing importance of regional Innovation Poles as subjects for the promotion and dissemination of innovation and intermediaries of the innovation ecosystem, between the academic world and the business world;
- the need for specific support for the development and growth phase of start-ups, or the phase where there is a greater risk of market failure but where the greatest potential for growth lies.

The Piedmont Region has therefore decided to focus the intervention of the ROP ERDF 2014/2020 on supporting the consolidation and growth phase of start-ups, complementing the panorama of existing instruments and, in this sense, to provide for a Measure having the following characteristics:

- support for the consolidation and growth of start-ups, through the payment of contributions to a non-refundable grant of between 150,000.00 and 500,000.00 euros for investment projects contained in a business plan and in correspondence with an investment in the capital of the start-up by one or more partners or third party investors in an amount less than the required contribution. Capital investments can be made by founding/pre-existing partners, specialised investors such as venture capital funds, as well as companies of any type and size, encouraging open innovation and corporate venture capital processes that can, on the one hand, increase turnover and start-up markets and, on the other, produce the additional added value of innovating the products, services and business models of companies.

The Piedmont Region has decided to allocate a public contribution of 10,000,000 euro to this measure.



On September 25, 2019, the Call for tender was open (Executive Determination no. 464 of August 1, 2019).

This measure is synergic and complementary with the intervention of the ESF ROP, aimed at supporting the activity of university incubators and the definition phase of the business project and business start-up.

The ESF ROP 2014-2020, Axe 1 "Occupation", Priority 8i, Specific Ob. 1, includes:

- ✓ an action of "Pathways of support (accompanying services and/or incentives) for the creation of a business and self-employment, including the transfer of a business (generational turnover)";
- ✓ an action of "Support services for innovative start-ups".

At the regional level it is also important to mention the **Smart Specialization Strategy (RIS3)** of Piedmont, that has opened a new season for the regional research and innovation policies, in the framework of the 2014-2020 Cohesion Policy and Europe 2020 Strategy.

#### **SMART SPECIALISATION STRATEGY (RIS3) – PIEDMONT REGION**

*Through an analysis of the regional context, with a more detailed picture of the research and innovation system, the strengths of the Piedmont production system and the most demanding social challenges were identified.*

*RIS3 has been developed on the basis of the following principles:*

- referring to a broad concept of innovation,
- starting from the strengths and competitive advantages of the Region,
- involving stakeholders in the strategic planning process,
- concentrating actions on a limited number of priorities,
- identifying mechanisms for evaluating results and reviewing the strategy.

*The objective of RIS3 is to transform and/or strengthen the sectors of the Piemonte industrial tradition, using innovation as a tool to draw new trajectories, create new knowledge, enhance new skills and respond to the challenges posed by changes in society.*

*The strategy focuses on interventions on two priority areas of innovation:*

- innovation of the production system;
- innovation for health, demographic changes and well-being.

*The Innovation of the production system focuses on the excellences and distinctive sectors that characterized a region with a high level of industrialization and a strong manufacturing vocation and that have been identified as relevant for the implementation of the Strategy: Aerospace, Automotive, Green Chemistry / Cleantech, Mechatronics and Made in (agri-food and textiles).*

*The Innovation for health, on the other hand, represents one of the main challenges that Piedmont must face in order to respond to the numerous needs that demographic changes and the progressive retreat of the welfare system brought out.*



*The Strategy is guided by two trajectories, smart and resource efficiency, which respond to the principles of smart growth, environmental and energy sustainability and resource saving. Enabling technologies (KETs) contribute to the implementation of the Strategy, as well as other factors that foster the development of the regional innovation ecosystem: digital growth (through the implementation of the Piemonte Digital Agenda); institutional and administrative capacity building (through the Administrative Reinforcement Plan); skills strengthening (through initiatives financed by the European Social Fund); competitiveness of production systems and social innovation.*

*A central role in RIS3 is played by the entrepreneurial discovery, i.e. the bottom up process that pushes companies, research centres and universities to work together to identify the most promising areas of a territory, but also the weaknesses that can hinder innovation.*

The Region, in line with its Smart Specialization Strategy (S3), outlined the development strategy to be adopted with the 2014-2020 ROP ERDF focusing on the thematic objectives and interventions that could guarantee the greatest added value in relation to the strategy of EU for smart, sustainable and inclusive growth. In particular, the areas of innovation on which it was intended to concentrate resources are:

- industrial innovation,
- research,
- innovation for health,
- the digital society
- the enhancement of the territory.

In light of the regional challenges and of the national and European scenario, the Piedmont Region, in the construction of the ROP ERDF architecture, has adopted the principle of concentration: based on a limited number of Intervention Priorities, Specific Objectives and, therefore, Results Expected, the selected Actions constitute an appropriate critical mass.

It was decided to combine concentration with the specialization of the various financial sources that could be activated, a crucial principle in the unitary programming approach.

From this drawing the choice to intervene on limited thematic areas is derived:

- business system
- research and development
- competitiveness and employment
- application of Information and Communication Technologies
- energy policies
- sustainable urban development



The approach has led to the activation of 7 Priority Axes and 5 of the 11 Thematic Objectives, referred to in art. 9 of EU Regulation 1303/2013:

- Axis I - Research, Technological Development and Innovation (TO 1)
- Axis II - Digital Agenda (TO 2)
- Axis III - Competitiveness of production systems (TO 3)
- Axis IV - Sustainable energy and quality of life (TO 4)
- Axis V - Protection of the environment and enhancement of cultural and environmental resources (TO 6)
- Axis VI - Sustainable Urban Development (TO 2/4/6)

The first results related to the implementation phase of the RIS3 (monitoring and evaluation at 2018 carried out by IRES Piemonte - regional socio-economic research institute) and the projects expressed by the business world (financed by the ROP ERDF measures) showed how the innovation policy implemented in the Piedmont Region to date has contributed to:

- mobilize investments in research, development and innovation, with a focus on technology transfer and collaborative research, also through "enabling" tools;
- concentrate the interventions around the transversal trajectories already highlighted by the S3, first the innovations attributable to the Smart trajectory, but also good results in the field of Resource Efficiency and of the "social" trajectory linked to health and well-being;
- have favoured research close to the "industrial" and "commercial" phase;
- have promoted greater integration between innovation initiatives and skills development.

Monitoring evidence shows that traditional economies based on traditional and "finished" systems, within product-based supply chains, leave room for models linked to variety, dynamic and transversal sectors.

Additional specific objectives achieved by the first phase of implementation of the regional S3:

- the complementarity of regional initiatives and synergies with national policies, in particular with the initiatives of the Ministry of Education and Industry (Industry 4.0), which have given companies greater opportunities and measures to support their investments, distributed throughout the entire innovation cycle;



- support for the consolidation of the innovation ecosystem and the strengthening of research, planning and innovation activities of companies. An orientation towards innovation close to the industrial phase and the entrepreneurial "discovery", which promotes a "creative" use of digital change by enhancing the potential of new technologies, transversal and non-sectoral solutions to the benefit not only of the production system, but also of the people's well-being;
- the anchoring and entrenchment of multinational groups that show the will to contribute to strengthening the position of the Piedmont offices.

