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EUROSYN

Improve innovation services for SMEs by enabling synergies between R&D&I European funds

The aim of the project is to collaboratively address a common innovation support challenge; namely to improve the use of public funds for R&D&I enabling synergies between ESIF, H2020 and other funds. Intermediary organizations offering support services on funding opportunities to SMEs are relevant actors in this process from two main points of view: 1) they can help policy makers in the development and application of the synergies, 2) they can support SMEs in the correct use of public funds for R&D.

The Peer learning activity will serve to learn from the best and to share good and bad practices in funding opportunities support services. The Design Option Paper will serve as a "guide" or a "handbook" to other agencies and business support centres to provide similar and/or more focused services on funding opportunities support.

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FRIULI innovazione
Research and Technology Transfer Centre

FORSCHUNG Burgenland
RESEARCH & INNOVATION

KEPA
BUSINESS & CULTURAL DEVELOPMENT CENTRE

Deliverable D1

DESIGN OPTIONS PAPER

"Improve innovation services for SMEs by enabling synergies between R&D&I European funds" - EUROSYN

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DISCLAIMER

The contents of this document and the views expressed in this report are of the sole responsibility of the authors and the EUROSYN project team. They under no circumstances can be regarded as reflecting the position of the European Union or of the Programme's management structures and in no way commit the involved organisations.

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Key personnel of the collaborating organisations and external experts contributed in the present DOP; namely the following persons (in name order):

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EXECUTIVE SUMMARY

The basic EUROSYN concept is to peer-review public funds for R&D&I and support programmes for SMEs in order to improve their use by **enabling synergies between ESIF, H2020 and other funds**. The project has been implemented by three Innovation agencies (Friuli Innovazione – Italy, KEPA - Greece, Forschung Burgenland GmbH - Hungary) holding a strong background regarding the delivery of services to support eco-innovation for SMEs. All the three partners have been successfully participating in several national and international level EU funded projects, dealing with the elaboration of mid/long-term strategies, specific policy recommendation papers concerning and sustainable development issues as well as designing and implementing regional level innovation support programmes for SMEs.

This Design Options Paper (DOP) is the result of a peer-review process realized by the three regional innovation agencies and partners in the EUROSYN project about the following topic: *how to improve the use of public funds for R&D&I enabling synergies between ESIF, H2020 and other funds*. The document has been developed through the Twinning Advanced Methodology (Twinning+), which has the potential of bringing many benefits to the participants by giving them the opportunity to share problems, exchange knowledge and understand different viewpoints. In this way, the DOP identifies and documents the existing options, guidelines and implementation alternatives that EUROSYN partners have experienced and would recommend to other agencies interested in implementing the proposed best practice.

In the beginning in this document, you will find an overview of the project, its goals and partners while you will be also informed about the challenge in place. Next, partners present the breakdown of the ecosystems needed, and how it affects the setup of services to SMEs that want to innovate. Later, the readers can find the methodologies used in order to come up with the final outcome of the project –this DOP- while next they can find useful information on the Innovation Funnel and recommended services to be offered by other similar innovation support agencies. Moreover, partners presents in the last main DOP's part with the outputs of the pilot action and give feedback on the interaction with the participating SMEs, while in the end of the present DOP there are a list of sources, images, useful links, and the templates of the tools used during the implementation of the pilot actions, in case any innovation support organisation wants to replicate the intervention or some features of it.

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GLOSSARY OF TERMS

TERM	USED IN DOP AS:
Coherence	Where two or more distinct policies or programmes are logically consistent and do not counteract each other.
Design Options Paper (DOP)	The DOP is intended as a guide or tool for the innovation agencies, department or similar organisations for the development of an innovation support activity.
EEN	European Enterprise Network. The Enterprise Europe Network helps businesses innovate and grow on an international scale. It is the world's largest support network for small and medium-sized enterprises (SMEs) with international ambitions. The Network is active in more than 60 countries worldwide. It brings together 3,000 experts from more than 600 member organisations – all renowned for their excellence in business support.
ESIF	The European Structural and Investment Funds. Namely they are are: the European Regional Development Fund, the European Social Fund, the Cohesion fund, the European Agricultural Fund for Rural Development, European Maritime and Fisheries Fund.
H2020	Horizon2020 (H2020) is the EU Framework Programme for Research and Innovation.
Innovation agencies	Any entity that is designing or delivering innovation support programmes to SMEs.
R&D&I	Research and Development and Innovation.
SMEs	Small and medium-sized enterprises (SMEs) are defined in the EU recommendation 2003/361. The main factors determining whether an enterprise is an SME are: staff headcount and either turnover or balance sheet total.

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1. GENERAL INTRODUCTION TO THE PAPER

1.1 Background of the paper

This **Design Options Paper (DOP)** is the result of a peer-review process realized by the three regional innovation agencies & project partners in the EUROSYN project consortium (Friuli Innovazione – Italy, Forschung Burgenland – Austria, KEPA - Greece). The peer learning activity focused on peer-reviewing public funds for R&D&I and support programmes for SMEs in order to improve their use by enabling synergies between ESIF, H2020 and other funds.

The present DOP has been realized through the **Twinning Advanced (Twinning⁺) Methodology**, a methodology taking place between two or more entities, which can bring many benefits to the participants by giving the opportunity to share problems, exchange views and understand different viewpoints. The Twinning⁺ Methodology not only facilitates transferring good practices among agencies, but it provides opportunity to design and implement better practices about a common innovation support challenge.

1.2 The lack of synergies for R&D&I - The challenge

Most countries across Europe are facing difficulties and challenges on market- , or social-oriented (or both) issues, like economic crisis, jobs reduction, climate change, energy inefficiency, public budget constraints and increasing global competition among them. European Commission has identified that Innovation is the answer to the abovementioned issues, and this is mirrored in its placement at the heart of the Europe 2020 strategy.

Even though Europe has many leading researchers, SMEs, and unique capacities, resulting in world-changing innovations, it seems that its member states can not fully support innovation through their structures. This is identified by the European Commission, which has diagnosed that SMEs benefitting from innovation support programmes, still often remain dissatisfied with the services received.

What we –as innovation support agencies- must do, is to step up, build on our strengths and tackle our weaknesses, in order to keep european SMEs in our entrepreneurial environment.

Back in 2010, European Commission had already identified those action that could lead to the achievement of the goals set in its **Europe 2020 Flagship Initiative Innovation Union**[1]**:**

1. *In times of fiscal constraints, the EU and Member States need to continue to invest in education, R&D, innovation and ICTs. Such investments should where possible not only be protected from budget cuts, but should be stepped up.*
2. *This should go hand in hand with reforms to get more value for money and tackle fragmentation. EU and national research & innovation systems need to be better linked up with each other and their performance improved.*
3. *Our education systems at all levels need to be modernised. Excellence must even more become the guiding principle. We need more world-class universities, raise skill levels and attract top talent from abroad.*
4. *Researchers and innovators must be able to work and cooperate across the EU as easily as within national borders. The European Research Area must be completed within four years - putting in place the frameworks for a truly free movement of knowledge.*
5. *Access to EU programmes must be simplified and their leverage effect on private sector investment enhanced, with the support of the European Investment Bank. The role of the European Research Council should be reinforced. The framework programme's contribution to nurturing fast-growing SMEs must be boosted. The European Regional Development Fund should be fully exploited to develop research and innovation capacities across Europe, based on smart regional specialisation strategies*
6. *We need to get more innovation out of our research. Cooperation between the worlds of science and the world of business must be enhanced, obstacles removed and incentives put in place.*
7. *Remaining barriers for entrepreneurs to bring "ideas to market" must be removed: better access to finance, particularly for SMEs, affordable IPR, smarter and more ambitious regulation and targets, faster setting of interoperable standards and strategic use of our massive procurement budgets. As an immediate step, agreement should be reached on the EU patent before the end of the year.*
8. *European Innovation Partnerships should be launched to accelerate research, development and market deployment of innovations to tackle major societal challenges, pool expertise and resources and boost the competitiveness of EU industry, starting with the area of healthy ageing.*

[1] COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Europe 2020 Flagship Initiative Innovation Union SEC(2010) 1161

9. *Our strengths in design and creativity must be better exploited. We must champion social innovation. We must develop a better understanding of public sector innovation, identify and give visibility to successful initiatives, and benchmark progress.*
10. *We need to work better with our international partners. That means opening access to our R&D programmes, while ensuring comparable conditions abroad. That also means adopting a common EU front where needed to protect our interests.*

Many of them are already in place in many members states, while others are lacking behind. What we can do –and this was the goal of the specific project- "to put our two cents in" in order to make Innovation Union a reality, is to work on adapting on the needs of the potential beneficiaries needs and offer them a variety of tools and services, that will lead them make use of the appropriate funding sources in order to innovate. At the same time, it is our duty to communicate that needs to the policy making side, in order to trigger the creation of those funding concepts that help SMEs transfer their ideas-proposals or some elements of them in different but interrelated programmes.

Towards these goals, the DOP identifies and documents the existing options, guidelines and implementation alternatives that EUROSYN partners have experienced and would recommend to other agencies interested in implementing the proposed best practice identified.

1.3 Structure of the paper

The present Design Options Paper was designed and structured during the peer-learning activities along the project implementation and in particular through two workshops that took place in Eisenstadt and Udine. During these two 2-days workshops, the three project partners and relevant stakeholders exchanged expertise concerning how to improve SMEs access to funds for improving their R&D&I rates as well as how to transfer good practices into support programmes for enhancing R&D&I in SMEs. Afterwards, through conference calls and on a remote basis, the partners developed the contents of the DOP, in order to realize a useful and practical guide for other organizations interested in the topic.

Throughout this DOP, you will find the background of EC's strategy, goals and mechanisms to support innovation, information regarding the challenge of enabling synergies between different funds, advices on innovation support services towards

SMEs, the EUROSYN experience and how partners implemented the project and their conclusions.

1.4 Project goals

EUROSYN projects aims to help other innovation support agencies, managing authorities and policy makers to better understand the added-value of enabling synergies between R&D&I European funds, in order to achieve innovation progress and enhance competitiveness and sustainability in their respective Regions' SMEs. In order to achieve this overall objective, project partners set smaller objectives that led to the realization of the main outcome of the initiative, the DOP. This was EUROSYN's goal, to end up with a guide, which will provide useful information and advice to similar people and agencies on how to enable synergies that lead to further innovation opportunities to the audiences they serve.

1.5 Project partners

Founders and shareholders of Friuli Innovazione are the University of Udine and other local partners, both public and private, representing industry associations, public administrations and research institutions. In 2004 it was appointed by the Autonomous Region Friuli Venezia Giulia to manage the Luigi Danieli Science and Technology Park of Udine, which hosted more than 60 tenants so far. Friuli Innovazione main areas of intervention are:

- technology transfer: to promote and facilitate the collaboration between enterprises and the scientific and technological research network;

- business financing: to inform, educate and support enterprises and researchers to identify the most appropriate finance instruments for their research projects and assist them in all the application procedures;

- business start-up: to support and assist the creation of high technology enterprises;

- hosting service for enterprises willing to establish their headquarter or the R&D department at the Science and Technology Park "Luigi Danieli".

Friuli Innovazione is an innovation agency that acts to develop and implement at regional level a shared strategy and objectives in innovation and technology transfer and it is a major player of the cross border macroregion between Italy, Slovenia, and Austria. Its mission is to support the creation of innovative businesses through its own incubator and to deliver support programmes to companies, in particular SMEs to gain competitiveness thanks to the introduction of product and/or process innovation. In 2011 Friuli Innovazione won an important 3 years long project called "FVG R2B – Research to Business" - funded by the Friuli Venezia Giulia region - to deliver services to manufacturing industry for implementing research results or start R&D programmes. In order to support companies in all the phases of a research project, Friuli Innovazione is also member of the APRE network (APRE is the National Agency for the Promotion of European Research – www.apre.it) and it hosts the APRE regional help-desk in Udine.

The APRE Udine help desk is entitled to give information and support to companies and researchers about the funding opportunities for R&D mainly within Horizon2020. Currently, it's helping the Regional Government in defining the correct synergies to be applied with other available funds.

Considering all the above information it can be said that Friuli Innovazione is an innovation agency with a strong interest in developing its own service quality, entrusted by the regional and local administrations to support SMEs development.

In the last 10 years, it improved its project management expertise thanks to the participation in numerous national, regional and EU R&I projects, acting as project partner as well as project coordinator. Friuli Innovazione evaluates as fundamental the experience in international consortia with other innovation support organizations because it allows the exchange of good practices and new approaches, necessary to improve continuously the service offered.

Forschung Burgenland GmbH is the operative research organization of Burgenland. We do research to solve problems and improve people's lives.

We are the team of the University of Applied Sciences Burgenland and Forschung Burgenland, the university's research subsidiary. Our research projects develop along the requirements that arise in our teaching environment. The 100%-subsidiary Forschung Burgenland is solely dedicated working on R&D-projects. In our research centers, research emphasizes on topics that come from teaching or go into teaching at our institution.

The CENTER FOR BUILDING TECHNOLOGY and the CENTER FOR HEALTH AND WORK RESEARCH are our first core research centers. In 2017 the CENTER CLOUD AND CPS-SECURITY and the CENTER FOR SMART ENERGY AND INNOVATION completed the center structure. In addition to that, we do research on heat pump systems of the future and run a group focusing on social science methodology.

Our R&D-activities take place in our facilities in Pinkafeld and Eisenstadt. The research carried out in the University of Applied Sciences Burgenland complements the respective course programs and departments. Currently, we are working on more than 100 researches and consulting projects with an overall volume in excess of 5 million Euro. The research activities range from large international projects with up to 100 partners to pin-pointed on-demand research projects.

In addition to engaging in a variety of research projects, we are also concerned with increasing the public's awareness for the outcomes of research. We are looking at those outcomes from several angles. On the one hand, research directly creates jobs in the region. On the other hand, research sparks a series of indirect outcomes, such as increasing a region's value, the weaving of networks between research, higher education and the economy and boosting the power of innovation in a region.

In 2017, a merger of FTI Burgenland GmbH into Forschung Burgenland GmbH brought additional know how and staff into the company. FTI Burgenland (also owned by the government of Burgenland by 100%) was responsible to implement the RTI strategy of Burgenland.

One of the central objectives of the RTI-strategy is to make the region of Burgenland "fit for the future". Starting with the analysis of the initial situation, the RTI vision

was developed to serve as a basis for defining strategic focus areas and optimal framework conditions. For a prolonged time, Burgenland has built up areas of excellence, i.e., sustainable energy production and supply, building automation and optoelectronics. According to the principle "to strengthen the strengths, but leave room for the new and unexpected", three focus areas for Burgenland have been defined:

- Sustainable energy
- Sustainable quality of life
- Intelligent processes, technologies and products

The timely achievement of the set goals is tied to the consequent implementation of the subsequent strategic areas:

- Development of increased public-awareness for the importance of RTI
- Advancement of available human resources
- Improvement of research infrastructure
- Services for pre-incorporation candidates, start-ups, SME and existing industry
- Implementation of an RTI-coordination entity

The RTI-strategy Burgenland 2025 supports this objective due to the involvement and synergetic connection of all relevant public and private actors on the regional and federal levels, as well as the integration of selected international partners. To that effect, the subsidization activities of the region will increasingly be oriented towards criteria fostering RTI and existing areas of excellence or areas to be developed. Moreover, the activities to raise national and European research and structural funds will be enhanced.

FTI Burgenland and its predecessor BIC Burgenland have been involved in the following European and national projects related to innovative SMEs:

- Interreg Austria – Hungary: "IRIS" (2009-2013), project coordinator
- Interreg Austria – Slovakia: "SmartNet" (2013-2015), project partner
- EFRE: "Innovationsoffensive Burgenland 2020" (2011-2014), lead implementation of innovation support measures

- EFRE: “FTI Strategy Burgenland 2025” (2014), members of FTI Burgenland formed the project team

- FFG (national funding agency): “TZ incubate” (2012-2014), project partner, lead implementation

Business and Cultural Development Centre (KEPA) is an Intermediate Managing Authority of funding programmes for SMEs, acting on behalf of Greek Ministry of Competitiveness and Development (since 1993). It is a non – profit organization, formed in March 1991 by the Federation of Industries of Northern Greece (FING) and Greek International Business Association (SEVE).