Looking at the results that gradually emerge from the implementation of the 2014-2020 policies, in particular those of Axis 1 of the ROP ERDF relating to the S3, there is a tendency to focus innovation projects on the two main drivers attributable to the areas of digitization and economy circular; next to which the third "innovation factor" is inserted, for all those projects in the field of health not attributable to the two main ones, but which respond to one of the main social challenges.

If innovation represents one of the fundamental drivers of the region's economy, also thanks to the policies implemented in recent years, the capacity of the productive fabric to adequately exploit the Piedmont primacy still appears inadequate, as shown by the numbers of the gross domestic product, which grows less than the average of the northern part of Italy, and those of the start-ups, whose per-capita data is lower than both the national and northern average. And the same is true for the survival rate. In Piedmont, in fact, only 29.5 of start-ups manage to stay alive four years after its creation.

These data provide important insights on the policies to be integrated / strengthened and on the necessary actions.



## The Metropolitan city of Turin level

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The Metropolitan City of Turin (NUTS3) is a territorial authority, established by Law 56/2014, which has replaced the Province of Turin, starting from January 1st, 2015. It is in Northwest Italy (NUTS1) and it is part of the Piemonte Region (NUTS2). It borders with South-East France and it is one of the largest Italian metropolitan areas in terms of size and population. Indeed, it covers a territory of 6.827 square kilometres (52% mountains areas, 21% hills areas, 27% plains) and has a population of around 2.247.780 inhabitants, of which 890,000 live in the City of Turin.

The Metropolitan city is characterised by a very high administrative fragmentation. It is in fact composed by a high number of municipalities (312), that are mostly small and very small towns: 80% of the municipalities has less than 5.000 inhabitants and 36% has less than 1.000 inhabitants.

Metropolitan cities are second level local authorities, governed by political bodies that are elected among mayors and councillors of the municipalities included in the metropolitan area: the metropolitan mayor is the mayor of the provincial capital city (in our case, the Municipality of Turin), while the metropolitan council (legislative body) and the metropolitan conference (non-legislative assembly) are composed respectively by city councillors indirectly elected by the city councils of each municipality and by the mayors of all the municipalities included in the Metropolitan city.

The Metropolitan city has the task, among others, of promoting and coordinating economic and social development, by supporting innovative economic and research activities.

For instance, due to the proximity factor, the metropolitan city can actively contribute to the entrepreneurial discovery process, by mobilizing socio-economic actors and involving business-related stakeholders more easily than regional governments. Moreover, cities and metropolitan cities can actively contribute to better define and give more focus to the priority domains of innovation that have been shaped in a broadly way by regional strategies or they



can play an important role in the implementation phase of RIS3, by making local policies and initiatives converge on such priority domains.

On the one hand, the Action Plan identifies specific and concrete initiatives that can contribute to the implementation process of the RIS3 at the local level. On the other, it may contribute to improving the Regional strategy, thanks to ideas and proposals from local stakeholders. Moreover, the initiatives promoting innovation and entrepreneurial ecosystem, business growth and territorial development included in the Action Plan are useful in order to enrich the Metropolitan Strategic Plan - a planning tool compulsory for each metropolitan city, that covers a three-year period and must be updated every year.

The strategic mission of the Metropolitan City of Turin is that of being an engine of economic and social development for local areas. It also represents a flexible governing tool able to coordinate municipalities within the metropolitan area and cooperate with higher government levels in order to plan and implement effective public policies, according to the multi-level governance model.

The elaboration process of the Action Plan has been developed with the goal of contributing to the implementation process of RIS3 at the metropolitan level, through a bottom up approach, which is expected to provide causes for reflection, suggestions for the implementation and, more in general, a valuable contribution thanks to the experience of the Metropolitan City of Turin "breaking the silos" and creating connections among different competencies and knowledge, too often organised vertically.

The main purpose with which the current Action Plan was developed was therefore to identify a set of actions, integrated with RIS3-Piemonte, aimed at supporting processes of territorial innovation and local development, in connection and complementarity with the regional measurement identified and the regional policies in general, since it is believed that working in an integrated way between different levels of governance and different policies is a winning strategy.

In this perspective, and within the wider framework of the Metropolitan Strategic Plan, the Action plan defines strategies and actions that are "horizontal" to the "vertical" priority areas of specialization identified by RIS3.



All the actions identified are in line with the Strategic Plan of the Metropolitan City of Turin. It must "outline the policies for the promotion and coordination of economic and social development, also ensuring backing and support for economic and research activities, which are innovative and consistently with the vocation of the city".

### **THE STRATEGIC PLAN OF THE METROPOLITAN CITY OF TURIN**

The Plan identifies a vision of unitary development for the entire territory of the medium-long term, and is divided into 5 project platforms, 20 strategies and 63 actions / projects; the Plan identifies the action priorities for the reference period and the dedicated resources within the annual operational agenda.

Here we mention the priority P3 - AN INNOVATIVE AND ATTRACTIVE METROPOLITAN CITY WITH REGARD TO ENTERPRISES AND TALENTS, with the two related strategies:

#### **- STR.1.9. Promoting the innovation, research and development ecosystem**

Numerous studies and documents concerning the theme of support to innovative economic and research activities and their connection with the local productive fabric proposed development trajectories for the metropolitan area concentrated on three fields of intervention, closely related to each other:

- level of innovation of the economic system;
- relations between universities and businesses;
- construction of a valid entrepreneurial ecosystem.

In addition, the Piedmont area is characterized by a significant presence of research and innovation centres - with a clear concentration in the CMT area - which are supported by a good offer of high education and by interventions to support industrial research, experimental development and of innovation (technological platforms and innovation hubs). The strategy for the smart specialization of Piedmont has then opened a new season for the development of policies in research and innovation under the 2014-2020 Cohesion Policy and the Europe 2020 Strategy. The priority areas on which to focus interventions in support of the "innovation ecosystem" (defined as "that environment where the enabling conditions for competitive growth and the economic transformation of a given production, economic and social context are created") is the innovation of the production system in specific sectors and the innovation for health, demographic changes and well-being.

Transversal to the two areas is the strengthening and development of the innovation ecosystem through initiatives aimed at supporting digital growth, improving institutional and administrative capacity, strengthening skills and enhancing human capital, and promoting social innovation. These conditions combine to create an environment conducive to the development of new ideas, the circulation of knowledge, the birth and development of new skills and the creation of business, also through the neutral role and precompetitive of the public administration and the simplification of rules and procedures.

Although the Metropolitan City of Turin area constitutes a favourable context for the development of knowledge and innovation, nevertheless some weak elements remain in it: poor connection between the research system and the economic-productive structure, poor coordination between public policies and private initiatives. The presence of a multitude of public and private actors, in fact, allows a wide range of opportunities for the growth of businesses and the territory, but at the same time generates some problems of coordination, which can hinder the creation of a real "integrated and synergic system".



Promoting better coordination of initiatives in favour of the research and innovation system on a local scale is therefore important and can have a positive impact on the effectiveness of individual measures, as well as improving communication, spreading the various initiatives and having important repercussions on economic and social issues. In this context, CMT can therefore play a useful coordinating role of the Turin innovation ecosystem, in order to ensure greater synergy between public policies and to overcome the fragmentation of interventions, pursuing economies of scale, encouraging the exchange of information and the sharing of know-how among the actors involved.