KEPA is the Intermediary Managing Agency of Operational Programme Competitiveness, Entrepreneurship & Innovation – EPAnEK (2014-2020) that comes under the National Strategic Reference Framework (NSRF), geographically responsible of the regions of Central and Western Macedonia for designing and implementing programmes dedicated to SMEs development.

In view of ensuring the successful implementation of its work, KEPA has introduced and applies an integrated quality system in the fields of design, application, monitoring and management of development projects, which has been certified in accordance with the ISO 9001:2008 standard. The scope of certification relates to : "Implementation and management of programs funded with planning activities, monitoring and project management, reviewed the submitted investment projects, contract management, testing and acceptance of physical and financial, payments accepted in the end, internal control, information Management Authority, financial management, electronic surveillance application works". Alongside, KEPA in the continued improvement of customer services and management capacity and administrative operation acquired the certificate management competence, in order to be able to undertake management of programs and actions under the NSRF 2007-2013 (Certificate Number : 151.145./PSS 1133 – C).

Overall, KEPA has successfully managed more than 70 programmes (to support entrepreneurship and especially Small and Medium Enterprises that are co-financed by the European Union under the Community Support Frameworks and the NSRF,

concerning the implementation of investments in the sectors of Energy – Construction – Manufacturing – Tourism – Environment – Trade –Training - Service Provision). Through these programmes more than 16.000 projects have been co-financed, amounting a total budget of over 2 billion €.

Throughout its long-standing operation, KEPA has acquired substantial experience in:

- designing and tailoring specific actions that co-finance development activities, both on a geographical and sectorial basis;

- managing national programmes to support entrepreneurship and especially Small and Medium Enterprises.

- preparing sectorial/branch studies and research for the diagnosis of the developmental features and activities of businesses;

- evaluating technical/economic and construction investment/business plans through the creation and use of suitable statistical and IT tools;

- drafting technical/economic reports and proposals for enterprise developmental programmes;

Due to the above experience, KEPA's executives participate in designing and management committees of national programmes, as well as a number of committees set up by businesses at local, regional and national level.

In addition to the management of programmes of the Ministry of Development and Competitiveness for the Central and Western Macedonia, KEPA significant experience in delivering EU projects.

In particular, KEPA is partner in the following currently implementing projects, funded by European Commission.

1. SEE Platform (Sharing Experience Europe - Policy Innovation Design) under the European Design Innovation Initiative (EDII),

2. EDIP (European Design Innovation Platform - Design for Europe) under the European Design Innovation Initiative (EDII),

3. Microstars (Investing in human resources in the cross - Invest in people of the cross-border area) under the third call for proposals of the "Greece - The former

Yugoslav Republic of Macedonia IPA Cross-Border Programme 2007-2013", co-financed under the Instrument for Pre-Accession Assistance (lead partner),

4. TRIGGER under the call for proposals of the Greece - Bulgaria 2007-2013 European Territorial Cooperation Programme,

5. EISS – HORIZON2020 (lead partner),

6. TOURISM ID – HORIZON2020 (lead partner), and

7. SMEs Pipeline – Greece Bulgaria 2007-2013 (lead partner).

1.6 Institutional background

The project proposal relates to the work programme **topic "Peer learning of innovation agencies INNOSUP-5-2016-2017"**. The "improvement of innovation services for SMEs by enabling synergies between R&D&I European funds" has been identified by the project partners as a priority theme in the implementation, by intermediaries organizations, of innovation support programmes for SMEs, in line with the Work Programme 2016 - 2017 "7. Innovation in SMEs".

As a matter of fact, the WP underlines that "*Articles 20 and 21 of the Horizon 2020 Regulation and Article 37 of the Rules for Participation highlight the complementarities and possibilities of synergies between Horizon 2020 and other European Union funds, such as ESIF*".

On the one hand, the European programmes (Horizon 2020, COSME, EUREKA/Eurostars initiative) can support SME innovation from the very early stage to market introduction. On the other hand, "*ESIF (through the Member States' Operational Programmes) holds the potential to help deploying innovative solutions emanating from Horizon 2020 in the regions, supporting SMEs by building the necessary capacity and providing further opportunities for the project development either before, after or in combination with*" the European grants.

On the basis of their previous experiences working with SMEs, the project partners consider the **role of intermediary organizations crucial to enable SMEs to concretely and correctively exploit these opportunities**, enhancing their capacity to boost their research and innovation performance, be competitive on international markets and face global competition.

In the previous years, **all three EUROSYN partner agencies have been successfully participating in several national and international EU funded projects**, dealing with the elaboration of mid- and long-term strategies, specific policy recommendation papers concerning e.g. funding schemes for innovation issues as well as designing and implementing regional level innovation support programmes for SMEs.

This topic creates yet another important opportunity for the partners, in the frame of a mutual/peer learning activity, to share and compare their findings and exploit their project results. The objective is **to create possible synergies and improve the overall and individual innovation support schemes for their SMEs**, both directly on the involved territories and indirectly by providing a Design Options Paper for other European innovation agencies and intermediary organizations.

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2. ECOSYSTEMS NEEDED (GENERIC MODEL)

2.1 Macro / Meso and Micro level

When measuring innovation capability, often it is done from a "bird's eye perspective" taking entire countries into consideration. One tool for measuring innovation capability on a macro-level is the European Innovation Scoreboard[2]. On the other end of the spectrum measuring innovation capability is also done from a "worm's eye view", putting the emphasis on single companies. A tool that employs such a micro-level approach is the Collective Campus Innovation Healthcheck[3].

However, one must consider the "in-between", in other words the "meso-level". Innovation capability can neither be completely explained by only looking at the microeconomic decisions of the individual entrepreneur nor by solely focusing on macroeconomic production factors or tax rates. Rather, the local, regional and social environment of the economic activity and its interrelationships with "related and supporting industries" (comp. Porter, M.E.: The competitive advantage of nations, MacMillan, London, 1990, p. 127) need to be taken into account. In his work, Michael Porter pioneered this trend to examine the layer between "micro and macro" and to consider information, communication and research infrastructure, clusters and co-operative networks as well as formal and informal knowledge-communities as some of the key-factors for competitiveness and innovation. The focus on mesoeconomic analysis also mirrors a trend in economic research and policy and the European Union added a Regional Innovation Scoreboard[4] in order to account for this trend. Hence, for the purpose of this paper three different levels of analysis are distinguished:

- Macro-level analyses will provide an overview on the current state of art regarding the major platforms available at EU and national/regional level supporting the synergy implementation, current state of art on various national programs supporting direct EU funding through the complementary calls and will address some critical aspects in the collaboration between managing authorities.
- Meso-level analysis specifically designed to reveal connections between micro and macro level will take into consideration specific characteristics of the Smart Specialization Strategy implementation and the impact of investments in research and innovation at national and EU level.
- Micro-level analysis as the smallest unit of analysis will provide an overview of three regional structures, their main economic/political characteristic and

[2] http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en
[3] https://www.collectivecamp.us/innovation-audit
[4] http://ec.europa.eu/growth/industry/innovation/facts-figures/regional_en

direct impact of synergy implementation on the SME growth and R&D development.

2.2 Macro / Meso level

2.2.1 Platform

Macro level analysis identifies several factors that need to be taken into account with regards to the theme of synergies between funds supporting the competitiveness and innovative progress of SMES'.

In the first place, we need to recall the scenario offered by "Europe 2020", the Programme of the European Commission with the final objective to turn Europe into a smart, sustainable and inclusive economy delivering high levels of employment, productivity and social cohesion.

Europe 2020 puts forward three mutually reinforcing priorities:

- *Smart growth*: *developing an economy based on knowledge and innovation*.
- *Sustainable growth*: promoting a more resource efficient, greener and more competitive economy.
- *Inclusive growth*: fostering a high-employment economy delivering social and territorial cohesion

Five target objectives have been set to be achieved by 2020:

- 75 % of the population aged 20-64 should be employed.
- 3% of the EU's GDP should be invested in R&D
- The "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right).
- The share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree.
- 20 million less people should be at risk of poverty.

These targets are interrelated and critical to our overall success. To ensure that each Member State tailors the Europe 2020 strategy to its particular situation, **the Commission proposes that EU goals are translated into national targets and trajectories.**

According to the document *"COMMUNICATION FROM THE COMMISSION EUROPE 2020 - A strategy for smart, sustainable and inclusive growth"* released by the European Commission on Brussels, 3.3.2010 "Europe 2020 will rely on two pillars: the thematic approach outlined above, combining priorities and headline targets; and country reporting, helping Member States to develop their strategies to return to sustainable growth and public finances. Integrated **guidelines** will be adopted at EU level to cover the scope of EU priorities and targets. Country-specific recommendations will be addressed to Member States."

The European Commission has set seven **"Flagships"**, seven initiatives structured in programmes and funds for specific activities. Among them, within the priority of reaching a *Smart Growth – an economy based on Knowledge and innovation*, the European Commission aims at strengthening knowledge and innovation as drivers of our future growth and launched the Flagship **"Innovation Union"**, aimed at securing Europe's global competitiveness, by re-focusing R&D and innovation policy on the challenges facing our society, such as climate change, energy and resource efficiency, health and demographic change. Every link should be strengthened in the innovation chain, from 'blue sky' research to commercialisation. The financial instrument implementing the Innovation Union Flagship is **"Horizon 2020"**, the biggest EU Research and Innovation Programme ever with nearly 80 billion of funding available over 7 years (2014-2020), in addition to the private investment that this money will attract. It promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market.

Secondly, we need to recall a key decision of the European Commission that recommends, in the document *"Enabling synergies between European Structural and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programs" - Guidance for policy-makers and implementing bodies (2014)*, that **"…it is of utmost importance to ensure an optimal synergy between the funds** to face the ever increasing competitive pressure from global markets and maximize impact and efficiency of public funding. The European Parliament and Council made it clear that this approach is no more a "**nice to have**" but a "**need to implement**". This political will needs to permeate all layers of stakeholders, at Member State level as well as Commission services level, including intermediaries and facilitators' networks".

Additionally, we need to recognize the role of the **European Smart Specialisation Platform (**http://s3platform.jrc.ec.europa.eu/**),** established by the Joint Research Centre (IPTS) in Seville, that strategically addresses economic development and target support to R&I across EU. The Platform provides advice to EU countries and

regions for the design and implementation of their **Smart Specialisation Strategy** (S3).

Conceived within the reformed Cohesion policy of the European Commission, the **Smart Specialisation Strategy (S³)** is a place-based *approach* characterised by the identification of *strategic areas for intervention* based both on the analysis of the strengths and potential of the economy, and on an Entrepreneurial Discovery Process (EDP) with *wide stakeholder involvement*. **It is a place-based approach**, meaning that it builds on the assets and resources available to regions and Member States and *on their specific socio-economic challenges* in order to *identify unique opportunities for development and growth*; it implies making *choices* for investments because Member States and regions ought to support only a limited number of well-identified priorities for knowledge-based investments and/or clusters. **Specialisation** means focusing on *competitive strengths and realistic growth potentials supported by a critical mass of activity and entrepreneurial resources*. **Setting priorities should not be a top-down, picking-the-winner process; it should be an inclusive process of stakeholders' involvement at all levels.**

The definition of each regional based Smart Specialisation Strategy required clear objectives and measureable deliverables based on a SWOT-analysis and the selection of few priorities and technological sectors.

In order to meet the local needs and promote specific regional technological progress and competitiveness, the local managing authorities should adopt this approach while allocating the public funds to the technological sector within each region and its specific S³ policy.

In the outlined context, after having highlighted the strategy and the tools adopted by the European Commission, the approach of synergy between ESIF and H2020 funds appears to be an essential key tool to optimize the use of funds by SMEs, in order to have more chances to have their innovative projects funded and improve their innovation level and their competitiveness, along with the S³ trajectors.

In the document *"Enabling synergies between European Structural and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programs" - Guidance for policy-makers and implementing bodies (2014)*, the European Commission suggests 4 typologies of synergies:

- **Sequential**: ESIF investment that will stimulate subsequent participation in the Horizon 2020 project "Upstream sequential combination" or through the "downstream sequential combination" Horizon 2020 or FP projects results used for further implementation under the ESIF funds;

- **Parallel:** Parallel projects that complement each other funded through ESIF and Horizon 2020 funds;
- **Alternative**: ESIF programs designed and implemented to act as an alternative funding taking up high quality project proposals from Horizon 2020 for which there was not enough budget available in the respective program
- **Simultaneous/cumulative:** Simultaneous/cumulative funding with the project that has been financed from direct and indirect funding source (for example ESIF and H2020) providing that grants are not covering the same project's cost items.

Some **key requirements** can be identified for getting the best results from the application of *synergies between ESIF and H2020 funds* in the context of the *Smart Specialisation Strategy guidelines*:

- a *long-term commitment of national and regional managing authorities*;
- an *involvement of stakeholders at all levels*, from the SMEs to the funding agencies, from the managing authorities to the national funding programmes and the European Commission;

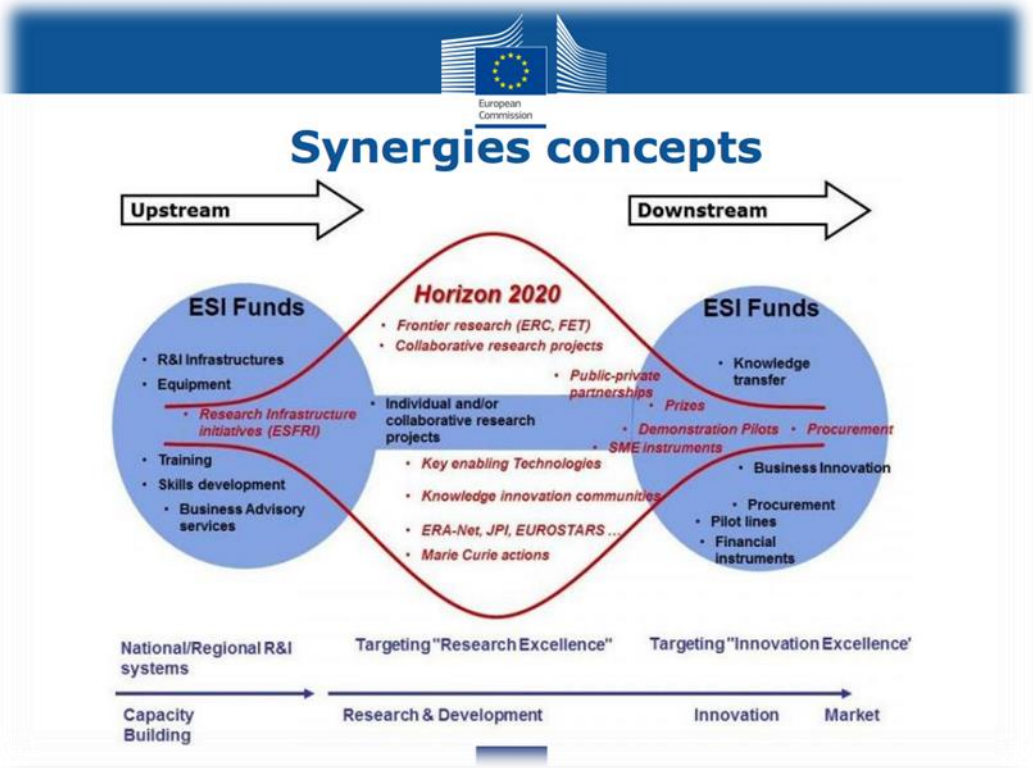
- the role of the *Open Innovation Platforms* as tools that are generally promoted by the regional managing authorities as functional for the systematic process of mapping the existing value chains or the configuration of new development themes indicated by the S3. The Open Innovation Platforms can contribute to the development of emerging industries by enhancing key competences and key enabling technologies in order to meet specific technological challenges identified within each regional strategy.