- **STR.1.10. Promoting entrepreneurship and supporting business creation**

The objective of this strategy is to build an INTEGRATED SYSTEM OF POLICIES AND INSTRUMENTS IN SUPPORT OF THE NEW ENTREPRENEURIAL, in order to enhance the concentration of resources, the synergy between the interventions and the cooperation between public and private actors.

The Plan has a duration of three years and is formed and adopted by the Metropolitan Council, subject to the opinion of the Assembly of Mayors of the Homogeneous Zones and of the Metropolitan Conference. It is updated annually, drawing on the principles of transparency and participation of all the entities and stakeholders.

The formation process of the first Strategic Plan of the Metropolitan City of Turin has involved all the 312 Municipalities, the economic actors, the world of university and research, the social partners and the associations that in various capacities operate in the territory, as well as the citizens: takes into account all the proposals of strategic importance made by the homogeneous Zones, and constitutes the framework for the planning and programming of the entire metropolitan territory.

The Plan does not end within the Metropolitan City of Turin, but intends to place itself within a constructive dialogue at the local level (homogeneous and common Zones), national and international (with the other Cities and metropolitan areas) and to compete for the creation of a network and a shared vision on the most topical issues for the success of all territories.

Within the planning framework described above, the **strategic goal of the Action Plan** is to activate the Metropolitan City by making it more innovative and able to foster and sustain the consolidation of the local innovation ecosystem also by promoting innovative ideas proposed by micro-enterprises, SMEs, start-ups.

This objective is pursued through actions aiming at improving governance and supporting the local innovation ecosystem.

Moreover, the action plan will be implemented in a period of deep change considering the Covid-19 epidemic. The coming years will be characterised by a serious economic and social crisis that will require new intervention models and innovative solutions to new problems and needs that have emerged, and the implementation of coordinated measures aimed at protecting workers at work, stimulating the economy and employment, supporting work and income, strengthening the welfare system and social protection networks.

All the actions included in the Action plan can give a contribution to these new challenges.



## PART III – DETAILS OF THE ACTIONS ENVISAGED

### ACTION 1 ONE SINGLE STRATEGIC DIRECTION FOR THE LOCAL S3 ENTREPRENEURSHIP ECOSYSTEM

#### THE BACKGROUND

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The Turin ecosystem for business creation and economic development is characterized by a high level of fragmentation: the actors that compose the ecosystem are, in fact, numerous, but poorly coordinated (few or weak hubs and prevalence of institutional actors).

The local SWOT analysis expressed the need for an organization of the innovation ecosystem with precise and clearly communicated objectives, identified after an appropriate dialogue with the actors and implemented through a precise plan and timeline.

The territorial analysis has also indicated that a revised approach for research and development policies is necessary and it has to be based on strengthening innovation ecosystem. Furthermore the next start of the new European programming cycle and the detected need for a renewal of the regional S3 (more "open", changing the focus from sectors to transversal drivers, and more "Internationalized" S3) make it necessary for the local ecosystem to be more organized also in order to interface with the regional government in the process of defining policies.

For these reasons, it has been identified an action of "improving governance" through the key factor of "improved cooperation", with the aim of identifying a single strategic direction for the local entrepreneurship ecosystem.

This action will make possible to strength the local ecosystem and also to reflect concretely on the territorial development processes; in this context the CMT<sub>O</sub> will bring as an element of comparison/information what will emerge from the ESPON project in which CMT<sub>O</sub> participates, hopefully creating the opportunity of confrontation with the stakeholders network that will be established through the project.



### **THE CMT0 PROJECT FUNDED BY ESPON 2020**

The CMT0 is the lead stakeholder of a targeted analysis recently funded by the ESPON 2020 program.

The ESPON 2020 program (*Inspire Policy Making with Territorial Evidence*) supports territorial development processes at local, regional and national level in Europe by bringing together policy makers who share the same types of challenges and who are looking for new territorial evidence in a European perspective.

The ESPON 2020 program supports territorial decision-making by providing the necessary scientific evidence, networking key actors and decision makers at European level, thus promoting the role of the territory as a place where interconnections and knowledge flows take place.

ESPON Targeted Analysis allows stakeholders (groups with a common interest at European level) to analyse the state of the art and design future scenarios - through the financing of a high-level European research activity.

The project funded is "**METRO - The Role and Future Perspectives of Cohesion Policy in the Strategic Planning of Metropolitan Areas and Cities**". The reflection proposed is interesting considering that metropolitan areas and cities are rarely involved in the definition of programs and strategies related to the implementation of cohesion policy because the European structural and investment ESI funds are often managed on a national and regional scale. In fact, a failure correspondence occurs between the concentration of GDP, the amount of population and entrepreneurial activities in metropolitan areas on the one hand and the volume of cohesion policy resources managed at a local level on the other side. The absence of areas and metropolitan cities in the management or implementation on the territory of ESI funds could have negative consequences on the effectiveness of policies.

Conversely, metropolitan cities can play a crucial role in the implementation of the sustainable urban development, according to the principles of integrated territorial development, adopting a political perspective anchored to the territory through the implementation of adequate tools such as CLLD (Community Local Led Development) and the ITI (Territorial Investment Integrated).

The research aims to bridge the gap on the state of the art of interrelationships between metropolitan areas and cities and cohesion policy and contribute scientifically to the future regional and national strategy.

The project involves a group of international stakeholders, namely 8 other cities are involved in addition to the CMT0 and 2 so-called "umbrella organizations": city networks both at European level (Eurocities) and international (Metropolis).

The learning from the ecoRIS3 project has influenced the construction of Action I, in particular the best practices related to Public Sector as Orchestrator of ecosystems of innovation and Smart Specialization, with several projects and programmes that aim at a growth of the territory and its ecosystem based on a logic of interaction and integration.

One of the best practices identified is "**Metropolitan strategy of economic development - Brest Métropole - Bretagne, France**". Following the adoption of the strategy of the



Brittany region on economic development, innovation and internationalisation in 2013, and after having exchanged with different economic actors, local authorities and organisations from the civil society, Brest Métropole launched in 2015 a Metropolitan Strategy for the economic development of its territory. This strategy aims at contributing to the aforementioned regional policy. Similarly, the Metropolitan city of Turin has launched its Metropolitan Strategic Plan, which identifies a scenario of uniform development for the entire territory of the Metropolitan City of Turin in the medium to long term.

In particular, the Brest Métropole strategy aims at connecting knowledge to the economy: Brest Métropole seeks to reinforce higher education and research and to multiply bridges between universities, "grandes écoles" and research centres from one side, and enterprises from the other, which is also a goal of CMT's Action Plan. Furthermore, in this good practice it was interesting the interlinkage among different policy level and actors: in fact, Brest strategy was made possible thanks to the framework set up by the regional policy. Another point of interest is that Brest Métropole implemented a development plan in the framework of "La French Tech", an initiative from the French State to help start-ups growing at international level and to create local networks of start-ups, that is similar to our policy instrument.

The Metropolitan city of Turin aims at "improving governance" through the key factor of "improved cooperation", that involves different stakeholders and policy levels and, in perspective, also citizens. For this reason two other projects are considered relevant as best practices: "**Smart Kalasatama develops smart city together with citizens**" - with its platform-based co-creation programme, involving the full-quadruple helix to make the district smarter together; "**Citizen Participation and Open Government Strategy**" of the city of Gijon.