- **a sound monitoring and evaluation system** as well as a revision mechanism for updating the strategic choices;
- the commitment of managing local authorities to publish **complementary calls**, as it will be further tackled upon in the next paragraph.

2.2.2 Complementary calls

Since the launching of the pilot project "Stairway to Excellence" (S2E) in 2014 the European Parliament (EP) and the European Commission are intended to enhance the synergies in the use of direct and indirect EU funding sources for research, development and innovation taking primarily into consideration the European Structural and Investment Funds and Horizon 2020 as the two major funding sources but also including COSME, ERASMUS+, Creative Europe and other programs.

In 2014 the European Commission published the *guidance for policy-makers and implementing bodies*, entitled the *"Enabling synergies between European Structural and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programs" -Publications Office of the European union*, defining the synergies among programs as "*joint or coordinated efforts to achieve greater impact and efficiency, not only combining European Structural and Investment Funds (ESIF) and Horizon 2020 money to the same project"*[5].



Picture 1: Synergies concepts - Source: The Synergies between Research and Innovation Funding: Stairway to Excellence (S2E) Nicosia, 22 September 2016, Nicholas Harrap European Commission, DG JRC

In fact the document also outlined 4 types of synergies as:

- **Sequential**: ESIF investment that will stimulate subsequent participation in the Horizon 2020 project "Upstream sequential combination" or through the "downstream sequential combination" Horizon 2020 or FP projects results used for further implementation under the ESIF funds;
- **Parallel:** Parallel projects that complement each other funded through ESIF and Horizon 2020 funds;

[5] The Synergies between Research and Innovation Funding: Stairway to Excellence (S2E) Nicosia, 22 September 2016, Nicholas Harrap European Commission, DG JRC

- **Alternative**: ESIF programs designed and implemented to act as an alternative funding taking up high quality project proposals from Horizon 2020 for which there was not enough budget available in the respective program
- **Simultaneous/cumulative:** Simultaneous/cumulative funding with the project that has been financed from direct and indirect funding source (for example ESIF and H2020) providing that grants are not covering the same project's cost items.

In order to enhance the value of two key European Union funding sources for RDI (ESIF and H2020) the ***Stairway to Excellence*** promoted their combination stimulating the implementation of national and regional Smart Specialization Strategies, assisting regions and EU member countries in closing the innovation gap and promoting excellence in all regions and EU countries through the implementation of complementary calls.

Since 2014, the EU regions have defined their ***Smart Specialization Strategies*** setting out their national and regional frameworks for investments in research and innovation, identifying main areas of development with the goal of stimulating projects that have already received positive evaluation from EU directly funded programs, contributing to the enhancement of the competitiveness, jobs and growth in the given region (for example valorizing the "Seal of excellence" holders within the SME Instrument and other complementary calls under the Horizon 2020).

Some examples of ***early good practices at the European level of the synergies***[6] between Horizon 2020 and national/regional funds:

Italy - Region Lombardy

Anticipating the launching of the European Commission's initiative "Seal of excellence" in 2015 the Lombardy region opened the call **in 2014** on the "Research and innovation" financing the SMEs located in Lombardy that have passed the Phase 1 of the SME Instrument but that have not received the funding. This initiative latter became the **European "case study"** that was also replicated in Sweden by the National agency for innovation and the national contact point for SME instrument – "VINNOVA".

Sweden - VINNOVA

In the first SME Phase 1 Instrument call for proposals during 2014 Sweden participated with 47 proposals where 10 proposals were evaluated over the threshold limit but only 4 received an actual funding. In order to stimulate the companies to implement

[6] Working group of regional APRE Offices "Synergies between Structural Funds (ESIF) and Horizon 2020", Agency for the promotion of research in Europe (APRE) , may 2016

the projects the National Agency for innovation VINNOVA issued the call for funding aimed at 6 projects that passed the threshold SME Instrument evaluation without being financed asking them to present the project proposal, the Evaluation Summary Report and the declaration regarding the compliance with the "de minimis" rule. 6 companies received the funding for the realization of the feasibility study presented under the SME Instrument phase. Initially the funding did not envisage the coaching activity that was latter put on disposal to the companies by matching the companies with the Enterprise Europe Network experts. This initiative resulted in increasing of success rate of Swedish SMEs passing from 4 to 10 projects financed over 47 projects presented resulting in an increase of a success rate from 8.5% to 21 %. This initiative also further stimulated the Swedish companies to prepare and submit quality projects for SME Instrument financing.

Spain – The Ministry for economy and competitiveness

In 2015, the Spanish Ministry for economy and competitiveness together with the Spanish national innovation agency launched the initiative entitled the HorisontePYME through which in 2015 out of 220 SME that participated at the call, 135 have been selected to receive the funding. The requirement to participate consisted in having obtained the minimum of 12 points in the SME Instrument Phase 1 evaluation. The program was very successful and was further re-proposed also in 2016.[7]

In order to further ***stimulate launching of complementary calls*** **and synergies** between ESIF and H2020 funds, the European Commission organized the ***Workshop on Industrial Technologies for Regional Growth*** that took place in Brussels in **2016** with the participation of 100 representatives from various national and regional authorities, industries and science. The workshop was organized within the Knowledge Exchange Platform (KEP), platform established in order to facilitate the cooperation between the DG Research and Innovation of the EC and the European Committee of Regions[8].

The **main objective of the workshop** was to **tackle upon obstacles limiting the implementation** of synergies and ways to define the modality to facilitate the cooperation in the area of KET – Key Enabling Technologies. The main obstacles were defined delineating differences within rules, procedures, deadlines and excessive bureaucracy procedure during the preparation of the calls, limited

[7] https://ec.europa.eu/research/soe/index.cfm?pg=opportunities_sme
[8] http://ec.europa.eu/research/index.cfm?pg=events&eventcode=84126F94-DA32-A7AB-04E4A5A79F49FFE6

knowledge of the Horizon 2020 at the regional level and the issue concerning the inhomogeneous state aid rules as the main obstacles for the synergy implementation.

In an overview of ***synergy implementation, the European Commission*** in 2016 published on the ***Smart Specialization platform some examples*** in which SF/ESIF and FP7/H2020 funds have been combined in order to amplify the research and innovation investments and their impact by using different forms of innovation and competiveness support bringing the innovative ideas to the market. The list included main thematic areas, type of synergies, country of reference and the synergy example.

Main findings indicate that the sequential funding was mainly applied type of synergies with 13 out of 25 projects included in the overview, followed by the combination of sequential and parallel funding with 8 out of 25 and parallel funding with 4 out of 25 projects.

Biotechnology, Energy, NMP and ICT[9] resulted as the main thematic areas of synergies application.

Some synergy and project examples:

Sequential Funding - Ruder Boškovic Institute (RBI), Croatia[10]– the example considers the project firstly funded by the IPA funding and further developed and funded by the FP7 funding.

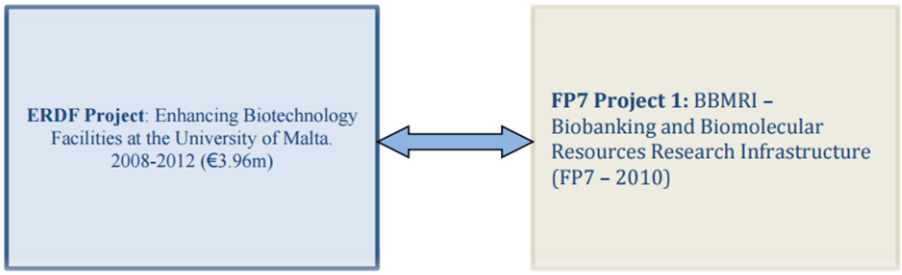
Picture 2: Diagram of chronology of the main projects involved in synergies

"The IPA project „Creation of research related infrastructure for Translational Medicine and Applied Genomics" enabled initiation of a complex research programme which would provide cross-functional and project-oriented alignment of resources and expertise along the value chain leading towards an innovative product in the field of biomedicine. The research expertise and

[9] http://s3platform.jrc.ec.europa.eu/synergies-examples
[10] http://s3platform.jrc.ec.europa.eu/documents/20182/142587/S2E_HR_RBI.pdf

equipment, as well as project management capacities obtained in that project facilitated the development of the much larger FP7 REGPOT project („Enhancement of the Innovation Potential in SEE through new Molecular Solutions in Research and Development"). In particular, the newly acquired infrastructure for custom microarray production and analysis represented a major leap for capabilities towards applied biomedical research. These capabilities will be strongly expanded by the REGPOT project, which will create new opportunities for synergies with different SF, H2020 and other projects".

Parallel funding - Development of capacity at the University of Malta[11] - This example considers the case of synergies achieved by the University of Malta through participation in two projects, one funded through ERDF funds and the other funded through the FP7.



Picture 3: Diagram of chronology of main projects involved in synergies

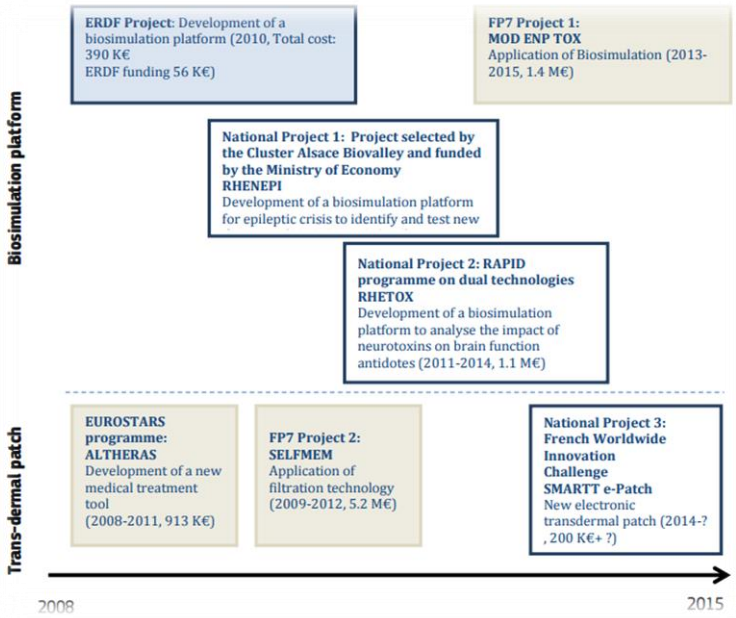
"The University successfully submitted an ERDF proposal for developing the Health Biotechnology facility at the University of Malta mainly through the purchase of equipment. The University of Malta also participated in a large international consortium in a project funded through FP7 under the 'Research Infrastructures' instrument - BBMRI (Biobanking and BioMolecular Resources Infrastructure). This initiative had a much broader scope than the ERDF project and aimed to develop a plan to integrate existing quality controlled biobanks, biomolecular resources and enabling technologies into a novel pan-European biomedical research infrastructure (RI)".

Sequential + Parallel Funding –Innovative therapeutics in Alsace Region through the case of the biotech SME Rhenovia-Pharma, France[12]

"The case of Rhenovia Pharma, an R&D pharmaceutical and biotechnology SME dedicated to global healthcare in the field of central and peripheral

[11] http://s3platform.jrc.ec.europa.eu/documents/20182/142587/S2E_MT_University_of_Malta.pdf
[12] http://s3platform.jrc.ec.europa.eu/documents/20182/142587/S2E_FR_Alsace_Rhenovia.pdf

nervous system (C&PNS) who is benefiting of a large spectrum of existing public aids at regional, national and European level to support different type of activities or equipment (development of a simulation platforms, training, research activities etc.) and developed expertise in various Research and innovation programmes (EUROSTARS, EU FP, Rapid programme from French Armament directorate, Innovation challenge from French Ministry of Economy).”



Picture 4: Projects supported public funding in the two main activities of the company since 2008

Alternative funding - Complementing the regional and national funding by implementing the Seal of excellence scheme to the funding opportunities.

The **Seal of Excellence** as the high-quality label awarded to projects submitted to Horizon 2020 which passed the quality threshold set by the program but did not receive the funding due to budget limits. The certificate servers as a guarantee of high-quality project evaluation that should help interested funding bodies willing to invest in promising proposals (including national & regional authorities through European Structural & Investment Funds) to identify these projects more easily.

The implementation of the Seal of Excellence is **not obligatory** and it still mainly depends on a decision of each regional and national authority if such certificate will be or not included in a specific **regional** or **national funding scheme** entirely dedicated to Seal of Excellence or valorized by additional project evaluation points given to the certificate holder.

According to the database provided by the European Commission, Research & Innovation/Seal of excellence13, **many** national and regional managing **authorities** already are **implementing** the Seal of Excellence schemes in their funding schemes. Italy results as a country with the largest number of **opportunities for funding** available in 6 Italian regional funding schemes (Friuli Venezia Giulia, Lombardy, Marche, Piedmont and southern Italian regions) mainly for the projects that are in line with the Smart Specialization Strategy and trajectory themes. Italy is followed by Spain, France, Germany, Czech Republic, Cyprus, Norway, Poland, Slovenia and Sweden.

Some **2017 alternative funding** regional and national **examples**[14]:

- Recently the Technology Agency of the **Czech Republic** closed the **GAMA program** that will finance the seal of excellence holders from 2016 cut-off dates and the first **2017** cut –off date. The program that was closed on 2.5.2017 gave the possibility to the SME instrument- phase 1 Seal of Excellence holders to apply and receive 55 % co financing rate by the Agency in order to further develop their projects;
- The **Cyprus** Research Promotion Foundation (RPF) published the program called "Horizon2020-2nd opportunity" that was launched in **2016** and that will remain open until **2019** under the **"RESTART 2016-2020" funding scheme**. The funding scheme includes projects from SME Instrument Phase 1 and Phase 2 with respective funding opportunity – 50.000 euro for Phase 1 and 700.000 euro for Phase 2;
- Region Marche in **Italy** with the regional grant that was closed on 2.5.**2017** envisaged the available funding for Phase 2 Seal of Excellence holders which project needs to be in line with the regional Smart Specialization Strategy. The Friuli Venezia Giulia also included the Seal of Excellence projects in its regional funding opportunities by giving additional points to the certificate holders in three calls in the area of Innovation, Cooperation and Public & Private partnership calls financed within the regional operation program **POR-FESR 2014-2020** financed from the Structural funds;

[13] https://ec.europa.eu/research/soe/index.cfm?pg=opportunities_sme
[14] https://ec.europa.eu/research/soe/index.cfm?pg=opportunities_sme

Main barriers to complementary calls and synergies' implementation

In **2016**, the Working group of regional offices of the Italian Agency for the promotion of research in Europe (APRE)[15] conducted the **study**[16] **"Synergies between Structural funds (ESIF) and Horizon 2020"** dealing with the state of art regarding the synergies between the ESIF and Horizon 2020 fund at the national/Italian and the European level taking into consideration also the main obstacles concerning its application.

The study demonstrated that **Italian regional authorities** were very **active in integrating** the funding opportunities at the **regional and national level** in particular through Regional Operational Programs and the European Fund for Regional Development (POR FESR 2016-2020) in ***three different modalities***:

a) ***Including the general principles of coordination and complementarity of actions financed the European programs*** (Horizon 2020, COSME, Life+, Erasmus ...) within the regional operating programs in Abruzzo, Basilicata, Trentino, Alto-Adige, Liguria, Perugia, Veneto, Valle d'Aosta, Friuli Venezia Giulia, Emilia-Romagna.
For example the *POR FESR of Valle d'Aosta* region outlines the action 1.1.4 – Support to collaborative R&D activities for the development of new sustainable technologies, products and services" financing activities related to the "development of collaborative applied research projects of regional interest, with results that can be complementary and synergic to regional, Horizon 2020 and other programs covering the area and specialization sectors coherent with the Smart Specialization Strategy"

b) ***Defining the specific actions for integrating the results coming from Horizon 2020 or other program funding*** (applying sequential or alternative synergy, additional evaluation points, using European evaluation system approach, etc.) within the regional funding opportunities.
For example the Emilia-Romagna region envisaged initiatives within POR – FESR 2014-2020 stimulating the participation in the Horizon 2020 of all regional research actors from research centers to companies (sequential synergy). Furthermore, the call for proposals financed under the POR FESR

[15] Agency for the promotion of research in Europe (APRE) - non for profit agency created in 1990 with the support of the Italian Ministry for research and the European Commission operating through its regional offices. It provides to its members as well as businesses, government agencies, and private individuals, information, support and assistance for participation in national and European programs and collaborative initiatives (today, with particular reference to Horizon 2020) in the field of Research, Technological Development and Innovation (RTDI) and in the transfer of research results.
[16] Working group of regional APRE Offices "Synergies between Structural Funds (ESIF) and Horizon 2020", Agency for the promotion of research in Europe (APRE) , May 2016

2014-2020 will also include the additional points for proponents that successfully participated in the European financing programs.

c) ***Including, within the regional funding opportunities, some specific measures stimulating the application to the calls published under the European funding programs (FP7 or Horizon 2020).***
For example Lazio region within its POR FESR 2007-2013 envisaged the action" Horizon 2020- measures stimulating the access to the European programs financing research, innovation and competitiveness, " aimed to companies, universities, public and private research centers that had an office operating in the Lazio region. The calls included financing opportunities for preparation of the project proposals to be presented to the European Commission within the two H2020 pillars namely Industrial leadership and Societal challenges.

On the basis of the research performed and data collected at the national and European level the study also included some practical suggestions aimed at managing authorities in order to stimulate better synergy implementation:

- Assign significant evaluation points for projects evaluated positively (over the threshold) that have not been financed;

- More coherency between the evaluation criteria envisaged by the Horizon 2020 calls (Excellence, Impact, Implementation) and those funded by the ESIF funds in order to assure homogeneity of the evaluation process;

- Coherency of the calls funded by the ESIF funds with the topics proposed by Horizon 2020 calls;

- In order to incentivize the "Parallel" synergy it is suggested that the managing authorities of ESIF and Horizon 2020 funds uniform the publication of the calls and also application forms in order to stimulate synergies;

- Sustain and give priority to the Research infrastructures inserted in the ESFRTI (European Strategic Forum for Research Infrastructure) as examples of synergic implementation of ESIF and H2020 Funds as indicated in the Commission documents[17];

- Assign additional evaluation points to proponents of ESIF funds on the basis of the participation in Horizon 2020 taking into consideration the following elements:

[17] http://ec.europa.eu/resreach/participants/data/ref/h2020/other/wp/2016_2017/mail/h2020-wp1617-infrastructures-conditions_en.pdf

- Score obtained under the H2020 financing – existence of seal of excellence or above the threshold evaluation result
- Measure under which the project has been presented (collaborative projects, SME instrument – phase 1, etc,)
- The role (proponed acted as a lead partner or a partner)
- Possibility to obtain funding using the lump sum approach under FESR funding, for example referring to actions complementary to the Phase 1 of the SME Instrument.

Recently "The Stairway to excellence (S2E) Boosting regional growth through innovation" conference organized in collaboration with the European Parliament (EP) and DG REGIO held in **Brussels in March 2017**, also tackled upon the **main issues concerning the practical bottlenecks** in implementing the available tools for **synergies between Horizon 2020** (and other funding programs) and **ESIF funds**.

The conference included the **participation of various managing authorities** at national and European level in order to share experiences in combining Structural Funds and Framework Programme to improve excellence in R&I systems, better understand the national (and regional) innovation ecosystems with a special emphasis on the identification of obstacles, barriers and potentials to innovation and to draw lessons for the future and identify the follow-up actions to enhance the potential synergies between different EU funds in the Member States.[18]

Suggestions and lessons learned (some country examples):

- ***Director-General of DG JRC, European Commission*** *Vladimir Sucha*[19] stated that in order to *foster the European Innovation Ecosystem it necessary to*: Move towards regional-specific R&D targets, give more role of non R&D innovation in Stairway to Excellence, open up regional structural funds to external actors, supported by Pan-European platforms; stimulate fewer and simpler EU funding instruments with better aligned rules and increased flexibilities; target funding towards radical innovations, encourage universities to become major players in the local innovation ecosystems as well as strengthen the role of Social Sciences and Humanities (SSH)

- ***State Secretary Ministry of Education, Science and Sport Republic of Slovenia*** dr. Tomaž Boh identified *some major and most critical bottlenecks in the*

[18] http://s3platform.jrc.ec.europa.eu/-/synergies-between-european-structural-and-investment-funds-esif-research-and-innovation-funding-the-stairway-to-excellence-s2e-

[19] http://s3platform.jrc.ec.europa.eu/documents/20182/202007/SUCHA.pdf/b02733ca-3c9e-4f2f-a647-c71cca61db9c

Slovenian experience[20] such as if the funding of R&I activities should be entirely linked to Smart specialization strategy, better coordination needed between institutions (national) and EC, State aid rules framework to be better defined and to apply the same state aid rules to projects positively evaluated within the EU funding programs, better promotion of the ESIF and next FP funds aligning the objectives and the targets, developing mechanisms and schemes on the systemic level already in the programming phase of the next perspective, harmonizing instruments addressing societal challenges.

- **Chairman of the Bulgarian ICT cluster** Peter Statev, reflected on the Bulgarian *experience in the governance and implementation to achieve greater funding efficiency*[21] identifying a need for a mobile, strong and knowledgeable research community; platform for real time cooperation among triple helix actors; more national support organizations; rising media coverage for best cases; lack of understanding of trends on global markets, necessity of continuous training instruments for SME & research society; further improvement of evaluation system in order to stimulate grater funding efficiency. As major barriers and bottlenecks Mr. Statev identified in a short horizon political view and/or political instability; lack of coordination on national level thus overlapping among different instruments; economic instability and high level of brain drain. As suggestion on how could H2020 calls support the development & implementation of the RIS3 Mr. Statev suggested to compensate low level of R&I investments and to rectify direction of research & development keeping in focus global market opportunities and threats.

2.2.4 Collaboration between managing authorities

Collaboration between managing authorities is of key importance, even though it is not widely applied. It helps managing authorities to mainly exchange their concerns and in many times, it has been proven that others have faced the same issues with them, providing in that case useful and practical feedback, on how to overcome them. There are several types of collaboration, but till recently is no specific mechanism or procedure in place so that the collaboration becomes more mainstream practice and not an exception.

[20] http://s3platform.jrc.ec.europa.eu/documents/20182/202007/BOH.pdf/b7a86b5c-56eb-4d67-8f11-60df311ba50e
[21] http://s3platform.jrc.ec.europa.eu/documents/20182/202007/STATEV.pdf/a4117028-4569-4286-b090-8c991b736635

Significant previous experience feedback comes from the Greek partner and stems from its role as Intermediate Managing Authority. KEPA, through its participation in a consortium of 7 organisations –EFEPAE-, is entrusted with the management of the funding programmes, published by the Ministry of Economy and Development. Each organisation has a very specific area coverage and is responsible for the proper implementation of the activities foreseen in its area.

These 7 partner organisation, have set up a dedicated mechanism to better facilitate the procedure and monitor the issues that come up during the management of the programmes.

Each of the seven organisations, when the Ministry announces a new programme, assigns a manager for it. He/she is responsible for the smooth operation during the implementation of the programme and he/she is the main contact point for any issue regarding the programme. The seven managers across Greece are in direct contact during the implementation, offering a holistic approach and a common solution to issues faced. It is very usual that the partners face similar -to identical- problems, but even if they don't, they peer-reviewing situation of higher-level of difficulty. This way of collaboration, minimizes risks and helps the managing authorities handle issues much easier.

The significance of having such mechanisms and procedures, have been recently recognized by the European Union. Monitoring the beneficiaries of innovation support services satisfaction rates, EU identified that *they often remain dissatisfied with the services they receive; while at the same time the public expects a higher return from the support provided*[22].

The nature of innovation is changing: open data, open software, open hardware design and crowd-funding make it easier and cheaper to start enterprises with limited own resources – but the challenge arises from scaling these initial offerings to create growth and jobs. Social innovation is required at the interface between public services and private enterprise to maintain the high standard and security of living in Europe. While small enterprises face challenges in recruiting talent - among others as a result of increased mobility – researchers have problems pursuing academic careers and work below their qualifications.

22 https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-innosup-2016-2017.html#c,topics=callIdentifier/t/H2020-INNOSUP-2016-2017/1/1/1/default-group&callStatus/t/Forthcoming/1/1/0/default-group&callStatus/t/Open/1/1/0/default-group&callStatus/t/Closed/1/1/0/default-group&+identifier/desc

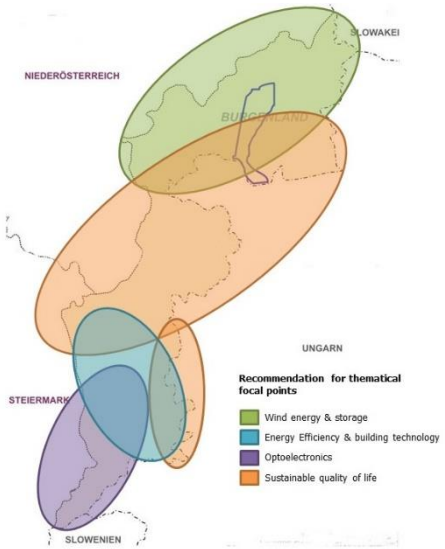
European Union, having captured this beneficiaries' feeling, have set up the INNOSUP scheme, through which it offers the opportunity to up to 3 innovation agencies, submit a project during which they will focus on a commonly identified topic they are interested about (and it affects European Innovation) and they will implement peer-learning activities, to conclude to some instructions to similar agencies across Europe. This scheme has funded this project's activities that ended to the DOP you are currently reading.

2.3 Micro level

The ecosystem on the micro level deals with the ecosystem within the companies / SMEs directly. Ecosystems on the macro/meso-level deal with the framework to make companies successful. With this framework available, the next step is a look into the companies directly. This ecosystem on the micro-level consists of the management, employees, partners and customers as well as intangibles like an innovation management process, know how or managerial mindset of the owners. Any company or startup might see themselves as innovative – but is it true?

For an analysis of the ecosystem on the micro-level we need to take a look at the company and its innovation management, but also take external factors into account.

2.3.1 Information about the regional structures



Burgenland / Austria:

In Burgenland, about 22.000 companies are registered (5.000 in the primary sector, 2.800 in the secondary and 14.000 in the tertiary sector). Agriculture and personal services (health care for elderly people) take a large part of the companies.

Those companies have in total about 106.000 employees. Most companies are located in the northern part, whereas the two southern regions (those without a highway and train connection) are way below the average. The number of large companies (based on the SME definition by the European Union) is very small, and only a handful of them are companies that have been established in Burgenland. Industry is playing a smaller part in the number of

companies (162 / 7.000 employees), but they cover for nearly all expenses regarding R&D in the country and their relative share in the regional gross product is higher than other sectors.

Friuli-Venezia / Italy:

Friuli Venezia Giulia (FVG) is one of the five autonomous regions with special statute located in the North-Eastern region of Italy. It borders Austria to the north, Slovenia to the east with the Adriatic Sea to the south and Veneto region to the west. It covers an area of 7.858 mk2 and has about 1.2 million inhabitants. The capital is Trieste. In 2016, the FVG had an increase of 1.8 % of GDP with respect to 2015 amounting to 35.238 million of euro. FVG's productive structure is characterized by the existence of small companies where 57 % has just one employee, 37 % belongs to the micro-category employing from 2 -9 employees and only 0.7 % of companies has more than 50 employees.

Regional firms mainly operate in the tertiary sector (57.9%), in particular 23.2% in trade and repair and 8.7% in housing and catering services. Enterprises in the secondary sector account for 27%, construction companies for 15.8% while the industry in the strict sense represents 10.7% (manufacturing alone accounts for 10.2%). Finally, businesses operating in agriculture, forestry and fishing account for 15.6% of the total. Craft businesses are distinguished from the others by their industrial development: 40.3% operate in the construction sector and 21.7% almost exclusively manufactures.[23] The Smart Specialization Strategy[24] of the FVG Region identified 5 major areas of development:

- Agribusiness
- Strategic production value chains (mechanics and home furniture and automation)
- Maritime technologies
- Smart health
- Culture and tourism

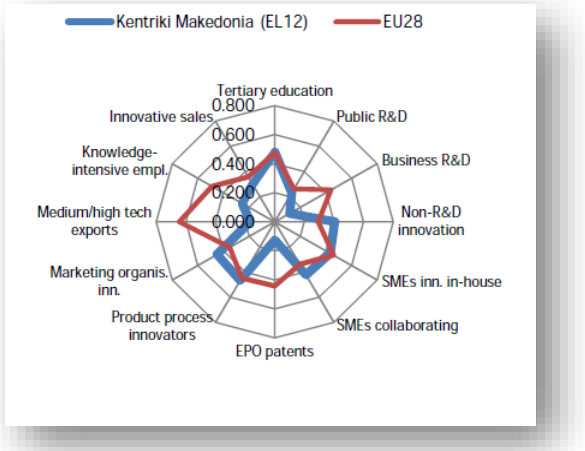
According to the regional innovation scoreboard, the FVG region in 2016 was classified as a strong innovator[25], indicating the SMEs with product or process innovations, SMEs innovating in-house and exports of medium and high tech products as the strength in the

[23] Regione in cifre 2016, Friuli Venezia Giulia Region, Trieste, November 2016
[24] Strategia regionale di ricerca e innovazione per la specializzazione intelligente del Friuli Venezia Giulia, Regione autonoma FVG, luglio 2015
[25] Regional innovation scoreboard 2016, http://ec.europa.eu/growth/industry/innovation/facts-figures/regional_en

Co-funded by the Horizon 2020 programme of the European Union

regional innovation system while the public R&D expenditure, innovative SMEs collaborating with other and tertiary education attainment as regional weakness. According to the FVG Region, the main objective the ERDF Regional Operational Program (ROP) 2014-2020[26] is to support the competitiveness of regional economy and to overcome the effects of the crisis where 33.42 % of the total ROP budget has been allocated to the priority on "Strengthening research, technological development and innovation" focusing the financial resources on the projects valorizing the 5 RIS 3 areas with the strong focus on the key enabling technologies.

Macedonia / Greece:



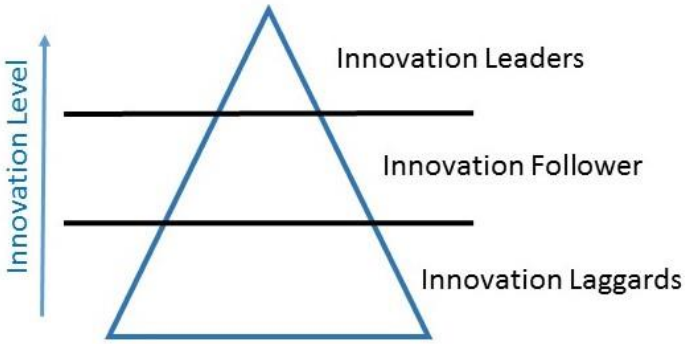
The Region is consisted of 7 regional units (Chalkidiki, Imathia, Kilkis, Pella, Pieria, Serres and Thessaloniki). The area is spread in 18.810 Km² and counts a total of 1.874.590 people by latest stats (2011). The region gives 13,54% of the national GDP. More than 120.000 companies are operating in the region; more than 99% of them are SMEs. 4,22% of them are active at the primary sector, 19,37% in the secondary sector (manufacturing), while the broadest sector is the tertiary sector with contribution of 76,67% to the regional economy. The region of Central Macedonia has also a significant exportation rate comparing to the national, representing the 17% of them and counting 4,67 billion €. The Regional Programme between 2014 and 2020 targeting research, technological development and innovation sums up to 18,4 million € while, in the same period, actions for the enhancement of competitiveness of the SMEs will be funded with 83 million €. Funds will also be committed to the specific targets through the Operational Programme Competitiveness, Entrepreneurship & Innovation – EPAnEK.