Regarding networking, the best practice "**Ave Entrepreneurship Network IN.AVE**" aims at stimulating the entrepreneurial and innovation ecosystem of the Ave Region through:

- mobilization of a diverse set of local agents, which support and/or promote entrepreneurship, to operate in a network;
- training of agents in the use of common support methodologies and tools, ensuring shared services and integrated answers;



- implementation of a complex series of actions aimed at promoting entrepreneurial training; encourage the creation and development of new businesses and jobs; and strengthen and qualify business support services.

Similarly, the Metropolitan city of Turin intends to promote business networks among companies in RIS3 priority areas in specific production lines, like in the AVE Region project, and strengthen the coordination of initiatives in support of technology transfer, the creation and consolidation of innovative start-ups and research spinoff initiatives.

In this best practice is of interest the project "IN.AVE 2020 - PME qualification", that aims at developing integrated actions around the axis of "knowledge - training - cooperation - coopeitition", which reinforce the innovation strategies of SMEs in the Ave region, around critical factors of competitiveness.

As in this project, also in the actions that will be developed by the Metropolitan city of Turin is important to:

1. Provide specialized tools and services to support the business community of the region, encouraging the modernization and introduction of innovation factors in SMEs;
2. Contribute to increase the productivity of SMEs in the region, in order to guarantee the competitive positioning of this territory;
3. Promote a spirit of cooperation and competition among SMEs, promoting strategies for sustainable and competitive growth of the territory.

## ACTION

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### Objective

The initiative aims at increasing the coordination between the actors from the innovation ecosystem and the synergy between the various initiatives implemented. This action will focus on the integration of decision-making processes and existing initiatives, concentrating information in few safe, interoperable and efficient points.

The capitalization will come based on the value of reinforcing the ecosystem, sharing knowledge and mutually reinforcing development, profiting from learnings from hands-on experiences and actual practice and adopting what already worked for others.



The activities promoted in this action will therefore focus on two points that are key factors for the success of the action:

- strengthening the role of CMT<sub>O</sub> as coordinator, facilitator and booster of the ecosystem;
- raise the willingness of local actors to share and to learn with and from each other.

This will generate trust, build bridges and align collaborative efforts inside the ecosystem, as well as reinforce the capacity of constructive dialogue with the regional government.

### **Phases of the action**

The initiative will be implemented through the following implementation phases:

#### **1. Shared strategic planning process**

The shared strategic planning process will include the actors of the ecosystem and the local institutions:

- Universities and Research Centres
- Clusters and Associations
- Trade associations
- Chamber of Commerce and SME associations
- Civil society Organisations
- Metropolitan City of Turin
- Municipalities
- Piedmont Region.

The promotion and coordination of economic and social development, as well as the computerization and digitalisation systems of its territory, are among the main functions that CMT<sub>O</sub> intends to carry out, on first promoting this process of strategic planning, that has the aim of integrating the system of innovation and research with the economic, social and institutional system and of defining the development measures necessary for the metropolitan area, in particular those that support innovation. For this reason, the working meetings will be organized and facilitated by the Metropolitan City of Turin.

Meetings will be organised for the definition of the strategic planning. The group of local stakeholder and institutions will define/share:

- the work program for strategic planning, the timings and the needs to construct technical subgroups on the various topics of interest (for example innovative start-ups,



e-health, ways to support SME, that in the regional contest are polarised in the metropolitan territory);

- the results of the framework analysis (activity n. 2) with the aim of defining the territorial needs through the following steps:

1. verify that all relevant intervention requirements have been identified.
2. provide a first indication of the "hierarchy" of identified needs.

The meetings will also permit to:

- share the development of projects/actions/plans of the different actors and their results.

In particular, the CMTTo will inform the other actors on the implementation of the Metropolitan Strategic Plan and the monitoring of the European projects in progress (first ECORIS3 Action Plan), promoting as far as possible synergies with other actors and initiatives;

- identify the most suitable ways and times to better support the Piedmont Region in its development of policies (concerning the ROP ERDF and the policy instrument Action I.1b.4.1) and in the definition and dissemination of the new European programming cycle of structural Funds.

Specifically, CMTTo will collect the requests/needs of the territories and will bring them to the Region, but it will also contribute to the knowledge/dissemination of the new programming cycle of the cohesion policy towards other institutional subjects such as Municipalities (during the meetings that will be organised in activity n.4).

#### Output:

- ✓ Minutes of the meetings

#### **2. Study for the definition of the local ecosystem's framework.**

This framework will allow the creation of a knowledge based document useful for bringing out the innovation actions needed by the territory. Thanks to the collection of quantitative data, the information drawn from research already carried out and an additional survey in the form of a questionnaire, it will be possible to define a synthetic representation of the local ecosystem that could describe:

- all the actors and the key roles that have an influence on the users, organization and service environment. The map will display all the entities, and then it will connect



them based on the type of value they exchange; it will map all the relationships as a giving and a receiving (the value is in the loops). In this way, it will be possible to identify existing gaps and valuable opportunities for new synergies. Considering the specific need of the local ecosystem, it will be decided the representative model (a simple quadrant with two axis - level of influence and level of interest or engagement in the process - or a more complex motivation matrix - detailing what each stakeholder will bring to the others);

- the competitive characteristics of the territory (for example strong industrial specializations, applied research system, educational institutions of high levels, evolved entrepreneurial ecosystem, competitive cost of living and working, widespread welfare and social volunteering) and its excellences.
- the innovation needs;
- the services offered by each entity (business support services as assistance for the definition of the business model, assistance for the administrative start-up of the business, free professional services, technical advice of different kinds) and the actions/projects already implemented, in order to identify overlaps / duplications and / or deficiencies related to the innovation needs.

The framework will favour a better overall knowledge of the system and its needs, identifying synergies but also the gaps and possible ways of improvement.

#### Output :

- ✓ Document «Framework of the local ecosystem»

### 3. Shared territorial innovation strategy

The strategy will focus on the strengths of the entire metropolitan territory.

The end point of action 1 is the identification, based on the framework, of the actions that the territory needs to implement as a guide to foster innovation. The actions of innovation, may consist, for example, in financial instruments, services (non-financial services) and learning, which may include:

- information and experiences exchanges (learning and sharing together), for example working groups on common interests;
- mutual learning between different actors;



- international networking and national/international best practices;
- monitoring and evaluation tools.

The actions identified will be included in the **new Metropolitan Strategic Plan 2021-2024**.

The actions identified will also be shared with the territory through dedicated meetings in the homogeneous areas of the metropolitan territory.

#### Outputs:

- ✓ Meetings;
- ✓ **Metropolitan Strategic Plan 2021-2024**

#### **PLAYERS INVOLVED**

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Metropolitan City of Turin

Others: Piedmont Region, City of Turin, Municipalities, Business Incubators (I3P, 2i3T), Turin Chamber of Commerce, Trade associations, University of Turin, Polytechnic of Turin, Innovation Poles, Public and Private Research Centres, enterprises, other actors involved in the local innovation ecosystem

#### **TIMEFRAME**

	I sem 2020	II sem 2020	I sem 2021	II sem 2021
<b>Activity 1.1</b>	X	X		
<b>Activity 1.2</b>	X	X	X	
<b>Activity 1.3</b>		X	X	<b>September</b>

#### **COSTS**

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Costs of internal staff of CMT0 dedicated and any external consultancy, for an amount of euro 100.000.

#### **FUNDING SOURCES**

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CMT0 budget resources

Ministerial funds (requested)



## ACTION 2

### RESEARCH, INNOVATION AND TERRITORY INTERACTION PROMOTION

#### THE BACKGROUND

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The local SWOT analysis has identified the need **to support more incisively innovation** and **networking** between local enterprises with research and higher education centres. Furthermore, there is the need highlighted by stakeholders to be able to benefit from greater investments (public and private) and greater stability of programs and territorial governance. Among the challenges identified at regional level for the growth there are:

- ✓ Increasing SMEs innovation capacity, collaboration with research organizations and use of research infrastructures.
- ✓ Create a favourable ecosystem: boost networking and collaboration attitude and stimulate open innovation processes, build on territorial assets to attract investors and support scaling up.
- ✓ Support integration of regional R&D (Research and Development) and industrial specializations in European and global value chains.

Piedmont territory has strong R&D and industrial competences and deeply rooted value chains, but high number of SMEs (small-medium enterprises) not innovating and an insufficient level of collaboration of SMEs with education and research organizations.

Therefore, through the action “RESEARCH, INNOVATION AND TERRITORY INTERACTION PROMOTION” the Metropolitan City of Turin aims at supporting the local innovation ecosystem by improving the connections between research and business.

The reflection for the definition of the present action started from the territorial initiatives already in place and from interesting best practices of ecoRIS3 project.

Concerning the first point, at local level CMT will involve, in addition to the University, different subjects/organizations promoting innovation, with the aim of integrating ideas, skills



and energy at the ecosystemic level (in the construction of the model and also in the subsequent interactions). Among the most interesting innovation agents, there are:

- Scientific and technology parks and Regional Innovation Poles (<https://www.interregeurope.eu/ecoris3/news/news-article/1609/piemonte-s-regional-innovation-poles/>), that are coordination structures among the different actors active in the innovation process in a specific sector: innovative start-ups, SMEs, big enterprises, research institutions. The poles give infrastructures and services with a high added value, to stimulate innovation activities through intensive interaction, common use of installations and knowledge and experience exchanges. The aim is to contribute effectively to technology transfer and diffusion of information among the different actors.

The Innovation Poles have their strengths in the concentration of resources, limiting the dispersion of interventions and helping to build an innovation system, characterized by an effective transfer of knowledge, sharing and building mutual competitive advantages.

- University Incubators:
  - 2i3T - Business Incubator and Technology Transfer process at the University of Turin (<https://www.interregeurope.eu/ecoris3/news/news-article/4624/2i3t-business-incubator-university-of-turin/>).
  - I3P, the Incubator of Polytechnic of Turin (<https://www.interregeurope.eu/ecoris3/news/news-article/4945/i3p-innovative-enterprises-incubator-politecnico/>).
- Other bodies created by the “Industria 4.0” National Plan (<https://ec.europa.eu/growth/tools-databases/dem/monitor/content/italy-%E2%80%9Cindustria-40%E2%80%9D>), which, in order to facilitate the encounter between the world of research and companies, has provided for the creation of:
  - *Competence Centres* promoted by the Ministry of Economic Development. These are innovation poles - in which innovative start-ups, small, medium and large companies, research and knowledge dissemination organizations, non-



- profit organizations and other economic operators operate - to support applied business research, in particular those of medium-small size, and constituted according to the model of public-private partnership by at least one research organization and by one or more companies, provided that the number of public partners does not exceed the measure of 50% of the total partners.
- *Digital Business Points* promoted by the Chambers of Commerce,
  - *Digital Innovation Hub* promoted by trade associations.

**The table below shows competences and roles of these bodies on “Technology transfer to SMEs”:**

	<i>Competence Centers</i>	<i>Digital Business Points</i>	<i>Digital Innovation Hub</i>
Diffusion knowledge on technologies “Industria 4.0”		X	X
Digital maturity mapping of companies	X	X	X
Training courses on basic skills		X	
Orientation towards Innovation Hub e Competence Centre		X	
Courses on specific advanced skills			X
Orientation towards digital transformation structures, technology transfer centres and Competence centres			X
High level training through production lines	X		
Development of industrial research and experimental development projects	X		

*Ministry of Economic Development – Presentation of national network “Industria 4.0” - 2017*

To develop the ideas on how to strengthen networking, several good practices of the project were selected: **“Extended Campus Connecting CIT with Industry - Cork institute of Technology - Southern and Eastern, Ireland (Éire)”**, that has been established as an interface or facilitator, to create and support links between CIT, enterprises, and community groups, which is also a goal of CMTTo's Action Plan. Of particular interest are the ways to support the two-way interactions of individuals and organisations with CIT for knowledge exchange, lifelong learning and responsive engagement, the approach and the development of a Customer Relationship Management system interactions with companies.



Concerning lifelong learning, it is of interest the “**Regional network of training courses offer, and enterprise's needs**” where CIM Ave has developed a practice that aims at creating processes for skills anticipation which are responsive to skills demand in the labour market of the region. It is interesting the involvement of different stakeholders of the Ave region such as policymakers and educational institutions to plan their provision of courses, labour market intermediaries including career advisers, young people, jobseekers, employers, education and training providers and policymakers.

Going further to deepen the territorial needs and opportunities, CMTTo took into consideration the idea to create a model of co-management of the research spaces between public bodies, university and enterprises. For this reason an interesting good practice is the “**Co-creation model of the University of Helsinki**” that connects research and business: to enable a knowledge flow from research to business and to work together, a co-creation model was developed at the University of Helsinki within a pilot project. In co-creation, problems are defined and solved in cooperation with different societal actors, such as companies and researchers, i.e. people with diverse backgrounds. The researcher identifies the scientific challenges while the company identifies the economic potential. In the pilot, researchers were humanists and social scientists bringing a greater context to the problem. Workshops were organised for researchers and companies where they engage in a dialogue guided by a facilitator. The facilitator and the setting had an essential role in the success of the workshops. In the pilot project, six workshops, that lasted for three hours each, were organised with five companies participating. During the workshops, joint research interests could be identified.

The co-creation can be considered as a part of a product development loop. During the workshops, research questions are defined. After the workshops a research concept can be built which can finally convert into a product development project.

Some of the outcomes of the co-creation pilot are spin-off activities, e.g. cooperation between one company and researcher has led to a research project where the company acts as a living lab. Moreover, the pilot has succeeded to connect humanities and social sciences with companies, which doesn't take place often.



Another good practice taken into consideration is the “**Grand Poitiers Technopole - Aquitaine, France**”, that aims at supporting public and private enterprises projects with high potential of development, boost new talents and remove the existing gap between R&I institutions &SMEs (objectives 1. An incentive for innovation (start-ups creation and innovative enterprises and development of innovations in SMEs). 2. Accompany and train entrepreneurs. 3. Innovate & anticipate (support Higher Education and Research centres). 4. Promote and communicate (promotion in the territory of business associations, economic sectors within national sectors and competitiveness clusters). 5. Support externalisation activities)

This best practice contains ideas that can be transferred in CMTTo local contest, adapting them to the local innovation ecosystem and to the existing institutional entities (such as innovation clusters and business incubators at university level).