2.3.2 Self-Assessment for targeted SMEs

An innovation system shall focus on innovative companies and those who are willing to take the next step. A self-assessment tool shall be used to verify the stage of the innovation level pyramid companies are in. This is a general approach; it will be

[26] La Programmazione POR FESR 2014-2020: per una crescita intelligente, sostenibile e inclusiva, http://www.regione.fvg.it/rafvg/cms/RAFVG/fondi-europei-fvg-internazionale/por-fesr/FOGLIA128/

applied within the pilot actions of EUROSYN at all SME that applied for an audit (Work Package 3).



Picture 5: Innovation level pyramid. Source: EUROSYN

The three levels of the pyramid describe the approach of companies towards innovation:

- Innovation Leaders: Led by highly motivated people, implementing an innovation strategy and motivating their employees to develop best-in-class solutions. Those companies try to be ahead of their competition by going new ways and offering innovative products and services to their customers.
- Innovation Followers: Companies that strive to be innovative. They implement some aspects of innovation management, but it not all departments or employees apply it. The management knows that it needs to improve certain skills and create a company culture that allows them to be more innovative.
- Innovation Laggards: Those companies might be working in an old-fashioned business where innovation is not necessary (as they think…) or they are an established family business with owners that do not want to invest in the future of their company. Innovation laggards are focussing on the daily business, they do not look at market trends and innovation in their area.

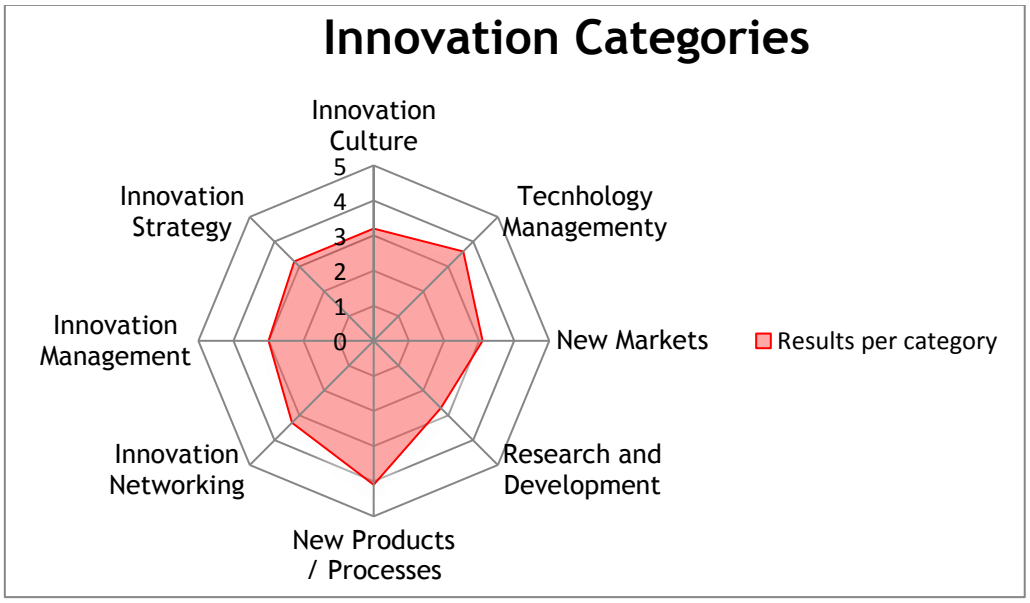
Right now, there is no standard measure available in the industry on how companies could be classified in the innovation level pyramid. Within this project, the consortium agreed to use the following tool: **Innovation Management Self Audit Tool** by "ZENIT GmbH - Zentrum für Innovation und Technik in NRW"[27], developed as part of Enterprise Europe Network / NRW.Europa[28].

[27] http://ik.zenit.de/innoaudit/
[28] http://nrw.enterprise-europe-germany.de/

The statements address eight different categories in the field of innovation management, which can be assigned to the following two dimensions:

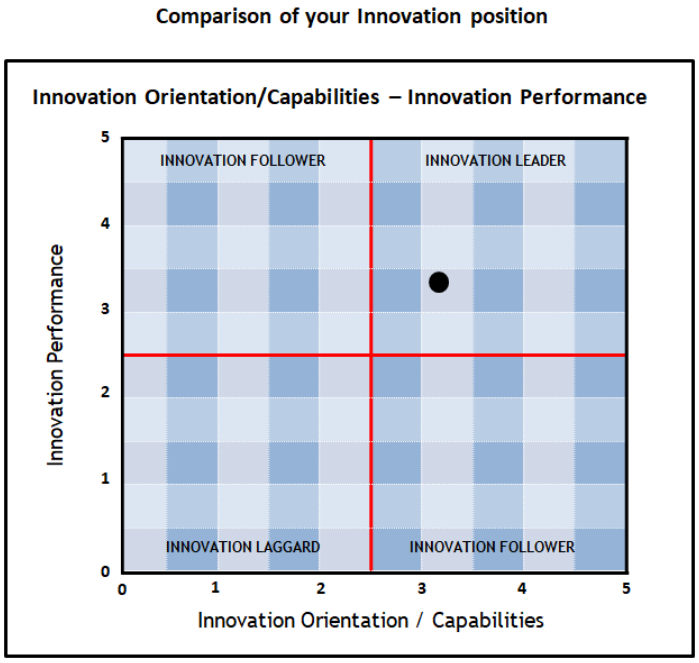
1) innovation orientation / capabilities (soft factors)
2) innovation performance (hard factors)

The tool is available in German and English. A company which performs this self-assessment needs to register with an email-address and after answering the questions; they can download the results in pdf format.



Picture 6: Source: Innovation Management Self Audit Tool / ZENIT GmbH

It also allows companies to compare their profile with others (see chart below). The project partners who get the profiles of all companies that participate in the innovation audit can do this comparison.



Picture 7: Source: Innovation Management Self Audit Tool / ZENIT GmbH

The classification into Innovation Leader / Follower / Laggard is based on a mapping of the innovation position. Innovation Leader = upper right field. Innovation Follower = upper left and lower right field. Innovation Laggard = lower left field. This classification-approach will be verified after the self-assessment and the innovation audit within the pilot action, although only innovative companies (should be in the field of Innovation Leader) are invited to the call.

Very small companies (0-5 employees) and startups might need to be treated differently if they have not established an innovation management process in their company. Still it is important to look at their process on how the company generates innovation and the management is dealing with it.

About the self-assessment tool that will be used in EUROSYN:

The partners evaluated several tools for the self-assessment. The tools can be grouped into two categories – ready-to-use tools and text-based information. The partners found several tools that fit into those categories. They have been excluded for different reasons (as e.g. the existence of a fee, the excessive complexity or the need to be furtherly implemented to get concrete and usable results). For informative purpose only the tools have been listed here below:

(1) Ready-to-use tools (online or excel-based)

- Francesc Güell: **Innovation assessment tool** http://www.fguell.com/en/innovation-assessment-tool/
- Collective Campus **Innovation Healthcheck** https://www.collectivecamp.us/innovation-audit
- Dimitri Schuurman, University Ghent – a **overall toolbox of assessment methods** https://www.iminds.be/en/userinnovation/about
- Raimund Mitterbauer (Chamber of Commerce Lower Austria), **Innovation profile**

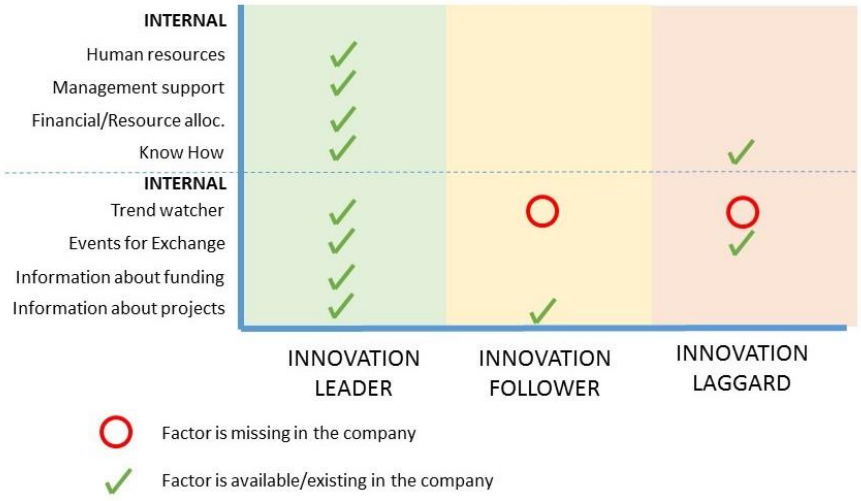
(2) Documents and Questionnaires

- John Bessant, **Innovation Audit** http://www.innovation-portal.info/wp-content/uploads/Innovation-audit-Latest-version-May-2013.pdf
- **Scientific article on "Measuring innovation culture in organizations**: The development of a generalized innovation culture construct using exploratory factor analysis" http://www.emeraldinsight.com/doi/abs/10.1108/14601060810911156

2.3.3 Internal / external success factors

The self-assessment for an SME, shows the internal view of a company on its innovation management process and its orientation towards innovation. This provides the auditor a good view on what is going on. A working ecosystem (on the micro-level) is a prerequisite for companies to work on a higher innovation level.

There are several factors that can influence the ecosystem on the micro-level, which means they can either support or hinder innovation in a company. We differentiate them between internal and external factors.



Picture 8: Figure: internal / external success factors. Source: EUROSYN

(matrix is showing only an example, not completely valid!)

This matrix displays internal and external success factors on the y-axis and the innovation maturity level on the x-axis. At the crossing point, an "o" shall indicate that this factor is probably missing in the company, a "✓" shall indicate that the factor is available.

Based on the matrix and their self-assessment, companies can identify what building blocks are available to create a successful ecosystem for innovation at the micro-level / within their company. They can then decide whether they will adopt one or the other for their company > Do they have it? Do they need it?

The **final result** could be a matching between the TRL levels and the innovation levels, leading to a definition of Innovation Readiness Levels [IRL]. Example:

TRL 9/8 >	Innovation Leader
TRL 7/6 >	Innovation Follower
TRL 5 and below >	Innovation Laggard

NASA developed the TRL model in 1988 in order to value space technologies; it has grown into a worldwide standard since (ISO). There are already some definitions of IRL available. To mention some:

1) the "Definition Innovation Readiness Levels",
2) the "Considerations for an 'Innovation Readiness Level' along with the 'Technology and Manufacturing Readiness Level' indicators" and
3) the "An approach for developing concept of Innovation readiness Levels"

Therefore, a definition of an IRL is out of the scope of this project.

3. THE METHODOLOGIES USED IN SETTING THE CHALLENGE AND THE PROPOSED APPROACH

3.1. Methodologies

The transfer of good practices in SME innovation support, the enhancement of existing and the establishment of new innovation support programmes for SME are key elements for the European Union's economic development.

The PRO-INNO Europe 'INNO-Partnering Forum' (IPF, 2009-2012) has made some significant contributions to formulating the requirements for a permanent learning mechanism for SME innovation support agencies, developing a "Twinning+" (Advances) methodology that combines elements of traditional peer reviews and twinning in small learning groups of interested agencies.

In particular, the Twinning+ methodology is based on of the original twinning method, but it is not limited to transferring good practices among agencies: it provides opportunity to the design and implementation of better practices.

During the project, the three partners (innovation support organisations) collaboratively addressed a common innovation support challenge and, using their collective experience and knowledge, developed and tested an approach to address the support challenge in a new and better way. The results are documented in this Design Option Paper that identifies and documents the implementation options, and serves as a guide for other support organisations.

The process implemented during the EUROSYN project was the following:

- peer reviewing of the service delivery system of instruments or programmes addressing the jointly identified topic, aiming at the identification and analysis of good practices and their further development;

- testing new approaches through a pilot action with 15 SMEs;

- synthesis of the lessons learnt from analyzing good practices and implementing the pilot action;

- preparation of the Design Options Paper.

3.1.1. Peer learning workshops

The goal of the peer-learning workshops was to learn from the best and to share good and bad practices in funding opportunities support services.

The activities were:

- selection of an external moderator to professionally apply the Twinning + methodology;

- creation of a peer learning group (≥12 persons, from the 3 partners + representatives from regional authorities) in order to strengthen the competences in supporting SMEs in searching for funding opportunities and preparing good and successful R&D&I project proposals;

- organization of 2 peer learning workshops (2 days each in Eisenstadt and Udine) as preparatory activity for the DOP preparation;

- follow-up activities (e.g. minutes, To-Do list, web meeting) and DOP preparation.

3.1.2. Best practise collection

GUTE IDEE, BURGENLAND

Burgenland is the smallest province in Austria. Historically, Burgenland has always been the place of rural agriculture, winery and tourism. Being the border region to Hungary and having a lack of transport infrastructure in some areas, there is only a small number of industrial companies. In the ranking of R&D activities, Burgenland has the lowest coefficient of all provinces. This led to the start of an innovation initiative ("Innovation-offensive Burgenland 2020" / "Gute Idee, Burgenland") to use EU funding for a push in the innovation landscape. The initiative set its focus on companies on a lower level of innovation.

Goals of this innovation support program were:

- Improve the R&D intensity in Burgenland
- Raise the level of innovation at companies (mostly SME) and founders

Three main activities had been defined and implemented:

(1) Awareness raising and location marketing

The innovation initiative focussed on supporting innovative companies and founders from Burgenland. The PR activities targeted on this group, but also on companies that planned to move to Burgenland. For this, different public events, ads in newspapers, a dedicated website (www.gute-idee-burgenland.com) and cooperation with stakeholders like the Chamber of Commerce were implemented.

(2) New funding programs

Before 2011, R&D funding was only available for high-tech / risky projects as an add-on to available national funding. The new program supported two phases in the innovation process: 1. the innovation process (setting up an innovation process within companies or applying techniques to find new products / services). 2. For an existing idea, three consecutive funding schemes were available: 2.A: innovation voucher to have a first analysis by an external expert (12 hours). 2.B: concept development, that means economic and technical feasibility, including proposal writing for the next phase. 2.C: implementation of the innovation project (including prototyping, ready for market introduction).

(3) Support activities and cooperation

The installation of innovation managers led to a stronger approach towards innovative companies and founders. These managers talk with entrepreneurs about innovation projects and funding possibilities, they offer their network to public and R&D institutions. They act as an interface between companies and funding agencies (regional / national).

This initiative was funded by ERDF (European Regional Development Funds), approximately 50 million € have been reserved for all measures. The project started in February 2011 and lasted until end of 2014. The companies in Burgenland have accepted the new funding program and the support activities very well. About 400 talks with companies and founders had been made and about 230 applications (200 granted) for the new funding program.

TALENTS STRATEGY, FRIULI VENEZIA GIULIA

AREA Science Park manages **SiS FVG** (the Scientific and Innovation System of the Friuli Venezia Giulia region http://cer.areasciencepark.it/en/download-2/) with the *strategic objective* of fostering the research potential of the region by promoting synergies between research and academic institutions, emphasizing the cooperation between public and private research sectors (intersectoral mobility) and by improving the attractiveness of qualified human capital (international mobility).

Since 2010, among several activities of SiS FVG all focused on the attractiveness and qualification of the human capital engaged in R&D activities in the Friuli Venezia Giulia (FVG) region, AREA Science Park has been conducting the **TALENTS STRATEGY** (http://cer.areasciencepark.it/en/international-house-2/) an internationalisation strategy attracting foreign researchers and students to the regional territory with the goal of:

- **strengthening the qualified human resources potential**;
- fostering **job creation and employability** of graduates and PhD;
- supporting the **development of long-term cooperation** between regional enterprises and scientific institutions and foreign research centres.

The Talents strategy up to now included **four Fellowship Programmes** all managed by the AREA Science Park: TALENTS, TALENTS UP, TALENTS FVG and TALENTS^3.

Since 2010 the Fellowship Program awarded 38 individual fellowships to expert researchers who have benefitted from both incoming and outgoing mobility experience (with a mandatory return phase in the FVG region) by acquiring new competencies and enriching their potential in terms of career development.

Next to the researchers, also the regional scientific institutions successfully benefitted from the TALENTS Fellowships by offering concrete career opportunities to the researchers that generally brought new perspectives and new dynamism to the research teams that hosted them, enabling in some cases the start of new research fields.

For the purpose of the present DOP document, it is worth recalling that:

- TALENTS (2010 - 2013) was funded by FP7 (Marie Curie Actions – COFUND) and AREA Science Park
- TALENTS UP (2013 - 2015) was funded by FP7 (Marie Curie Actions – COFUND), AREA Science Park and the Autonomous FVG Region
- TALENTS FVG (2013 - 2015) was entirely funded by the Regional Authority of FVG through the European Social Fund (ESF)
- TALENTS^3 (2015 - 2018) was entirely funded by the Regional Authority of FVG through the European Social Fund (ESF)

Four Fellowship Programmes represent an **example of sequential implementation of synergy between funds in the** «downstream sequential combination»: the results

of the projects financed by FP7 have been further developed and financed by ESIF funds.

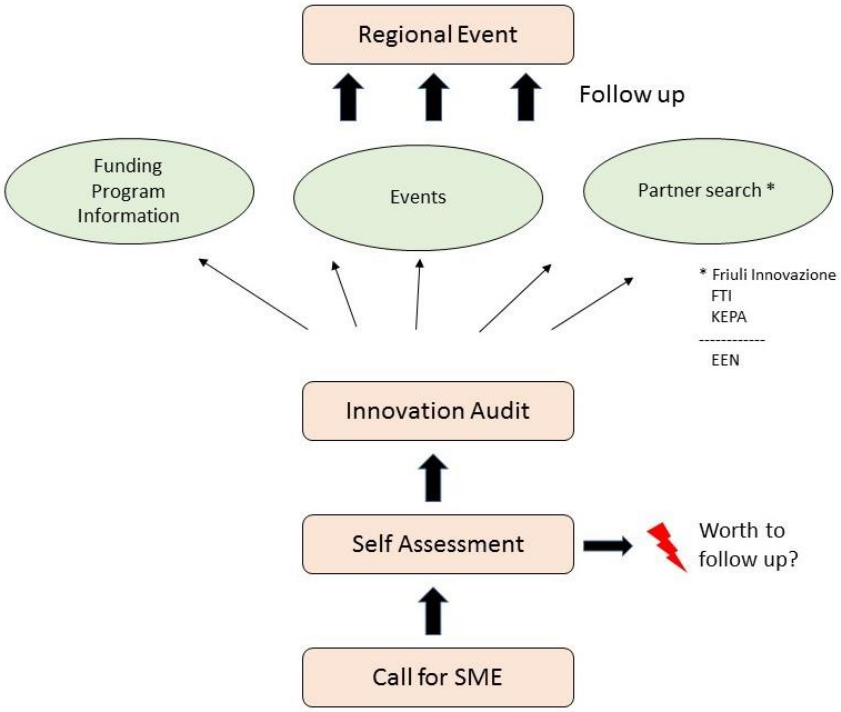
3.1.3. Pilot action

A group of 15 SMEs -5 in each country- have received a personalized Innovation Audit, analysing their research and innovation projects ideas and getting information about how to finance their investments thanks to synergies between funds. We used a bottom up approach to serve the SME within the pilot action activity.

1) The project partners launched an open-call to choose the 15 SMEs participating in the pilot action.
2) The partners provided a self-assessment tool to the participating SMEs. This helped the SME and the auditor to understand the innovation level of the company. (see also 2.3.2 Self-Assessment for targeted SME)
3) The partners developed a personalized Innovation Audit report during the audit talks, analysing the SMEs' research and innovation projects ideas/needs.
4) The know-how gained through the audit led to various results. For example:
   a) Information about how to better finance their investments exploiting different funds (European, national, local). Thus, the best practice concerning synergies between ESIF and H2020 funds to be implemented in each territory will be proposed.
   b) Invitation to events (local / national / European level) for networking and information about funding schemes or project proposals.
   c) Using the partners' network, but also EEN to find partners for a potential innovation project.
   d) Other information which support the innovation projects.

The project partners will NOT develop and/or submit applications for funding and in no case have told the participating SMEs that their projects/ideas "sound good and will be surely funded".

5) It is important to support the companies after the audit and make a follow-up. The regional events were an excellent chance to do this. Companies and their innovation projects were promoted there and they got an additional chance for publicity.



Picture 9: Figure: Pilot Actions / bottom up approach. Source: EUROSYN

3.1.4. Peer-reviewed Operational Programmes

ERDF Friuli Venezia Giulia 2014-2020

The Regional Operational Programme ERDF Friuli Venezia Giulia 2014-2020 defines the strategy for the regional programming in the fields of research and innovation, defines the types of intervention priority, in line with the strategic priorities of Europe 2020.

The main objective of the ROP ERDF 2014-2020 is to support the competitiveness of the regional economy and to overcome the effects of the crisis.

The ROP ERDF 2014-2020 identifies the priority areas on which to focus the action of support for the strengthening of the innovation system and research, the increase of competitiveness and attractiveness of the regional system.

Within ROP ERDF the Action 1.1 *"Support to the acquisition of technological, strategic, organizational and commercial innovation services for the benefits of SMEs"* is aimed to finance feasibility studies for research, development and innovation projects, included the support for the participation to related EU

programmes (in this action Grant covering 50% costs for maximum 20.000 € for external services acquired by SMEs)

The Action 1.2 (*Support for the economic enhancement of the innovation through the testing and adoption of innovative solutions in processes, products and management schemes and through the financing of the industrialization of research results*) and Action 1.3 (Support to collaborative activities for R&D for the development of new sustainable technologies, products and services) foresees the assignment of 6-10 points out of 120 for those projects that received a positive assessment in the framework of H2020 SME Instrument but not financed for lack of funds.

All the above mentioned measures provide an example of how synergies and complementarities may be exploited, encouraging SMEs in applying for EU project as well. Nevertheless the potentials is still unexploited and more emphasis and incentives may be provided by Managing Authorities.

Burgenland – Regional Operational Program 2014-2020

The regional management agency triggered the programming process from 2013 onwards and integrated all relevant stakeholders into this process. The ERDF program itself was agreed to be nationalwide with no regional-specific topics.

After two Target 1 periods (1995-1999, 2000-2006) and one phasing out period (2007-2013), Burgenland is currently defined as a transition region and received additional funds from the EU.

In total, 72,3 million Euro have been granted by the European Union for IWB/ERDF (47 million) and ESF (25,3 million) funds. In addition to this funds, the region of Burgenland provides 167,10 million € as an additional program for those two funds (124 / 73,8 million).

Burgenland set its focus for the period from 2014-2020 in ERDF on the following three topics:

1) Research, Technology and Innovation
   a) Infrastructure and networks

   This contains the expansion of research infrastructure in the surrounding of the university of applied science in Eisenstadt and Pinkafeld as well as cooperation projects between R&D institutions and companies.

b) Funding of innovation projects of companies into R&D

Development of new products/services within companies but also investments with respect to new technologies.

2) Strengthening the competitveness of small and medium enterprises

Settlement of new enterprises in the region of Burgenland, modernizing of companies – for industrial as well as touristic companies.

3) Reduction of CO2 emissions in all economic areas.

Use of renewable energies in enterprises and research of CO-reduced technologies.

Central Macedonia Regional Operational Programme 2014-2020

The Central Macedonia's ROP main objective is to boost economic development and create job opportunities in Central Macedonia. It contributes to achieving the Europe 2020 targets for smart, sustainable and inclusive growth, also in line with the smart specialisation strategy. It should create jobs and help SMEs to become more competitive and innovation-driven. EU funding will also contribute to meeting the requirements of the Union's acquis, in particular as regards greenhouse gas reduction in and increase energy efficiency. The OP support will substantially contribute to promoting the following key EU and national development priorities:

- "Strengthening research, technological development and innovation" (ERDF 2.38% of EU allocation).
- "Enhancing access to, and use and quality of, ICT" (ERDF 1.16% of EU allocation).
- "Enhancing competitiveness of SMEs" (ERDF 10.79% of EU allocation).
- "Supporting the shift towards a low-carbon economy in all sectors" (ERDF – 3.4% of EU allocation).
- "Promoting climate change adaptation, risk prevention and management" (ERDF 7.66% of EU allocation.
- "Preserving and protecting the environment and promoting resource efficiency" (ERDF 12.51% of EU allocation).

- "Promoting sustainable transport and removing bottlenecks in key network infrastructures" (ERDF 37.19% of EU allocation).

- "Promoting sustainable and quality employment and supporting labour mobility" (ESF 1.26% of EU allocation).

- "Promoting social inclusion, combating poverty and any discrimination - ERDF" (ERDF 3.16% of EU allocation).

- "Promoting social inclusion, combating poverty and any discrimination - ESF" (ESF – 15.42% of EU allocation).

- "Investing in education, training and vocational training for skills and lifelong learning" (ERDF 3.16% of EU allocation).

- "Technical Assistance Axis" (ERDF 1.52% and ESF 0.31% of EU allocation respectively): provision of technical assistance.

COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION Operational Programme, Greece

The OP should substantially contribute to the proposed shift in the growth model of the Greek economy from non-tradable into tradable sectors, and cluster development of innovative and out turned sectors with a sustainable competitive advantage. A crucial aspect of the OP is its articulation with the Regional OPs regarding the support of priorities identified through national/regional smart specialisation strategies (RIS3) at the appropriate level. EU funding will also contribute in upgrading the country's infrastructures in the sectors enhancing the development of entrepreneurship, the innovation and the outturn of the enterprises (mainly research centres, broadband and NGA infrastructures and energy efficiency interventions).. The use of Financial Instruments is foreseen in most of the specific objectives (including those relating to energy efficiency), where appropriate and depending on the results of the ongoing ex-ante assessments. The OP contributes to achieving the Europe 2020 targets for smart, sustainable and inclusive growth.

The OP will contribute to promote the following key priorities:

- "Enhancing entrepreneurship with sectorial priorities" (ERDF –50,79% of EU allocation): increase research potential and private investments in research and development, promote innovation and outturn of SMEs, particularly in

sectors with a competitive advantage (agri-food, energy, supply chain, cultural and creative industries, environment, tourism/culture, ICT, health, Material/Constructions).

- "Adaptability of employees, enterprises and entrepreneurial environment to the new development requirements" (ESF –18,18% of EU allocation): aiming at matching the employees and enterprises skills to the development needs. In parallel, the effort will focus on the capacity of the public administration to facilitate the improvement of the entrepreneurial environment.

- "Development of mechanisms to enhance entrepreneurship" (ERDF –29,19 % of EU allocation): invest in upgrading the country's infrastructures in the sectors enhancing the development of entrepreneurship, the innovation and the outturn of the enterprises (mainly research centres, broadband and NGA infrastructures and energy efficiency interventions).

- "Technical Assistance" (ERDF - 1.50% and ESF 0.34% of EU allocation respectively): provision of technical assistance.

3.1.5. Recommendations for policymakers

- Seek coherence of ESIF calls with Horizon 2020 topics.
- Align the timeline of a call publication and ESIF application form, with the Horizon 2020 models.
- Seeking coherence on the evaluation criteria between H2020 and ESIF.
- Awarding a major score for those projects that have already received a positive H2020 assessment and were not financed due to lack of funding.
- Activation of application procedures with reduced administrative burdens
- Saving a part of ESIF funds to be assigned to those projects already submitted for Horizon 2020 following specific criteria.
- Widen the possibility to provide lump-sum grants through ERDF, e.g. with reference to complementary actions to SME instrument Phase 1.
- Avoid ERDF grants for small enterprises and research/development intense projects, as ERDF triggers high efforts with regards to reporting at companies.

4. INNO-FUNNEL & SERVICES SMES THAT CAN BE OFFERED TO SMES

The aim of the project is to improve the quality of services for SMEs by facilitating an easier access to the different funding channels provided by European programmes. Innovation Agencies are in the position, in this sense, of having a double function. On the one hand, stimulate and encourage SMEs to increase their participation in funding programs by providing them with scouting services and suggesting the most appropriate fund/financial instrument. On the other hand, Innovation Agencies may provide policy makers with useful elements in order to make programming more effective (especially in terms of rules, measures and tools) with the aim of increasing the absorption of funds. From the point of view of the Innovation Agency themselves, it is in particular how to support SMEs in the different phases of innovative ideas development process - from the ideation to the market - through the support of direct or decentralized funds.

To achieve this result it is therefore necessary to understand:

- The validity of the innovative idea / product / process

- The company's ability to access European funds (project, management, financial capabilities)

- The most suitable instruments for the companies purposes and how these can be combined in a synergic way.

Pilot Action also aimed to identify the weaknesses of this process (from the development of the project ideas to the market supported by EU funds) and how to intervene to improve them. Findings issued by the Pilot Action may provide useful results for:

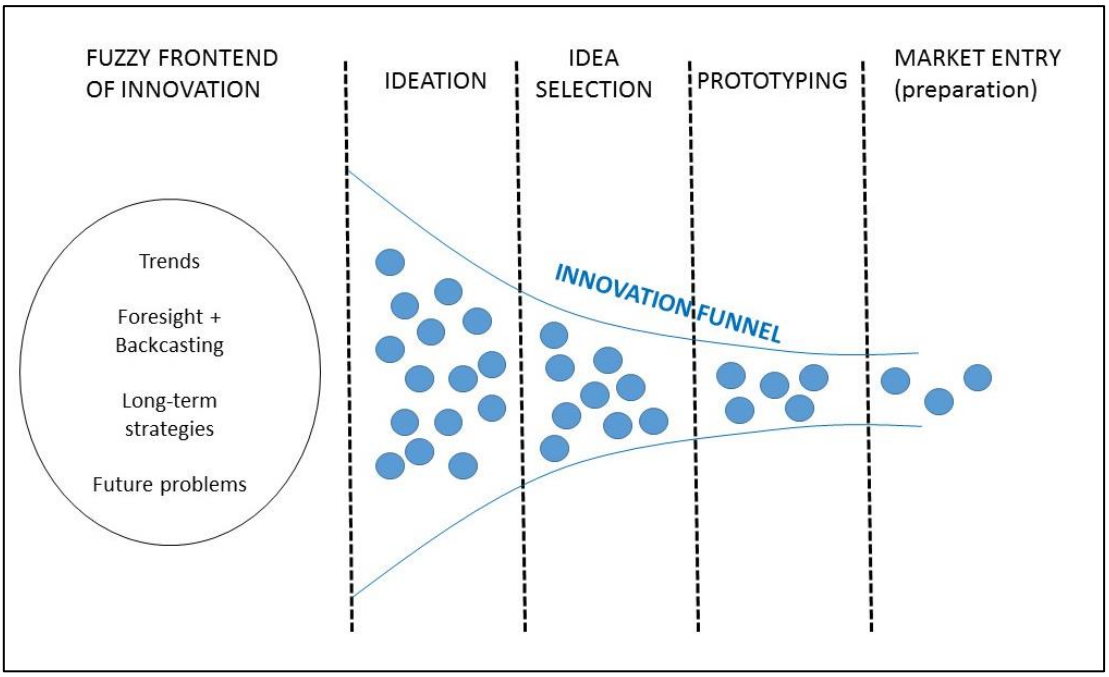
- SMEs in order to strengthen their capacity to develop project ideas and applying for funding;

- Innovation Agencies to provide targeted guidance and support services and improve their support to SMEs

- Policy Makers / Managing Authorities to identify the most appropriate mechanisms to facilitate access to funds for SMEs.

For this reason, the analysis first took place at a macro level (addressed to policy makers), hence to a micro level (focused on innovation within companies) to identify the critical factors that hinder full use of Funds and provide appropriate suggestions.

4.1. Concept of the Innovation Funnel



Picture 10: Figure: Innovation funnel. Source: EUROSYN

The innovation funnel depicted above, is a model used in product development and innovation that illustrates the process to narrow down the large number of products, ideas, concepts that exist at the beginning to only a few viable options towards the end of the process. The goal of this process is "to select the vital few from the trivial many" and concentrate on the options with the highest potential!

Starting from what commonly is called the "fuzzy front end of innovation" that is characterized by a high degree of vagueness, ambiguity and uncertainty. The model distinguishes four phases: *ideation, idea selection, prototyping* and *market entry*. Although the process is not necessarily linear, -in general- as the process progresses, the number of options that make it to the market entry phase is reduced to only a few or often just one.

The innovation funnel is a model that has been extensively used in order to efficiently bring "ideas to the market". There has also been some criticism that it is detrimental to creative thinking and unconventional ideas, that are weeded out to early and are not given the time to develop into a state that allows to recognize their full potential.

4.2. Concept of Building Blocks

Innovation support agencies offer a lot of services to their companies – either directly by themselves, by third parties like consultants or intermediary agencies or by national/regional funding agencies.

Those services can be described, using certain parameters like:

- What kind of service?
- Who delivers it
- Required level of innovation at SME
- Benefit for SME
- Cost (direct / indirect)
- Efficiency

The discussion regarding services offered in the different stages of the innovation funnel, resulted in the concept of building blocks. Each service –examples are given below in detail– acts as a building block. Agencies can decide which portfolio can offer to their customers.

But why these services are described as "building blocks"? Because they can be offered in a bottom-up structure. While some are basic blocks, others are more advanced and basic services in place beforehand, in order to be provided.

General remark: The level of support offered by a building block depends on the innovation level (leader / question mark / laggard) of the SME that makes use of it. Some building blocks can only be offered to innovation leaders, as innovation laggards are not developed enough to apply it in their company.

Structure of Building blocks:

- What is it about
- Who can help SMEs? (what kind of person / institution / agency / company)
- Benefit for the SME

4.3. Building blocks for the early stages

The **maturity of the intermediary organisation**, is a crucial factor in designing, selection and application of the Building blocks:

Intermediary organisations differ in various aspects: number of employees, experience of employees, budget (also: distribution internal / external cost), interaction with SMEs, etc. This DOP follows a generic approach, therefore the application of Building blocks does not demand a certain skill level in the organisation. Organisations need either to find external partners (e.g. organisations, consultants, scientific institutions) that will implement those building blocks for / with the SME, or if an organisation has sufficient know-how and human resources, they can of course do it by themselves, too.

Phase FUZZY FRONT END OF INNOVATION [FFEI]

>> Trend Watcher

Companies need to re-evaluate their portfolio in a regular manner. Expertise about market, technology trends, grand challenges are not available in every company. Micro- and small companies cannot afford to have resources in their daily work. Nonetheless, it is of high importance to be aware of the trends in the market.

A trend watcher will be provided to companies as an external source of information. There will not be a single person who can cover all business sectors and technological areas. Intermediary organisations, who want to offer this building block in their region, need to look for experts and agencies that do this on a daily basis. Companies looking for new products and services will be connected to the trend watcher and use the service as part of their innovation process.

>> Innovation Management / Process

The innovation management process within a company defines how the handle innovation, ideas and new topics on the market. This can be done in simple manner like idea boxes and a clear statement of how new ideas can be evaluated. For larger companies, innovation process managers are responsible to define and implement a complete process.

Independent of the way an innovation process is implemented, it needs to be introduced and pushed by top management. The goal is to have a structured process on how ideas are evaluated and developed within a company.

>> Innovation Management Networking

Networking events and channels for innovation managers gather people who are responsible for innovation within a company. As they are often "isolated" in their company in regards to their tasks, they need exchange of thoughts with like-minded people. The task is to find people in companies who are dealing with innovation and provide a networking environment for them. This can be regular events, exhibitions or company visits.

Networking events are not for technical discussions, but for discussing methods and competence exchange. The benefit is that companies get to know each other better and the focus on innovation management is raised.

>> Technology Transfer//Technology Broker

The experience of the FVG region (Italy) with regards to the *technology transfer and technology broker's* activity is well represented by the *"OIS - Open Innovation System FVG"* project (http://www.openinnovationsystem.it/it/home/).

Thanks to the regional funds, four technological and scientific parks of the FVG region joined together in order to have a systemic, integrated and more effective impact on the entire regional territory and to support SMEs' innovative projects by using the common *methodology* of *technology brokering*.

The regional enterprises may benefit, *without costs*, from the support of technology brokers in four steps:

- AUDIT: technology brokers visit the enterprise and analyze the innovation need;
- TECHNICAL ASSISTANCE: they study the market and technology scenarios, the need of the SME to patent the business idea, the need for additional technical and scientific competencies and technology and industry partners;
- FEASIBILITY: brokers conduct a feasibility study from the technical, economical and legal perspective and offer assistance for the development of pilot activities;
- PLANNING: brokers assist in detail the innovation project' activity development and identify available funding opportunities.

Phase IDEATION

>> Innovation Challenge

Challenge: a company/institution is looking for a solution for a given problem. May be internal or customer-oriented. Challenge is opened to deliver ideas or solutions for the problem. The winner / winners may be awarded a fixed prize or is handed an assignment by the issuing organisation. Innovation Challenge uses the open innovation approach.

Support can be found at:

- Private agencies like "WhatAVenture".
- Public agencies like "Innovationsfördernde Öffentliche Beschaffung".
- Support organisations with know-how.

Benefit for challenge issuing organisation: applies open innovation methodology. Presents itself to the public as innovation leader. Uses crowd knowledge as an external source. Acquires new employees or partners.

Benefit for challenge participant: makes a name for himself/herself or for his/her products/services. Gets to know bigger companies or institutions. Verifies his/her ideas in a real market.

>> Good Practice

Companies approach similar problems in their innovation cycles. In many cases, these are problems in the fields of technology, market, design, marketing, sales, business, and interaction with public agencies. Exchange of good practice between companies and external consultants who are working with multiple companies of an area offers the possibility of exchanging ways of acting, handling and solving such problems.

Benefit for SME: Avoids an error that others have made already. Learns from others – gets either direct input or finds other ideas.

Who can help? Companies in a similar field. Experts/consultants. Intermediary organisation that is working with many companies and follow them closely.

>> Open Innovation

Open Innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the

firms look to advance their technology. Open Innovation combines internal and external ideas into architectures and systems whose requirements are defined by a business model.

Innovation no longer takes place behind closed doors but takes its own non-linear route away from well-trodden paths. It occurs between the real and virtual world, in different disciplines, sectors and between different actors. This applies both to scientific research and to the application-oriented development of new products, services and processes[29].

Open innovation is the targeted and systematic cutting-across of the boundaries between organisations, sectors and disciplines to generate new knowledge and to develop new products, services or processes. Online tools and platforms are frequently used, allowing knowledge senders to link up and collaborate. In this context, users are playing an increasingly important role: Users, user crowds and user communities can offer up their needs, problems and solutions to the innovation processes of companies, science and the public sector, thus increasing the success rate of innovations. In this way, knowledge can penetrate an organisation, while at the same time society can actively shape innovation processes.

For the innovation system, open innovation means that civil society, science, industry and public administration (Quadruple Helix model) work together in dynamic, diverse innovation eco-systems both online and offline. Above all, the diversity of the actors increases the likelihood of generating really new knowledge and more radical innovation. This is contingent upon a culture of open innovation that also supports the useful and selective sharing of research results and data. Open innovation thus eliminates barriers in research, development and innovation and generates an innovation dynamic that cannot be achieved with traditional methods[30].

Benefit for SME: Uses crowd knowledge which would not be accessible in a traditional way.

Who can help? For example, in Austria, the government issued the “Open Innovation Strategy for Austria” in 2015. The strategy itself was generated by using an open innovation approach[31].

[29] http://openinnovation.net/about-2/open-innovation-definition/
[30] http://openinnovation.gv.at/wp-content/uploads/2015/08/OI_Barrierefrei_Englisch.pdf
[31] http://openinnovation.gv.at/wp-content/uploads/2015/08/OI_Barrierefrei_Englisch.pdf

>> Idea Contest

SME want to create new products or services, expand their product to new markets or search for new applications of existing products / services and they look for solutions in a certain area / field of technology.

This is a form of open innovation. The difference to "Innovation challenge": It is not required to have a product/service ready that can be applied to the challenge offered by the SME. Also possible for self-employed to join the idea call.

>> Funding programs for FFEI / Ideation

SMEs (especially those micro and smallest ones) may be aware of the methods, that are offered in the building blocks. From the experience of the project partners, SMEs are often hesitant to apply new methods, to let some external expert or institution enter their company. How can an intermediary organisation intervene: explain the building blocks and show the benefits to them.

In addition: Define a funding program which offers substantial financial support (at least 50%) or a certain number of days/hours of an external expert. This lowers the entry barrier.

Phase IDEA SELECTION

>> Focus Group

How does a fast-food restaurant choose the best wrapper for a hamburger? What do retailers do to find out how customers feel about shopping in their store? How can politicians be sure about people's views on their candidacy and issues? Why do newspapers choose the type size, store placement and images they do? These companies don't just guess how their customers feel. They use focus groups.

A focus group is a targeted group of consumers who are brought together for an in-depth discussion on a certain topic. Businesses and organizations rely on focus groups to obtain feedback on their products and services. Focus groups can be particularly useful in:

- Understanding how consumers view your brand
- Understanding how consumers in a particular category think
- Providing input on advertising campaigns
- Exploring the purchasing habits of customers
- Generating ideas on how to solve a problem or fill a need in a product category

- Assessing employees' attitudes about their companies

Unlike surveys or polls that produce quantitative, number-driven data, focus groups provide more in-depth, qualitative insights into a topic and collect a range of information. Focus groups typically include six to 12 people, and participants receive anywhere from $25 to $200 to reimburse them for their time and travel expenses. Group members are selected based on certain characteristics or demographic information, such as age, race, income and usage of the product. Companies give screening questionnaires to ensure they select the target audience.

Moderators lead the groups and try to stimulate discussion without saying too much about what they want to hear. The moderator keeps the participants focused on the topic, involves all the participants and encourages group members to react to each other's comments.

Moderators work from a guide with an outlined discussion plan. The sessions typically last from 90 minutes to two hours. The number of focus groups varies, depending on the topic. Some only hold a handful, while others could have 20 or more. The goal is the amass opinions to identify the trends.

The format of focus groups remains similar throughout the industry.

- The moderator starts by introducing attendees to make them feel at ease.
- The moderator next presents the topics to be addressed during the session.
- Then the moderator introduces topics that are more specific and may introduce props such as product samples or pictures.
- To wrap up, the moderator restates key discussion points and may ask participants to write down their conclusion.

During the sessions, clients may observe the group from behind one-way mirrors. Based on the discussion, clients may feed new questions to the moderator. After the session, the moderator gives the client a videotape or audiotape along with an analysis of the focus group results[32].

>> Crowd Selection

Companies or founders have several ideas, but they don't know which one is accepted by your customers. The lean management theory says that you need to define the Business Model Canvas and go out to possible customers to test your

[32] http://money.howstuffworks.com/business-communications/how-focus-groups-work.htm

assumptions. This is not feasible for all ideas, as you have only restricted market access.

A more global approach: Use Crowdfunding tools (Kickstarter, Indiegogo, startnext, etc.) to let the crowd evaluate your idea. Make a campaign for all of your ideas, see which one gets the most attraction (and in this case – funding) and start implementing it.

Benefit for the SMEs: Low cost for setting up and running a campaign. Depending on the successful implementation of it, the SME has its plans already funded.

>> Business Model Canvas

www.businessmodelcanvas.com

An SME's business model on one page - A global standard used by millions of people in companies of all sizes. You can use the canvas to describe, design, challenge, and pivot your business model. It works in conjunction with the Value Proposition Canvas and other strategic management and execution tools and processes. The Canvas has nine elements; together these elements provide a pretty coherent view of a business' key drivers

The Business Model Canvas is a strategic management and lean startup template for developing new or documenting existing business models. It is a visual chart with elements describing a firm's or product's value proposition, infrastructure, customers, and finances. It assists firms in aligning their activities by illustrating potential trade-offs.

The Business Model Canvas can be printed out on a large surface so groups of people can jointly start sketching and discussing business model elements with post-it note notes or board markers. It is a hands-on tool that fosters understanding, discussion, creativity, and analysis[33].

>> Start-up Weekend / Hackathon

Start-up Weekend is a 54-hour weekend event, during which groups of developers, business managers, start-up enthusiasts, marketing gurus, graphic artists and more pitch ideas for new start-up companies, form teams around those ideas, and work to develop a working prototype, demo, or presentation by Sunday evening. You will experience the highs, lows, fun, and pressure that make up life at a start-up. As you

[33] https://en.wikipedia.org/wiki/Business_Model_Canvas

learn how to create a real company, you will meet the very best mentors, investors, cofounders, and sponsors who are ready to help you get started. Surrounded by smart, passionate people and with the best tools and approaches at your disposal, you will take giant leaps toward creating a business, becoming a founder, and connecting with the right people and resources.

Benefits of attending a start-up weekend or similar start-up events:

- Learning the basics of starting a company
- Is starting a company right for you?
- Validation (or not) of your idea
- Business skills that extend beyond start-ups
- Explore a new and fun community

A similar event, but more computer-oriented is a **Hackathon**. A hackathon (also known as a hack day, hackfest or codefest) is a design sprint-like event in which computer programmers and others involved in software development, including graphic designers, interface designers, project managers, and others, often including subject-matter-experts, collaborate intensively on software projects. Occasionally, there is a hardware component as well. Hackathons typically last between a day and a week. Some hackathons are intended simply for educational or social purposes, although in many cases the goal is to create usable software. Hackathons tend to have a specific focus, which can include the programming language used, the operating system, an application, an API, or the subject and the demographic group of the programmers. In other cases, there is no restriction on the type of software being created.

Hackathons typically start with one or more presentations about the event, as well as about the specific subject, if any. Then participants suggest ideas and form teams, based on individual interests and skills. At the end of hackathons, there is usually a series of demonstrations in which each group presents their results. To capture the great ideas and work-in-progress often people post a video of the demonstrations, blog about results with screenshots and details, share links and progress on social media, suggest a place for open source code and generally make it possible for people to share, learn from and possibly build from the ideas generated and initial work completed

>> Innovation Voucher

This voucher tries to gap the bridge between SME and research organisations. The voucher is either fully funded or –at least- to a high extent. It allows the SME to collaborate with a research organisation in order to come up with solutions to an

issue they have in an innovation project. This way, SME also gets to know the way research organisations work.

Compare: “Innovationsscheck” by the FFG (Austrian Federal Promotion Agency)[34]

[34] https://www.ffg.at/programme/innovationsscheck currently available only in German

5. OUTPUTS OF THE PILOT ACTION IMPLEMENTED

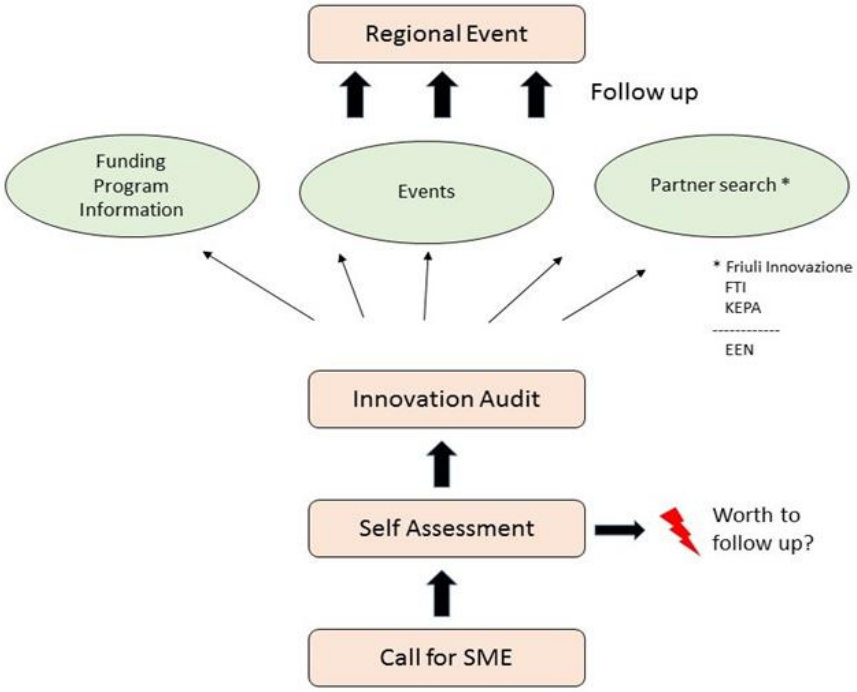
Pilot action has been realized by the means of a Personalized Innovation Audit with the aim of analysing company's research and innovation projects ideas and getting information about how to finance their investments thanks to synergies between funds. The Pilot action has been therefore delivered by involving local SMEs with the following **requirements**:

● be a **Small and Medium-Sized Enterprise** (SME) according to the definition of the EU recommendation 2003/361;

● be established in **one of the Regions involved in the project**: Friuli Venezia Giulia, Burgenland, Central Macedonia;

● operate in a **productive sector** (consultancy firms and professional services providers are not included).

A total of 15 SMEs have been interviewed (5 for each partner region), selected on the basis of an Open call and using the **Audit Tool** developed by "ZENIT GmbH - Zentrum für Innovation und Technik in NRW". The following scheme provides a more simple clarification of the flow.



Main outcomes of the interview delivered can be summarized as follows:

MAIN IMPACTS ON COMPANIES' R&D DEVELOPMENT

- ✓ Participation to EU project provides a positive impact on the cash flow
- ✓ Positive impact on the expansion of the network of relations with SMEs, industries and RTOs
- ✓ Acquisition of consultancy contracts
- ✓ R&D and innovation's investments increase
- ✓ Thanks to the funding received ,the company was able to proceed with the prototype development leading to the closure of the first commercial contract and turnover and revenue increase
- ✓ After the positive experiences on the regional funds, the company is willing to participate to EU R&I programs to collaborate with EU partners and expand its market
- ✓ No directs impacts so far except for collaboration with other companies on projects funded by regional programs
- ✓ After positive experiences with regional funds, the company is interested in applying to Horizon – SME instrument and other schemes (e.g. SoE exploitation) in order to collaborate with EU partners and expand its market.

MAIN PROBLEMS ENCOUNTERED

- ✓ Not enough skills, resources and experience to participate to European programmes
- ✓ Most of the interviewed companies declare to be too small to find out EU partners and guarantee EU impact of the project
- ✓ Qualified expertise is needed to apply for more complex EU projects: for this reason external resources are needed to apply to regional or EU calls. It should be stressed that for most of the companies it's hard to manage the Eeffort to write the application during daily work. Besides, it should be considered that in particular ERDF programs are very reporting-intensive.
- ✓ Even if attracting and innovative, the possibility to exploit the Seal of Excellence is poor and limited. This may strongly discourage the smart use of funds in a synergic way.
- ✓ Because of the rules applying for most of the EU programmes (State Aid in particular, but also eligibility of expenditures and overload of rules concerning management and administration) participating as a subcontractor look much more attractive for the majority of the companies;
- ✓ Evaluations received until now have been somehow contradictory; this disincentive company to invest on EU project

6. CONCLUSIONS AND INTERPRETATION

EUROSYN project implementation has given the opportunity to throw out some final conclusions and recommendations, based on the main findigns of the pilot actions and of the Peer Learning activity. We can distinguish two main field where some final conclusions can be summarized:

1 – Macro Level

The following points are basically reflecting the considerations made at the project starting point and shoudl be addressed to Programme Managina Authorities

- **Coherence of ESIF calls** with Horizon 2020 topics should be furtherly seek under many different aspects as: **Alignment of timeline** of call publication and ESIF application form on Horizon models; **coherence with evaluation criteria** between H2020 and ESIF; **Awarding a major score** for those project already received a positive H2020 assessment not financed for lack of funding **(there are already some best practices on this but still limited)**; activation of application procedures with reduced administrative burdens

- Saving a **part of ESIF funds** to be assigned to those project already submitted for Horizon 2020 following specific criteria: Ø score; Ø priority/measures applied by the project (collaborative projects, SME instrument - Phase 1, ecc.) Ø role (lead partner, partner)

- Opening the possibility to grant with **lump-sum** in ERDF, e.g. with reference to complementary actions to SME instrument Phase 1.

- More coordination between DG Regio / Growth / Research for the simplification in the implementation of synergies with specific reference to State Aid rules, and deepening the debate at EU level as well.

2 – Meso and Micro level

The implementation of pilot actions has showed how many obstacles may compromise or significantly limit the participation of SMEs to EU calls. Among these we can mention:

- Lack of information/awareness about different funding opportunities and support in choosing the best/most appropriate one;

- Skills are still lacking: to monitor and dealing with EU funding opportunities, to apply, to seek for partners as well as for managing project once funded; in this sense Innovation Agencies are "covering" somehow these weaknesses with their support;

- Limited resources to manage projects: the perspective of acting as sub-contractor seems to be much more attractive than having a dedicated staff to EU project management; simplification of procedures may help in this sense.

- Sometimes evaluations take too long time: this means that interest of SMEs may decrease / disappear and the impact of EU funds may therefore be limited on companies' activities.

Synergies between centrally managed EU funds and the so-called "European Structural Innovation Funds" is a hot topic for discussion within Eu institutions. It implies a particular coefficient of difficult given by the combination of different governance level where EU rules have to be combined and coordinated with regional polices and programmes. For this reason APRE working group is still collecting best practice around Europe to provide practical examples to policy makers. This represent a continuous work in progress, where everyone can learn and find the solution best fitting with specific needs.

As one of the point also emerged by the Pilot Action is the lack of resources (i.e: SMEs investing in specialized staff for EU project), is interesting to bring the example of Navarra Government that provide a financial contribution for support service for the preparation of R&D&I projects.

The contribution is an *ad hoc* funding to support the preparation/submission of projects related to H2020, ERANET-COFUND, Eureka

Beneficiaries are: Universities, SMEs, Research centers based in Navarra and requirements are the following:

- Projects involving SMEs, research centers, universities

- Eligible costs: support services,

- Funding rate: 25% (1st phase), 75% (2nd phase) if any.

From the high policy level is worth mentioning the Vanguard Initiative New Growth through Smart Specialisation whose objective is to co-create, co-fund and collaborate for projects and programmes across the regions where there is a close match in relative strengths to further develop EU value chains and clusters in a EU growth priority area. This initiative may be classified as a "Pilot Programme"

gathering different regions across Europe sharing same of similar growth priorities, identified by matching RIS3. Objectives are:

1. Matching Strategic Roadmaps
2. Aligning Strategic Investments
3. Upgrading regional partnership and clusters

What is interesting and pretty innovative is the approach and methodology introduced by the Vanguard Initiative that may represent a model of future cooperation between regions in a post-2020 future scenarios.

7. LIST OF SOURCES, IMAGES AND USEFUL LINKS

SOURCES

1) Research for REGIU Committee – Maximisation of Synergies between European Structural Funds and Investment Funds and other EU Instruments to attain Europe 2020 goals

2) Measures to foster SMEs' participation in R&D&I activities and synergies' promotion in support of innovation and SMEs

3) Enabling synergies between European Structural application: and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes

IMAGES

PICTURE 1: SYNERGIES CONCEPTS - SOURCE: THE SYNERGIES BETWEEN RESEARCH AND INNOVATION FUNDING: STAIRWAY TO EXCELLENCE (S2E) NICOSIA, 22 SEPTEMBER 2016, NICHOLAS HARRAP EUROPEAN COMMISSION, DG JRC 26

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USEFUL EU LINKS

1) https://ec.europa.eu/growth/industry/innovation_en
2) http://ec.europa.eu/research/innovation-union/index_en.cfm
3) http://een.ec.europa.eu/
4) http://europa.eu/youreurope/business/funding-grants/access-to-finance/index_en.htm
5) http://ec.europa.eu/programmes/horizon2020/en/h2020-section/sme-instrument
6) http://ec.europa.eu/programmes/horizon2020/
7) https://ec.europa.eu/growth/industry/policy_en
8) https://www.eurostars-eureka.eu/

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8. ANNEX

Pilot Action Application Form

CALL FOR SMEs

Application form

Company	.....
Address:	.....
Web site:	
Contact person *(name surname)*	.....
Role in the company:	.....
E-mail:	.....
Phone:	.....
Brief description of the company *(industrial sectors/markets and main products/services)*	.....
Number of employees *(2016)*	.....
Turn-over *(2016)*	.....
Future innovation projects *(company vision, project idea, needs, obstacles, …)*	.....

Participation to regional, national, European programmes / grants received (in the last 3 years)	☐ Regional programme - please specify: .... ☐ ERDF Regional Operational Programme - please specify: ..... ☐ National programme - please specify: .... ☐ European programme - please specify: ....

Innovation Audit Tempate

INNOVATION AUDIT

Company name

[date]

PILOT ACTION: in the EUROSYN project, 15 pilot cases with SMEs in the three involved regions will be implemented.

A personalized/customized Innovation Audit will be developed, in order to analyse the SMEs' research and innovation projects ideas/needs and provide proposals on how to better finance their investments exploiting different funds at regional, national and European level.

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General information about the company

Company information	
Address:	.....
Web site:	.....
Contact person	
Name and surname:	
Role in the company:	.....
E-mail:	.....
Phone:	.....
	.....
Brief description of main activities	.....
Industrial sectors/markets and main products/services	.....
Staff (number of persons, roles, …)	.....
Turn-over	
2016	.....
2015	.....
Main competitors	.....
IPR management (patents, etc.)	.....

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	.....	
Participation to regional and/or national programmes / grants received (in the last 3 years)	☐ Regional programme - please specify: ..... ☐ ERDF Regional Operational Programme - please specify ..... ☐ National programme - please specify: .... ☐ The company was financed /awarded on the basis of the Seal of Excellence - please specify:	
Participation to European programmes / European grants received (in the last 3 years - (FP7, Horizon 2020, etc.)	....	
Participation to H2020 SME Instrument	The company: ☐ has never participated ☐ participated, but the project evaluation was under the threshold ☐ participated, but the project wasn't financed for lack of resources (it obtained the Seal of Excellence) ☐ participated and got funding Please specify if participation was in Phase 1 or Phase 2: ...	
Impact of funding (regional, national, European) on the	☐ none ☐ R&D and innovation's investments increase	

company's development (R&D, innovation, etc.)	☐ innovation project implementation - please specify: ... . ☐ other impacts - please specify: ....
Economic / financial impact of funding	☐ none / the company has never received public funding ☐ high impact - please specify: .... ☐ low impact - please specify: ....

Analysis about project ideas / needs (min 1 - max 3) on which the company will invest in the next 1-2 years

 # 1

Title	.....
Main objectives	.....
Problems to be solved	.....
Brief description about the innovation / technological solution	....
Application sectors	.....
Target markets	☐ Regional ☐ National

	☐ International Please specify which kind of markets:	
Added-value in comparison to the state of the art	.....	
Activities already implemented	☐ none ☐ following activities: 1) ..... 2) ..... 3) ..... 4)	
TRL - Technology Readiness Level	☐ TRL 1 - basic principles observed ☐ TRL 2 - technology concept formulated ☐ TRL 3 - experimental proof of concept ☐ TRL 4 - technology validated in lab ☐ TRL 5 - technology validated in relevant environment ☐ TRL 6 - technology demonstrated in relevant environment ☐ TRL 7 - system prototype demonstration in operational environment ☐ TRL 8 - system complete and qualified ☐ TRL 9 - actual system proven in operational environment	
Future planned activities in the project	☐ none ☐ following activities: 1) ..... 2) ..... 3) ..... 4)	
Financial resources / funding for the project	☐ internal resources ☐ searching for external funding to start the projects	

	☐ the company has applied / will apply to the following funding programmes: 1) …… 2) …… 3) ……
Partners already involved	☐ none ☐ searching for external partners (technological, industrial, financial, etc. partners) - please specify: …… …… ☐ already identified / in contact - please specify: …… ……
Positioning in the regional S3 - Smart Specialization Strategy	*[indications about the coherence of the project idea / need with the topics indicated in the regional Smart Specialization Strategy]*

 # 2

Title	……
Main objectives	……
Problems to be solved	……
Brief description about the innovation / technological solution	…… ……
Application sectors	…… ……
Target markets	☐ Regional

	☐ National ☐ International Please specify which kind of markets: ……	
Added-value in comparison to the state of the art	…… ……	
Activities already implemented	☐ none ☐ following activities: 1) …… 2) …… 3) …… 4) ……	
TRL - Technology Readiness Level	☐ TRL 1 - basic principles observed ☐ TRL 2 - technology concept formulated ☐ TRL 3 - experimental proof of concept ☐ TRL 4 - technology validated in lab ☐ TRL 5 - technology validated in relevant environment ☐ TRL 6 - technology demonstrated in relevant environment ☐ TRL 7 - system prototype demonstration in operational environment ☐ TRL 8 - system complete and qualified ☐ TRL 9 - actual system proven in operational environment	
Future planned activities in the project	☐ none ☐ following activities: 1) …… 2) …… 3) …… 4) ……	

Financial resources / funding for the project	☐ internal resources ☐ searching for external funding to start the projects ☐ the company has applied / will apply to the following funding programmes: 1) …… 2) …… 3) ……
Partners already involved	☐ none ☐ searching for external partners (technological, industrial, financial, etc. partners) - please specify: …… …… ☐ already identified / in contact - please specify: …… ……
Positioning in the regional S3 - Smart Specialization Strategy	*[indications about the coherence of the project idea / need with the topics indicated in the regional Smart Specialization Strategy]*

 # 3

Title	……
Main objectives	…… ……
Problems to be solved	…… ……
Brief description about the innovation / technological solution	…… …… ……

Application sectors	…… ……
Target markets	☐ Regional ☐ National ☐ International Please specify which kind of markets: ……
Added-value in comparison to the state of the art	…… ……
Activities already implemented	☐ none ☐ following activities: 1) …… 2) …… 3) …… 4) ……
TRL - Technology Readiness Level	☐ TRL 1 - basic principles observed ☐ TRL 2 - technology concept formulated ☐ TRL 3 - experimental proof of concept ☐ TRL 4 - technology validated in lab ☐ TRL 5 - technology validated in relevant environment ☐ TRL 6 - technology demonstrated in relevant environment ☐ TRL 7 - system prototype demonstration in operational environment ☐ TRL 8 - system complete and qualified ☐ TRL 9 - actual system proven in operational environment
Future planned activities in the project	☐ none ☐ following activities: 1) …… 2) …… 3) ……

	4) ……	
Financial resources / funding for the project	☐ internal resources ☐ searching for external funding to start the projects ☐ the company has applied / will apply to the following funding programmes: 1) …… 2) …… 3) ……	
Partners already involved	☐ none ☐ searching for external partners (technological, industrial, financial, etc. partners) - please specify: …… …… ☐ already identified / in contact - please specify: …… ……	
Positioning in the regional S3 - Smart Specialization Strategy	*[indications about the coherence of the project idea / need with the topics indicated in the regional Smart Specialization Strategy]*	