About the technology transfer between research and enterprises, the good practice “**IntoA! Lean Business (IntoALB)**” was considered. It proposes an interesting methodology linking university spin offs to medium & large enterprises (MLEs) as a way of reinforcing economic renewal (it's a bottom up effort to populate a regional ecosystem by linking it to the larger businesses).

Finally, for the construction of ways and services to support the innovation in micro and small enterprises, tools and methods used in other local contexts, such as “**Technological Vouchers**” promoted in San Sebastian, resulted of some interest.

## ACTION

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### Objective

CMTTo intends to design a model of co-management of a university space (situated in Grugliasco town) based on the quadruple helix: an experience of dialogue between public bodies, universities, companies, etc. to facilitate the access to the research laboratories of companies and above all of micro-enterprises, and to create occasions of shared training and dialogue, also with the Third Sector.



### THE UNIVERSITY CAMPUS IN GRUGLIASCO

*A new campus will be created in a little town near Turin, Grugliasco. The Campus will be a scientific hub, conceived to create an ideal context for the development of potential synergies between the Departments of Agricultural, Food and Forestry Sciences, Veterinary Sciences, Chemistry, Physics, Life Sciences and Biology of the Systems, Earth Science, and between the University and the territory. A hub that can act as a meeting service between companies and researchers, connecting the research potential of the Departments, skills and resources with local industries and institutions (agencies, etc.). The Campus will act as a showcase of innovative companies, points of connection between companies and laboratories and research groups, meeting area.*

The goal of the initiative is on the one hand to encourage the use and sharing of laboratories on the part of universities, public organizations, enterprises and citizens and, on the other hand, to promote further investments in laboratories and equipment, which are functional for the development of research activities of interest to the business system.

The ambition is to reduce the fragmentation and dispersion of public and private equipment and to stimulate open innovation (closely linked to regional S3), through the strengthening of collaboration between companies and public research facilities and the sharing of open access infrastructures, in close connection with the demand of companies.

The long-term objective is to make the area more attractive, both for potential investors and highly qualified human resources.

The definition and subsequent experimentation of this model of co-management could lay the groundwork for the future establishment of a Regional Network of laboratories in the territory, which would make it possible to make the fruition by the companies, the subjects operating in the territory and the system of complete and transparent research. In the long term the establishment of a network would allow a greater internationalization of the research system through the participation in European and international networks and the development of interregional and international collaboration projects to seize and develop new projects of interest for the subjects of the territory, promote exchanges knowledge and promote regional skills and experience in the areas of research and innovation.



The CMT, the University and the local actors involved in the action will pay attention to link this action to all the initiatives for the promotion of innovation, internationalization and local development, carried out within the ambit of the industrial, territorial and community policies, national and regional, with the idea that the degree of international openness of local systems positively influences their ability to absorb and generate innovations.

At university level, the initiatives promoted through this action will be closely coordinated with those carried out for technology transfer and business creation, as well as for the internationalization of local businesses.

### **Phases of the action**

- 1. Study phase for the definition of ways of collaboration of CMT with the University of Turin for the use of shared spaces in the new scientific centre - Campus of Grugliasco.**

*1.1 Analysis of good practices considered more interesting and transferable*

*1.2 Joint reflection on forms of collaboration and management methods.*

The reflection will primarily involve the university, then:

- trade associations,
- leading companies in the area
- professional orders.

The reflection will cover:

- legal form, definition/availability of spaces, specific ways for sharing infrastructure, scientific instruments and experimentation facilities such as buildings, rooms, laboratories, common areas, etc ... with the aim of ensuring efficiency;
- ways of interaction with enterprises and local actors of innovation, defining a model of how academic institutions and industry can work together to bring better solutions to global scientific challenges and offer an attractive environment for companies, foreign investors, young talents and researchers. The innovation Poles - important agents of innovation in the regional territory – and the university Incubators will try to



find and develop ways to soften the existing and evident separation between start-ups and industries;

- ways to focus the interventions on SME (in particular micro-enterprises). The facilitation of collaborations between companies and researchers is considered very important to promote the competitiveness of the territory and the development of applied research, to allow local small and medium enterprises to obtain a better quality of technology, thus accelerating their economic growth. In the definition of the ways of interventions, a special focus will be put on dialogue between micro businesses and universities. In fact, if for large companies is normal to dialogue with universities to test their products, CMTTo intends, without excluding large companies, to focus on dialogue with micro-enterprises, that make innovation internally, without sharing it, knowing that the ability to collaborate and enhance the social capital of companies is a discriminating factor in the paths of dissemination of innovation. Furthermore, it would be important to promote open and collaborative innovation processes between large industrial groups and micro-small businesses in the area: creating synergies and partnership agreements between companies would in fact allow smaller companies to identify technological solutions that meet concrete needs related to product innovation or processes.
- Reflection on the Third sector and innovation. The social sector also needs innovation; indeed, in the Third Sector it is difficult to carry out significant projects without creating a system and without using digital technologies: it will be necessary to reflect on the role of digital transformation in the production of social value and to evaluate the opportunities offered by digital innovation in terms of management of non-profit organizations, of resources and financial flows (for example one can evaluate the potential of technologies as a dashboard for forecast analysis and planning on the territory).
- Information sharing:
  - how to define the mapping of existing laboratories, instruments and services;
  - preparation of information about services that allow to grasp also the "unusual" connection between instrument and the industrial sector to which it belongs,



- which for this reason will be a source of innovation and creation of added value for users;
- realization of an information/communication tool on the mapped technical infrastructures and on the access modalities through specific regulations, hopefully consultable online.

### Output

- ✓ Document on the hypothesis of a co-management model.

#### 2. Joint reflection on necessary training and occasions of implementation.

Deepening the specific needs related to the implementation of the co-management model and to the subjects involved, consideration will be given on the opportunity to concretely implement (and therefore use as a testing moment) some training / exchange moments related to:

- ways of increasement of public engagement. In the model activities will be taken to improve knowledge of public procurement/public spending to encourage innovation (for example the connection with corporate venture capital, in synergy with the regional policy instrument) and of European funding and specific international projects;
- strengthening of managerial and commercial skills of researchers and entrepreneurs;
- sharing the characteristics of the defined co-management model;
- moments of mutual learning.

### Output

- ✓ Document on the necessary training and specific initiatives to be implemented.

## PLAYERS INVOLVED

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Metropolitan City of Turin, University of Turin, Grugliasco Municipality, Business Incubators (I3P, 2i3T), Piedmont Region



Others: Turin Chamber of Commerce enterprises, other actors involved in the local innovation ecosystem, Bank foundations, City of Turin, Polytechnic of Turin, Innovation Poles, Public and Private Research Centres.

### TIMEFRAME

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	I sem 2020	II sem 2020	I sem 2021	II sem 2021
Activity 2.1		X	X	September
Activity 2.2		X	X	September

### COSTS

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Costs of internal staff of CMT, any external consultancy. Euro 40.000

### FUNDING SOURCES

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CMT budget resources



**ACTION 3**  
**COORDINATION OF INITIATIVES IN SUPPORT OF THE CREATION  
AND SCALE-UP OF MICRO-ENTERPRISES AND STARTUPS**

**THE BACKGROUND**

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The results of the 2014-2020 planning policies implementation in Piedmont, in particular those of the ERDF Axis 1 relating to the S3, show a tendency to reinforce innovation projects not only on the two main drivers identified by the piedmont S3 (digitalization and circular economy), but also on a third factor of innovation, health: numerous projects have been carried out in the "**health**" area (the S3 has - as indicated in the policy contest - identified an area of innovation called "Health and Welfare").

Health is part of a theme that the new programming of cohesion policy 2021 - 2027 considers relevant: one of the four unifying themes identified is in fact that of the **homogeneity and quality of services for citizens**. The dimension of individual and collective well-being appears to be strongly linked to the availability of services that people and communities can benefit from. And the services that are relevant in the policy debate are understood on ever-widening perimeters in terms of type and characteristics. Among the types of services that can be identified through the specific objectives established in the new fund regulations for the five policy objectives of the general regulation, there are some health services.

Furthermore, it is necessary to consider that, with reference to digitization, Piedmont is among the reference regions, as well as in terms of diffusion of new digital technologies, also in the field of structures for the diffusion and technology transfer or dedicated to research and innovation in the field digital.

Speaking of health technologies, the regional S3 area of innovation Health and well-being has identified among the main challenges of Piedmont those linked to the demographic dynamics and to the retreat of the welfare - with the consequent need to cope with changes in needs and redesign the offer of services.



In the ROP ERDF, this area has been declined mainly in the "industrial" sectors of biotechnology and the pharmaceutical industry, as well as through a line dedicated to social innovation projects. This conception, which focuses on interventions and resources in limited or clearly identifiable perimeters, does not fully take into account the wider transformations concerning products/services of the emerging economy and the growing demand for solutions for collective life (e.g. quality of public services, land management and natural resources) and individuals, which include various services aimed at people and their abilities. Certainly, in this perspective, the development of medical-health technologies and care services - which include highly specialized hospital departments such as territorial light health facilities - constitute the technological "core" of a much wider health chain. The digitization process that has affected the 4.0 paradigm is also widely applied in the field of health technologies: today, as never before, innovation has placed itself at the service of care, enabling people, data and technology to be connected.

From augmented reality during the execution of interventions, to telemedicine solutions to assist patients remotely, to artificial intelligence to carry out predictive analyses and new robotic tools able to favour the rehabilitation process, highlight the beginning of an epochal turning point driven by companies and research institutions that are investing in cutting-edge projects with already tangible results.

The "value-based healthcare" represents a totally new strategic approach to the improvement of health systems by using IT solutions and models to integrate the hardware (databases and devices), the software (analysis tools), the services and the rules on the access to data to allow the different actors of the health system to always be connected and share information.

The health system is called upon to seize the opportunities offered by the digital revolution to face the challenges that are looming on the horizon of a sector characterized by strong regulatory constraints and by a society in which the increase in life expectancy is leading to a large gap between available health resources and real needs.



## TELEMEDICINE IN PIEDMONT

*In Piedmont, where demographic dynamics are strongly marked by aging, telemedicine services play a decisive role in responding to the conditions of fragility and chronicity of the elderly population that has greater need for continuous assistance, highly complex care pathways, increasing difficulties in accessing care places, which impose on the caregivers additional social costs for the accompaniment.*

*A survey conducted by the Regional Department of Health in collaboration with a research institution (IRES Piemonte), surveyed 45 telemedicine projects launched in the Piedmont area at 2017. The survey showed that most of the projects (58%) have existed for more than 3 years and that over half of the initiatives (24 projects) are concentrated in the metropolitan area (only in 8 cases is the service included in the corporate act of the ASL of belonging).*

*The most widespread services include teleconsultation, tele-examination, tele health cooperation, telemonitoring, remote reporting, remote assistance and tele-rehabilitation.*

*Most of the initiatives concern the provision of care in the ordinary regime, especially in the cardiological and endocrinological field (diabetes). The telematic connection services used are divided almost equally between services on the fixed network, on the wireless network and on the mobile network. About a third uses a combination of network services. Many projects (36) provide for data protection measures.*

*The financing of the initiatives is ensured in equal parts by public funds (38%) and private funds (40%) and almost all the projects carry out training initiatives both for health personnel and for patients and family members.*

In the framework of ecoRIS3, eHealth topic was of particular interest for the CMT0 that decided to construct the June 2019 seminar with all the other partner active on it:  
<https://www.interregeurope.eu/ecoris3/events/event/2719/ehealth-and-ecosystem-seminar/>.

Among the best practices of ECORIS3, CMT0 focused on **Biodonostia** (<https://www.interregeurope.eu/policylearning/good-practices/item/2135/biodonostia/>).

San Sebastian local authority is promoting innovation in the public health services to tackle new challenges related to aging and improvement of quality of life, in association with BIODONOSTIA, the first institute for health research in the Basque Country.

BIODONOSTIA develops its activity by promoting biomedical research, epidemiological, public health and health services, by scientifically supporting the programs and policies of the health system and promote transnational research, aimed at accelerating the transfer of scientific knowledge to clinical practice, in the territorial area of Gipuzkoa.

Local entrepreneurs and companies seeking a biotechnological health component or biomedical related innovative business idea can apply to the technological vouchers. The services provided by BIODONOSTIA includes:

- Laboratory & Research support services in the field of sanitary biotechnology,



- Innovation support services to transfer final products to the market, with the objective that these ideas can become products or services that add value to the Health System and Society

Companies awarded with the technological vouchers can get up to 12.500 euro.

In addition to the technical support, services provided by Biodonostia Fomento San Sebastian offer to the selected projects tailor made innovation support services to promote the consolidation and internationalization of the SMEs applicants. This accompaniment is gathered on a "Road Map" plan that will be designed jointly with BIODONOSTIA and Fomento de San Sebastián.

As the SWOT analysis carried out among the local stakeholders of the local innovation ecosystem within the framework of ecoRIS3 has pointed out, SMEs tend to have limited exposure to public knowledge providers such as universities and research organisations. Thus, one of the main purposes of the BIODONOSTIA' Support aids Programme is to build new relationships between SMEs and research institutions which:

- a) Stimulate knowledge transfer directly;
- b) Act as a catalyst for the formation of longer-term more in-depth relationships.

BIODONOSTIA's technological vouchers are intended as pump-priming funding through which initial industry-research centres relationships will be established. The issuing of the voucher has two main impacts, both of which overcome major incentive barriers to the usual engagement between SMEs and knowledge providers. First, it empowers the SME to approach knowledge providers with their innovation/technological-related problems, something that they might not have done in the absence of such an incentive. Secondly, it provides an incentive for the research centre to work with SMEs when their tendency might either have been to work with larger firms or to have no industry engagement at all.

The Biodonostia experience is very similar to an experimental idea that CMT0 would like to pursue in its own territory (presenting a **pilot action** within the ECORIS3 project in collaboration with Fomento de San Sebastian), linked to the diffusion of health services using internet (broadband) in the municipalities more peripheral in the metropolitan area. This choice starts from the observation that in Italy, in addition to the gaps between the macro-areas of the Country (North-South), there are significant disparities in the supply of services also within the cities, in particular between the centre and the suburbs (i.e. between



richer and vocal areas, and weak areas with low pressure capacity), and between cities - urban poles and rural-internal areas. The difference in density and quality of services is itself an indicator of poor cohesion and its persistence not only signals inequity and static inefficiencies, but also generates perverse dynamic trajectories. Many territories lose important development opportunities, because services are themselves a factor of development and their inadequacy does not attract individuals and businesses of greater value as they could. However, a negative dynamic is also created for the citizens of these territories: those who can move towards relatively better served situations and those who remain lowers their expectations or are forced to suffer behaviours of worse or less complete public management.

CMT considered important to outline a pilot action on e-health in a peripheral area of its metropolitan territory that will be identified.

The pilot action proposed (*E-health Territorial LAB - Local ecosystem as an instrument to scale up innovative local start-ups in ehealth topic*) is aimed to test a four helix horizontal place-based approach, as in the framework of ecoRIS3 project: public sector, civil society, RTO and high education, SMEs and industries involved together to improve citizens life.

The supply of eHealth services will take place in a specific territory identified in the metropolitan area.

## ACTION

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### Objective

The aim of the action is to promote a shared reflection on the possible promotion of e-health for the local development and wellbeing: digital technologies are bringing the opportunity to completely innovate the entire healthcare sector, putting patients at its centre. E-health technologies, products and services offer great opportunities to change clinical practices, increase the well-being of citizens and could radically change the way health and care services are delivered to patients.

The beneficiaries of these transformations won't only be people and professionals but also the sustainability of local healthcare system which if coupled with a new paradigm of health care management that encompasses the entire life of citizens from prevention to active



participation of elder people and chronic patients to the society and passing through the capability to predict pathological situations and to personalize the treatment (4P paradigm).

### Phases of the action

This action is divided in 4 phases of implementation.

1. **Internal analysis on e-health issue** will be developed in terms of:

- systemic opportunities and constraints. The “rule breaking” potential of innovations developed by innovative companies and start-ups coupled with a continuous empowerment of patients and citizens can completely change the scenario of health. However today, citizens cannot yet fully benefit from such innovations: market fragmentation, lack of standardization and lack of interoperability across health systems stand in the way of this transformation. Regulatory issues, privacy issues, reimbursement issues, business models are still affecting the capability to develop sustainable solutions.

The need to intervene at different levels concern, e.g.:

- ✓ Develop shared data infrastructures.
- ✓ Make possible for citizens to access in a secure mode health data across borders.
- ✓ Develop technologies and solutions to make possible a real person-centred care.
  - Develop new ways to “introduce” digital innovation in territorial and national health care systems.
- new European programming and related funding opportunities. The new multi-year European financial framework has a strong health dimension: health policies will be financed both through targeted funding (component of the ESF +) and through other financial instruments.

Funding for health-related activities will be made available through the Social Fund, resources for research and the digital market, regional and cohesion funds and other support mechanisms, increasing the impact of health policies.

The Health component of the FSE + program will support public health policies with the aim of ensuring a high level of health protection in the Union. It should also



complement other ESF + interventions in addressing health challenges identified within the European semester.

The inclusion of health in the ESF + will bring about new and strengthened synergies with the other components of the European pillar of social rights. The new ESF + architecture not only allows a specific chapter on health to be maintained, but also supports the integration of health into other related policies and coordination between complementary lines relating to health.

To amplify the impact of the EU budget on health policies, priorities in this field will also be addressed by other EU financial instruments (e.g. the European Regional Development Fund, Horizon Europe, Digital Europe, the InvestEU Fund, the mechanism to connect Europe, etc.).

- strengthening of the ecosystem. The general reflection will be based on the assumption that these challenges have to be based on the capability to develop and adopt innovations on a large scale: all the actors (national and regional authorities, health and social workers, industry, patients, service providers, researchers and EU institutions) should be involved in creating a “triple win” for the benefit of people, health systems and the market.

Furthermore, a reflection will be developed about the need / possibility to create a specific Digital Health Ecosystem in Piedmont, imagining to create ways or instruments for dialogue and collaboration between the main stakeholders of Piedmont that operate on the Digital Health theme, to accelerate the financing of technical solutions in the sector through support for innovation and long-term investment but also to favour the international linkages.

#### Output:

- ✓ In-depth materials on e-health and new European programming.

#### **2. Reflection about a model of experimentation on the specific local contest of e-health services**

Starting from the initial assumption that the engagement of the local stakeholders (as services providers, hospitals, associations, our incubators that already work in the



metropolitan area as representative subjects for the innovative start-ups) and the linkage of the territorial ecosystem is the very key to generate impact, it will be defined a model of local experimentation to test a methodology letting the innovative start-ups (some of them funded by ecoRIS3 Policy Instrument) enter in touch with the local ecosystem (four helix approach) playing a role of “test bed” for their innovations, acting also as “accelerators”.

Therefore, a reflection will be shared on the ways to create the right social and technological context to allow the local innovative start-ups to build the eHealth service providing network, in collaboration with, of course, the service providers belonging to both private and public sectors.

**Outputs:**

- ✓ Model for the local experimentation
- ✓ Detection of the local contest for the experimentation.

**3. Place-based 4helix e-health LAB**

A place-based laboratory will be created in order to shape innovative and business-oriented e-health services (identified during the first activity of the project), to be delivered and tested on a real environment. The LAB will involve all the 4helix components, the public sector providing health & healthcare services to the citizens & the start-ups. The LAB will be organised in a specific territory, identified because it has the right features in terms of skills and infrastructures (broadband).

In this activity it will be fundamental the participation of Fomento San Sebastià, to integrate their experience (Biodonostia good practice) in our activity.

**Outputs:**

- ✓ Minutes of the LAB;
- ✓ A list of e-health services/products ready to be tested are identified.
- ✓ Methodological guide to facilitate the replication of the pilot approach



#### **4. Proof of concept phase and report**

Activity 3 will be followed by a proof of concept, in which the e-health services/products previously identified will be tested on a real environment. The economic sustainability, the public sector and the user's community response will be tested.

##### **Output:**

- ✓ A set of indicators in order to evaluate the pilot results.
- ✓ Mini-pilots identified, prototyped and tested
- ✓ Methodological guide

#### **PLAYERS INVOLVED**

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Metropolitan City of Turin

Others: Piedmont Region, Business incubators (I3P, 2i3T), Turin Chamber of Commerce, University of Turin, Polytechnic of Turin, Innovation Poles, public and private research centres, enterprises, other actors involved in the local e-health innovation ecosystem, bank foundations.

#### **TIMEFRAME**

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	I sem 2020	II sem 2020	I sem 2021	II sem 2021
<b>Activity 3.1</b>	June	X		
<b>Activity 3.2</b>	June	X		
<b>Activity 3.3</b>	June	X	X	September
<b>Activity 3.4</b>		X	X	September



## COSTS

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Costs of internal staff of CMTTo, any external consultancy

Travel

Euro 100.000 (80.000 financed through the pilot action)

## FUNDING SOURCES

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CMTTo budget resources

Interreg Europe program (pilot action)



Date: 01/07/2020

Metropolitan City of Turin

Councillor Dimitri De Vita

Signature:



Stamp of the organisation:

