

Title

Benchmarking report

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Abstract

Each partner will make a competition of their chosen policy instrument from their RIS3 with a comparable policy instrument from the RIS3 of the region, that has been identified by the JRS Peer Review methodology as a nearest region according to the several indicators (geographical proximity, economic structure, cultural indicators, social structure etc).

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1 INTRODUCTION

The project HIGHER (Better Policy Instruments for High Innovation Projects in the European Regions) is an Interreg Europe project, that aims to identify innovative models of Public-private Partnerships (PPP) suitable for mobilising investment in smart specialisation areas and enhancing entrepreneurial discovery in the regional innovation process. The project examines the application of nine innovation policy instruments developed in each project partner region, and evaluates their impact on the development and implementation of regional smart specialisation strategies.

The main subobjectives of the project are:

- To promote, the role of the PA as innovation demand drivers starting from public procurers' needs.
- To set up of a learning process starting from the good practices identification and exchange of Structural Funds MA actions e.g practices to: manage ESIF programs on interregional and transnational actions, types of priorities, project selection.
- To support the implementation of the PP's policy instruments action plans, exploiting explicitly the possibility to invest ESIF funds in related smart specialisation areas among Member States (e.g. making us of macroregional platforms or other networks).
- To implement an "experience hub" of PPP through a process of transformation of experience tacit knowledge (experience acquired in the work) into explicit knowledge (information available to others). The "hub" means digitalise work experiences, ready to be promoted in all European web and social platforms including program web platform so to do critical mass in the European debate.
- To promote the engagement of all actors, quadruple helix approach, for improving the policy instruments: from institutions to the new innovative entrepreneurs, hidden champions and groups with an entrepreneurial potential.

The nine regions and countries, participating in the HIGHER project, are:

- Abruzzo (Italy)
- Catalonia (Spain)
- Central Macedonia (Greece)
- Greater Cambridge and Greater Peterborough (United Kingdom)
- Lithuania
- Marche (Italy)
- Norte (Portugal)
- Slovenia

- Stockholm (Sweden)

The benchmarking report is one of the deliverables of the project HIGHER. As an upgrade of the Analysis of the Policy instruments in the nine regions, participating in a HIGHER project, it represents the next phase of the policy learning process. The objective of the benchmarking report is to make a comparison of the policy instruments from the regions from the HIGHER project with the selected policy instruments in the regions, that have been identified as the nearest region according to several indicators and to learn from the regions that are not participating in the HIGHER project. The benchmarking documents describes eight policy instruments in seven benchmark regions, selected by project partners. Each project partner selected one benchmarking region to compare the policy instruments with. Each partner region also described similarities and differences between their policy instrument and policy instrument of the benchmark region and identified activities or areas of the benchmark policy instruments they can learn from and improve in their regional policy instruments.

2 POLICY INSTRUMENT IN THE SELECTED BENCHMARK REGIONS

Each region, participating in the HIGER project, chose a policy instrument in the selected nearest region and described their the policy instruments.

Pomorskie, Poland

Name of the instrument:

Regional Strategic Programme for Economic Development 'Pomorskie Creativity Port' (RSP PCP)

What are the main characteristics and the objectives of the instrument?

RSP PCP is one of the six regional strategic programmes supporting the implementation of the Regional Development Strategy 2020. Particularly, it plays an important role in identifying and implementing smart specialisation areas. It also sets out new directions for the development of cluster policy, following the decision to discontinue the Regional Programme in Support to Clusters during the 2009-2015 period. The main strategic and operational objective of the Regional Strategic Programme for Economic Development is "Modern Economy", the achievement of which will be implemented through two specific objectives: 1. Effective Enterprises and 2. Competitive Higher Education.

Specific objective 1: Effective Enterprises will be implemented through actions such as: dissemination of innovations and implementation of modern and more efficient production technologies and services to businesses. Intervention will focus on innovative projects supporting the development of green economy, in particular strengthening the industries with the utmost potential for growth and/or smart specialization. "Effective Enterprises" objective will include: technological innovation, business, eco-innovation and creative industries. Special preferences will be granted to the initiatives conducted in partnership, such as setting up and maintaining clusters.

The priorities of "Effective Enterprises" objective are:

1. Innovation and knowledge transfer to the economy:
 - Innovation in enterprises
 - Transfer of knowledge to the economy
 - Professionalization of enterprises
2. External economic links:
 - Foreign expansion of enterprises
 - Attracting external investments
 - Promotion of region's economic potential

3. Modern information and communication technologies:

- Broadband infrastructure
- Use of ICT

Specific objective 2. Competitive Higher Education will focus on increasing international attractiveness of Pomeranian Universities by providing a consistent, modern and flexible training developed in cooperation with the employers. In order to improve the competitiveness of higher education, universities will also work closely with each other on providing attractive curricula responding to market needs.

The priorities of “Competitive Higher Education” objective are:

1. National and international activities of the universities in the following fields:

1. Attractive curricula
2. Cooperation with other universities

2. Education corresponding to market needs:

- Partnership of employers and universities
- Professional training in Subregions of the Pomorskie Region

What are the thematic priorities of the instrument?

Thematic priorities of the Pomorskie smart specialisation strategy are:

- Digital transformation
 - Artificial intelligence, cognitive systems, augmented and virtual reality, visualisation, simulation, gamification & interaction technologies
- Sustainable innovation
 - Sustainable energy & renewables
- Public health & security
 - Ageing societies
 - Food security & safety
- Blue growth
 - Aquaculture
 - Blue renewable energy

What are the key implementation tools and channels for the policy instrument?

Pomorskie Regions offers a wide range of tools of support for Pomorskie Smart Specialisations:

Modern R&D facilities

- R&D infrastructure of research units for the development of joint projects with entrepreneurs

- infrastructure of business environment institutions, e.g. Pomeranian Science and Technology Park Gdynia, Gdańsk Science and Technology Park, Kwidzyn Industrial and Technology Park
- specialist laboratories, R&D departments, R&D centres in companies
- incubators supporting innovative start-ups, e.g. STARTER, Constructor Park

Human capital

- thematic meetings, conferences, training sessions and workshops
- improvement of competitiveness and internationalisation of academic centres of the Pomorskie Region under “Study in Pomorskie”
- undertakings implemented by the Regional Labour Office
- development of personnel and competences in response to market expectations (regional education and infrastructure)

Knowledge and mentoring

- market analyses, including analyses of the needs of the labour market, economic trends, prospective directions of development (in co-operation with the OECD)
- expert support in facilitating the activity of PSSs
- specialist advisory services provided by business environment institutions
- dedicated analyses and models facilitating internationalisation of companies entering foreign markets (prepared in co-operation with the European Commission)
- participation in domestic and international platforms for co-operation, e.g. S3
- use of the potential of national and regional key clusters and innovative Pomeranian companies
- meetings of PSS Councils

Promotion

- participation in fairs, trade missions
e.g. under the project *Pomeranian Export Broker*
- support in searching for project partners, e.g. the ‘Pomorskie in the European Union’ Association, the Regional Office of the Pomorskie Region in Brussels
- activities aimed at increasing the investment attractiveness of the region and effective service of external investors under “Invest in Pomerania”

Joint undertakings

- R&D undertakings implemented in response to market needs aimed at developing modern products, services and technologies
- research infrastructure, including modern laboratory and research equipment for companies and research units
- horizontal (partner) projects – projects of great significance for the competitiveness of the region
- incubation and acceleration

- of the platform for co-operation between companies – sharing experiences and good practices

What are the main stakeholders involved?

Pomorskie Region has decided to engage many stakeholders in the smart specialisations policy from the initial stage of selecting areas of PSS. The Pomorskie Region has adopted a bottom-up approach to defining smart specialisations. The approach has consisted in inviting business and scientific circles, organised into partnerships and interested in developing specific specialisations, to submit concrete proposals under the Call for proposals for the selection of Pomorskie Smart Specialisations. The regional authorities selected proposals with the highest development potential among those submitted. The process of selecting PSSs was carried out with the involvement of independent experts comprising the Selection Board, in the period between 14 May and 20 November 2014.

Pomorskie Region entered into negotiations with Partnerships representing areas of Pomorskie Smart Specialisations, which led to the conclusion of Agreements on Pomorskie Smart Specialisations on 28 January 2016, in order to specify the scope of smart specialisation areas, concentrate efforts on the most attractive and prospective segments (development directions), and facilitate the assessment of R&D and innovative projects applying for financing under operational programmes utilising EU funds. The Agreements were signed by both Board of the Region nad around 400 partners from the region, including companies, representatives of higher education, clusters, business support institutions, hospitals, NGOs, municipalities and others.

Under the Agreements on PSSs, Councils of PSSs were chosen from among the signatories. They constitute a “channel of communication” between the business and scientific sectors and the administration with regard to any activities within the given area of PSS. The Councils determine the direction of specialisation development and take measures to strengthen the area of PSSs. The councils consist of the 10 representatives of business, science nad clusters.

Type of funding (grants, loans, other):

The main regional source of funding for projects form the area of Smart Specialisation is Regional Operational Programme for the Pomorskie Voivodeship for the years 2014-2020. There are two main priority axes 1 and 2 and additional PA 4:

- PA 1 Commercialisation of knowledge (allocation: 139 860 877 EUR) – all the projects financed from this PA has to be from the area of Pomorskie Smart Specialisations (PSS)
 - Measure 1.1. Expansion through innovations – for R&D projects - both grants and non-grant support
 - Measure 1.2 Transfer of knowledge to economy – development of R&D infrastructure in scientific units in order to develop cooperation with entrepreneurs
- PA 2 Enterpreneurship (allocation: 174 647 688 EUR) - preferences for projects focused on PSS

- Measure 2.1. Basic investments – financial instruments eg. microloans, development loan, investment loan
- Measure 2.2. Profiled investments – project aimed for market expansion or broadening products range – both grants and non-grant support
- Measure 2.3 Export activity (allocation: 15 million EUR) – „Pomorski Broker Eksportowy” (project value: 20 million EUR)
- Measure 2.4. Business environment - its aim is to provide highly specialized and pro-innovative services to SMEs in Pomorskie
- Measure 2.5. External investors (allocation: 44 million EUR) – „Invest in Pomerania” (project value: 47 million EUR)
- PA 4 Vocational training
 - Measure 4.2. (allocation 17 million EUR) Infrastructure of universities with practical profile - all the projects financed from this measure has to be from the area of PSS

National funds:

- Operational Programme Smart Growth
- Operational Programme Knowledge Education Growth

International funds, including:

- Horizon 2020
- INTERREG
- COSME
- LIFE

Own funds of the Self-Government of the Pomorskie Region

Private capital of companies

The negotiations between the PSSs Partnerships and the Self-Government of the Pomorskie Region as the last step of defining PSS also led to agreeing on specific undertakings (so-called horizontal projects) which are relevant for the development of the PSS as a whole. The horizontal projects may be given preference in access to finance within the framework of the ROP PV 2014–2020 or support in applying for financing at the national level.

What are the expected results and the impact of the instrument?

The strategic interest of the region is to improve its position in the added value chain on a national, Baltic and European scale. The intensification of internal and external economic links determines the improvement of competitiveness of the region, enabling the attraction of human, capital and technology resources, and their formation in such a way as to work towards its sustainable development.

The modernization of the region's economy creates opportunities to build good economic (external investment, foreign trade, attracting and implementing innovation) and educational and scientific links (regional, Baltic, European and global networks), as well as social links (including cultural ones).

Desired direction of change

- An increase in export activity and the level of investment in enterprises;
- An increase in activity of external investors, including foreign ones (also through reinvestment);
- An increase in employment in sectors of high added value and the largest development potential;
- Strengthening of the Tri-City Metropolitan Area as a centre of international trade;
- Extension of control over the key economic assets of the region by the Pomorskie companies;
- An increase in activeness of research institutions and enterprises in research programmes;
- An increase in the number of foreign lecturers and students and those from outside the region;
- Improving cooperation between universities, business and government to offer better educational offer;
- Increasing access to broadband internet with very high performance parameters;
- Becoming the first tourist destination in Poland.

Measure of success

GDP *per capita* growth dynamics in 2013-2020 higher than the Polish average and higher than the EU average.

What are expected performance indicators?

There are several expected results described in the RSP PCP, the strategic goals are:

- Pomorskie Region as an initiator and active partner of economic cooperation in the country and in the world - especially in the Baltic Sea Region
- Competitive economy based on smart specializations of the region
- Favorable living and business conditions based on modern ICT technologies
- Pomorskie Region as a competitive academic center
- An optimized learning process that takes into account the needs of the labour market

The main objective of RSP PCP is Modern economy, its goal is to modernize the region's economy with the balanced use of specific features of its economic, social and cultural potential.

Within modern economy there are two specific objectives:

- Effective Enterprises – within the goal the emphasis will be placed on development of a service system for new and active investors in the region, creation of a system of economic promotion and an export support system
- Competitive Higher Education – within this goal the emphasis will be placed on preparation and promotion of the offer for foreign students, coordination of scholarship policy, in particular for the purpose of internationalisation of the universities and transformation of three cities away from the centre into vocational higher education hubs

The performance indicators are described in the RSP PCP which is now being verified and updated. There are separate indicators for the main goal “Modern economy”, for specific goals “Effective enterprises” and “Competitive higher education” and for priorities within each specific goals. The whole structure of RSP PCP is now being transformed so the exact indicators under each objective will be established next year.

Copenhagen Region, Denmark

Name of the Instrument

CopenVirk

What are the main characteristics and the objectives of the instrument?

In Denmark, the regional growth and development strategies, government innovation strategy, government cluster strategy and regional growth partnerships are jointly recognized by the European Commission as initiatives that meet the criteria for a smart specialization strategy (Copenhagen EU Office 2017). CopenVirk is one instrument designed to help implement this strategy by increasing the knowledge of local SMEs on regional smart specialization to help maximise their chances of successfully accessing EU funding. The instrument provides capacity building and training for local SMEs, with EU smart specialization and funding experts offering free advice on EU funding opportunities and assistance in identifying national, local and international project partners. The main objective of the instrument is to gain greater access to public funding and increase access to global markets through the development of global value chains with other companies and businesses.

What are the thematic priorities of the instrument?

Copenhagen's thematic areas are chosen on the basis of their regional smart specialization strategy and main EU priority areas. The smart specialization strategy of the Copenhagen Region focuses on 5 main areas:

- **Medicine and Healthcare Technologies:** The region has a number of companies and active clusters in the pharmaceutical, biotech and medtech sectors, including Copenhagen Health Tech Cluster, Medicon Valley Alliance, Copenhagen Health Innovation and Copenhagen Centre for Health Technology.
- **Clean Tech and Smart Cities:** Public authorities, universities and clean-tech companies have ambitious climate strategies built around clusters, including public-private partnerships CLEAN and Gate 21, that look to develop and implement innovative solutions to promote renewable energies.
- **Smart Mobility and Infrastructure:** Copenhagen is a frontrunner in urban mobility planning with public authorities working together with universities, companies and transport providers to develop effective biking infrastructure and intelligent transport systems.
- **Smart Growth Digitalization:** The region aims to develop synergies between research institutions, companies and public authorities to promote digital transformation through the creation of more spin-off businesses in areas, such as, cyber security, big data, quantum computing and artificial intelligence.
- **Innovation in SMEs:** The region is focused on enhancing innovation in local SMEs by increasing their access to public investment and global market chains.

What are the key implementation tools and channels for the policy instrument?

CopenVirk is managed and financed by the Copenhagen EU Office. The instrument is conducted in cooperation with representatives of local business services, Væksthuset, cluster organizations, GTS institutes and universities in Copenhagen, whose role is to provide expertise, knowledge and targeted support to local SMEs. The Danish Cluster and Regional Partnerships strategies are important implementing tools as they bring innovation stakeholders together within a framework in which they can exchange information and foster collaborations.

What are the main stakeholders involved?

The Copenhagen instrument targets local SMEs, businesses and industries. To be eligible for CopenVirk, companies must work with technologies or processes that are novel and innovative, scalable and targeted to the international market, and focused on challenges facing the public sector. Typical projects must focus on developing a prototype for the international market, or finding solutions that tackle societal challenges.

Type of funding (grants, loans, other):

The main aim is to increase access to EU grants and loans available through public funding programmes, such as Horizon 2020, ERDF and ESF.

What are the expected results and the impact of the instrument?

The instrument is expected to increase the amount of investment received through EU funding for SMEs and in doing so, increase the number of new business and jobs available in the Copenhagen Region. Furthermore, the instrument will increase access to international value chains and the possibilities for local businesses to get their products and services into global markets.

What are expected performance impact indicators?

The main performance indicators for the instrument include:

- Increased investment revenue from EU funding sources;
- Development of new spin-off businesses;
- Increase in the number of jobs;
- Increase in the number of products reaching the market place;
- Attract more skilled workers to the region;
- More young people in education and training;
- Increase in the number of patents;
- Increase in industry/business exports.

Emilia-Romagna, Italy

Name of the instrument:

Regional Operational Program of Emilia-Romagna – Strategic industrial research projects within the framework of the priorities defined in S3 (Action 1.2.2)

What are the main characteristics and the objectives of the instrument?

The objective of this policy instrument is the reinforcement of the regional innovation system oriented to the promotion of R&D and technology transfer activities in order to enhance industrial innovation. Created under the Regional Law n. 7 (2014), the regional innovation system of Emilia-Romagna aims to enhance industrial research and technology transfer with a view to accelerate the innovation process in companies. The final objective is to promote innovation as a collective and sustainable process.

It also aims to potentiate the role of industrial research laboratories and innovation centres integrated in the “Regional Advanced Technology Network”. This network was created under the POR 2007-2013 and its members must be accredited by Emilia-Romagna Region.

Specifically, this measure supports strategic projects, comprising industrial research and experimental development activities oriented to the demonstration of new products and processes and benefiting the industrial fabric (starting with a TRL 3 and achieving a TRL 5 at the end of the project).

What are the thematic priorities of the instrument?

The thematic priorities of the instrument are linked to S3 priorities, in terms of productive sectors and technology domains:

- Agri-food;
- Building and construction;
- Mechatronics and transport;
- Health and well-being industries;
- Cultural and creative industries.

The projects should also be coherent with the drivers of innovation foreseen in the S3, namely: sustainable development, information society, healthy and active living, and services innovation, as well as with the Enabling Technologies, such as micro-nano electronics, nanotechnology, photonics, industrial biotechnology, advanced materials, advanced production systems, and digital technologies.

What are the key implementation tools and channels for the policy instrument?

The policy instrument is implemented through calls for proposals.

Projects' evaluation criteria are:

- Scientific and technical quality, and contribution to the development of S3;
- Economic and financial quality and economic sustainability;
- Level of industrial viability;
- Level of innovation in relation to the state-of-the-art of technological development.

Some calls for proposals have already been launched. The last approved projects started in 01/04/2016 and will finish in 31/03/2018 (24 months).

What are the main stakeholders involved?

The main stakeholders involved are Emilia-Romagna region as the responsible for the policy instrument, and accredited research laboratories, innovation centres and non-accredited research organisations as beneficiaries.

The groups of applicants should integrate 5 entities (max), being at least 2 of them research laboratories accredited by Emilia-Romagna region. These accredited laboratories must have a budget non-inferior to 80% of project's costs. Moreover, only accredited laboratories can assume the role of Lead Partner.

Companies should participate in the project through the establishment of a cooperation agreement with research laboratories (minimum of 2 enterprises) as a way to access to research results. Public and non-profit organisations could participate as stakeholders.

Type of funding (grants, loans, other):

Grants are provided in the framework of this policy instrument, with a maximum financing per project of 1 million euro.

Funding rates are described in the table below:

Beneficiaries	Industrial research	Experimental development	Diffusion and valorisation
Research institutes and entities that don't develop economic activities	70%	70%	100%
Other public and private entities	50%	25%	100%

What are the expected results and the impact of the instrument?

The main expected result of this instrument is the creation of partnerships between research institutes and companies focused on the thematic priorities of S3.

Additional results are:

- Enhance industrial innovation;
- Enhance knowledge transfer activities;
- Reinforcement of the regional innovation system;
- Strengthen the role of industrial research laboratories and innovation centres integrated in the “Regional Advanced Technology Network”.

What are expected performance indicators?

The performance indicators defined in the ROP Emilia-Romagna in the scope of Action 1.2.2 are:

- Public expenditure in R&D /GDP (2023) – 0,55
- Total expenditure in R&D /GDP (2023) – 1,96

Tuscany Region, Italy

Name of the instrument:

R&D investments aid scheme, part of ROP, AXIS 01 (supporting innovation and links between Knowledge and Market), Action 1.1.5

What are the main characteristics and the objectives of the instrument?

The instrument fosters the development of the economic potential of the region through investments on R&D carried out by so-called “dynamic companies”, i.e. those companies able to compete worldwide and performing on international markets.

Tuscany Region has decided to invest very much on these companies, as leading companies for backwards effects on inner supply chains and domestic markets.

Within this scheme, main instruments objectives are:

- to enhance the development of dynamic companies through investments on R&D on the technological priorities of RIS3;
- to support local SMEs to invest in R&D and cooperate with Research (raise innovation demand);
- to increase research and Market linkages (exploit research results);
- to focus on RIS3 strategies;
- to enhance open innovation dynamics (fostering also spin-off and start-ups).

What are the thematic priorities of the instrument?

Within the general objective of promoting business investments in R&D, main thematic priorities are related to RIS3 technological axes:

- photonic and ICT;
- smart manufacturing;
- chemicals and nanotechnology.

What are the key implementation tools and channels for the policy instrument?

Key implementation tools are call for proposals for Research and development state aids schemes. The R&D aids scheme, activated under the GBER (general block exemption regulation) are integrated with aids to SMEs for purchasing knowledge intensive services.

What are the main stakeholders involved?

Main stakeholders involved are:

- technological districts;

- research centers;
- universities;
- enterprises.

Under this action and calls proposals that partner with research and knowledge centers get more points during their evaluation phase.

Type of funding (grants, loans, other):

Grants.

What are the expected results and the impact of the instrument?

The instrument has several output indicators, mainly linked to:

- number of R&D employees generated;
- number of enterprises introducing process and product innovation;
- number of enterprises introducing new products in the market;
- number of companies cooperating with research institutes.

Outcomes indicators are related to:

- increment of the number of R&D employees on total employees;
- increment of the percentage of enterprises introducing new products in the market on total.

What are expected performance indicators?

The performance indicator is related:

- number of enterprises introducing new products in the market.

Lombardia, Italy

Name of the instrument:

Linea R&S per Aggregazioni (R&D line for Aggregations)

Which are the main characteristics and the objectives of the instrument?

The *R & D line for Aggregations* aims to support R & D programs and projects undertaken by companies in collaboration with research organizations (public and private). Its final goal is to promote stable and long-term collaboration in the R&D field, enhancing the whole R&D system and spreading the innovation and culture in SMEs as well as whole economic sectors.

The projects should address one of the specialisation areas identified by the "Regional Strategy for smart specialization Research and Innovation (S3) ". They must be specialized unless they are developed in the context of 'transversal projects', or so-called "Smart Cities and Communities" projects, which can integrate different specialization areas. The areas identified in the RIS3 are: aerospace; agri-food; eco-industry; health/life sciences; creative and cultural industries; advanced manufacturing; sustainable mobility.

The projects should range between 1M and 2M euros for a maximum of 24 months, with a partnership that must include at least 3 members, 2 SMEs and 1 large enterprise or research centre. There are some restrictions in order to balance the partnerships: the SMEs must manage at least 60% of the total budget; the large company must not surpass 25%; and no partner can manage less than 10%. That should allow for a balanced partnership with co-responsibility and real participation of all those involved.

An additional restriction establishes that SMEs can only participate in a maximum of 2 projects, so they have to really invest resources and commitment in the projects they are part of. The projects must be clearly "marked-oriented" in terms of the necessities of the enterprises involved, but also with the ability to improve and foster a culture of innovation and investment in research, especially in the SMEs. They must be aimed at the introduction of innovation of the product and/or coherent process and relevant with the corporate core-business and NACE classification of production activities of the applicant.

Which are the thematic priorities of the instrument?

The thematic priorities are directly linked to the formulation of the regional S3 and its specialization areas. The projects supported must be in one of the specialization areas of the regional strategy: aerospace; agri-food; eco-industry; health/life sciences; creative and cultural industries; advanced manufacturing; sustainable mobility. They must be "applied" in terms of the typology of innovation involved in the projects: industrial research and experimental development with a significant weight of SMEs in the partnership.

Which are the key implementation tools and channels for the policy instrument?

Public calls for proposals launched periodically from the Regional Government, with a two-stage competitive selection process. The first phase has an admissibility revision – basically in terms of formal attributes and administrative requirements – and a technical evaluation through a "Technical Valuation Nucleus" (Nucleo Tecnico di Valutazione) supported by experts in order to assess the innovation level and technical merits of the project as well as the capacity of the partnership for effectively developing the project or programme.

The second phase is for those projects admitted in the first one. The evaluation relies heavily on the technical and innovative merits of the project, and it is developed by the TVN with the help, if necessary, of outside experts in the research fields of the project/program. The parameters involved are the degree of innovation, the overall quality of the project (chronogram, budget, activities, etc.) and the economic and financial sustainability of the partnership (since there are also loans involved). The whole system relies also significantly on two other initiatives in the region such as the cluster and the Open Innovation Platform of Lombardia. They act as foundations and/or helping tools to develop the partnerships and “aggregations” necessary to participate in the instrument.

Who are the main stakeholders involved?

The main stakeholders are Enterprises (SMEs and LE), Universities and Research Centres, but it is expected to have a high degree of involvement from the whole R&D system in the region, given the characteristics and scope of the projects.

Type of funding (grants, loans, other):

There is a combination of grants and loans up to different degrees of the total (eligible) expenditure of each partner, depending of its nature (enterprise, university or research centre). The total amount is:

- SME: 10% non refundable grant + 60% loan over 100% of expenditure (total amount from the instrument = 70%)
- LE: 10% non refundable grant + 50% loan over 100% of expenditure (total amount from the instrument = 60%)
- Research Centre (University): 40% non refundable grant (total amount from the instrument = 40%)

Which are the expected results and the impact of the instrument?

The expected result, in the mid-term, is to create an ecosystem favouring the "spontaneous / bottom up" development of relevant projects, especially through new forms of collaboration and partnership around the three elements of the knowledge triangle (education, research and innovation). The final aim is to reinforce a system of "Regional Knowledge and Innovation Communities" as on the KIC model, as it has been developed in the European level and proposed by agents such as the European Institute of Innovation and Technology.

Which are expected performance indicators?

The performance and “results”/impact indicators of the instrument are directly linked to the ERDF Regional OP and thus the main parameters are the one stated there:

- Enterprises linked to projects: 564
- Enterprises cooperating with Research Centres: 256
- Enterprises introducing a new product/process at the end of the activities: 140
- Total amount for the instrument: 120,000,000 €

Poland

Name of the instrument:

Pro-innovation BEI services for SMEs

What are the main characteristics and the objectives of the instrument?

The purpose of the measure is to ensure enterprises' access to pro-innovation services provided by various types of public and private entities. The services are expected to contribute to R&D&I activity development in companies or to establishing cooperation in this area from partners from Poland and abroad. Support mechanisms used are demand-driven and respond to diverse needs of enterprises pursuing R&D&I activity.

The aim of the measure is to develop the offer of pro-innovative services rendered by business environment institutions (BEIs), which support SMEs in the process of developing and implementing product or process technology innovations in areas of National Smart Specialisations (NSS).

What are the thematic priorities of the instrument?

Thematic priority axis - strengthening research, technological development and innovation.

Investment priority - promoting investments of enterprises in research and innovation, developing relations and synergies between enterprises, R&D centres and higher education sector, particularly promoting investments in product and service development, technology transfer, social innovation, eco-innovation, applications in public services, demand stimulation, networking, clusters and open innovation by way of smart specialisation and support for technology and applied research, pilot lines, actions for early product validation, advanced manufacturing capacity and first production, particularly in the field of key enabling technologies and dissemination of general purpose technologies.

What are the key implementation tools and channels for the policy instrument?

Accredited entities are entitled to provide the services financed under this sub-measure. The BEI accreditation process is conducted by the Ministry of Economy. An entrepreneur may choose a non-accredited entity to provide the service, but the entity must fulfil the accreditation criteria and become accredited before the date of signing the co-financing agreement with the SME. In such a situation, the BEI accreditation process is conducted in parallel with the assessment of the SME's project co-financing application. Provision of pro-innovation services should result in development of research and development activity and of innovativeness of enterprises.

Project selection procedure: competition procedure. Authority responsible for calls for proposals, evaluation of applications and receiving protests: Polish Agency for Enterprise Development.

What are the main stakeholders involved?

Stakeholder group relevant for policy instrument:

- Micro, small and medium-sized enterprises, that intend to carry on/carry on R&D&I activities;
- The Ministry of Economy;
- Polish Agency for Enterprise Development;
- Business environment institutions, which support SMEs in the process of developing and implementing product or process technology innovations.

Type of funding (grants, loans, other):

Outright subsidy

What are the expected results and the impact of the instrument?

- Number of new employment in supported enterprises (total/female/male) - 1317;
- Number of enterprises using the advanced services (new and/or improved) provided by business environment institutions – 2636;
- Number of introduced innovations - 3294.

What are expected performance indicators?

- Number of supported enterprises – 2636;
- Number of enterprises receiving subsidies – 2636;
- Private investments that supplement public support for enterprises (subsidies) - 66 385 000 PLN.
- Number of enterprises that received support in the form of specialist advisory services – 2636.

Rhône Alpes Region (France)

Name of the instrument:

Regional ERDF-ESF Programme "Rhône-Alpes" 2014-2020

What are the main characteristics and the objectives of the instrument?

The ERDF-ESF Programme "Rhône-Alpes" aims to boost economic growth in the region and contributes to achieving the Europe 2020 targets for smart, sustainable and inclusive growth. It should create jobs and boost productivity, particularly in SMEs.

What are the thematic priorities of the instrument?

Within Priority Axis 1, Research and Innovation, the Programme focuses on increasing research and innovation in RIS3 (smart specialisation strategy) sectors.

What are the key implementation tools and channels for the policy instrument?

ERDF Operational Programme and RIS3 Strategy for the region based on integration of Key Enabling Technologies; analysis of innovative regional potential; RIS3 action plan

What are the main stakeholders involved?

The Rhône-Alpes region has an effective quadruple helix collaborative approach involving central government representatives; local governments and cities; business organisations (Chambers of Commerce, etc.); clusters and enterprises; Universities and techno platforms; users' associations and social groups.

Type of funding (grants, loans, other):

A mix of grants, loans and innovative funding mechanisms, e.g. use of private equity.

What are the expected results and the impact of the instrument?

Improved general efficiency of our innovation system:

- better tailored and more specific support for enterprises
- better outputs with same level of funding
- specific action plan for RIS3 themes

- improved involvement of regional stakeholders in European projects
- better funding mechanisms for SMEs (e.g. private equity)
- New policies on other forms of innovation (e.g. social, user driven)
- better visibility of regional core competences

What are expected performance indicators?

Increase in the regional rate of investments in R&D and innovation by 15% from 2010 to 2020 (3.08% to 3.57%)

3 Policy learning

Stochkolm: Copenhagen

What are the main similarities between your policy instrument and the comparable policy instrument of the chosen region?

Both policy instruments are focused on finding solutions to important societal challenges and there is considerable overlap in key thematic areas of focus, particularly in relation to healthcare, smart cities and digitalization. Similarly, the instruments are designed to promote innovation activities in local SMEs.

What are the main differences between your policy instrument and the comparable policy instrument of the chosen region?

Where the Stockholm instrument (ERDF, Thematic objectives 01 and 04) aims to promote the creation of local innovation networks between stakeholders, the Copenhagen instrument is focused on targeted capacity building and SME support. The Stockholm instrument is focused on helping local SMEs to identify and develop new products and services, whereas the Copenhagen instrument aims to help local SMEs gain access to international networks and value chains. Another difference is the relative lack of well developed regional support structures (e.g. cluster organisations) with close SME contacts in the Stockholm region, compared to Copenhagen.

What can you learn from the chosen comparable policy instrument of the chosen region / What are the characteristics of the chosen comparable instrument that you could implement in your region?

The Stockholm County Board can use the Danish Cluster and Regional Partnerships strategies as a good practice case to increase understanding of the need to develop and effectively support such structures, among policymakers at regional and national level. The CopenVirk instrument can also provide useful insights for an up-coming call on internationalisation support for SMEs (ERDF, Thematic objective 03: Enhancing the competitiveness of SMEs). The CopenVirk instrument provides a blue print model for engaging regional stakeholders in smart specialization activities aimed at increasing access to EU funding and global value chains. The CopenVirk model also highlights the importance of establishing links between smart specialization/EU funding experts with local business to help promote capacity building and learning. This may add to the understanding of smart specialisation among stakeholders in the Stockholm Region.

North Portugal : Emilia Romagna

What are the main similarities between your policy instrument and the comparable policy instrument of the chosen region?

The main similarities between our policy instrument and the policy instrument of Emilia-Romagna region are the final objectives: to reinforce the regional innovation system through the creation of partnerships between research institutes and companies, promoting technology transfer and industrial innovation. Expected results are also similar.

Moreover, both instruments privilege projects coherent with the priorities defined in S3.

What are the main differences between your policy instrument and the comparable policy instrument of the chosen region?

There are some differences between our policy instrument and the policy instrument of Emilia-Romagna region, besides the common objective of promoting partnerships between research institutes and companies.

Structural differences:

- Northern Portugal and Emilia-Romagna are very different regions in terms of level of development and access to European funds: North is considered a convergence region and Emilia-Romagna a developed region.
- Governance structures are also different since Italy has autonomous regions and Portugal doesn't have this kind of governance structure. CCDR's are the managers of Regional Operational Programs but don't have autonomy.
- The establishment of S3 priorities followed a different approach in the Northern region and Emilia-Romagna region. North has defined generic strategic priorities, such as life and health sciences and sea-related economic activities. Emilia-Romagna has defined priorities at different levels: productive sectors and technology domains (agri-food, buildings and construction, etc.), drivers of innovation (sustainability, information society, etc.) and Key Enabling Technologies (nanotechnologies, industrial biotechnology, etc.).

Administrative differences:

- In the Emilia Romagna policy instrument the privileged beneficiaries are industrial research laboratories and innovation centres integrated in the "Regional Advanced Technology Network" and accredited by the Emilia-Romagna region. In the North Portugal policy instrument the definition of beneficiaries is more generic, comprising universities, R&D centres, and technology institutes. In fact, in the North region there isn't a formal technology network integrated by accredited organisations.

- In the Emilia-Romagna policy instrument, it is compulsory the establishment of a cooperation agreement with at least 2 companies to promote the diffusion of R&D results. The call for proposals of the Northern region of Portugal doesn't include this requisite.
- In the North region policy instrument, the collective nature of the projects is emphasised, with benefits for an enlarged group of companies and not for a single company, promoting positive externalities. This characteristic is not explicit in the Emilia-Romagna policy instrument.
- Financing rates foreseen in the policy instruments are different.
- In general, calls for proposals in Emilia-Romagna are less flexible than in the North region, comprising more rules and requisites.

What can you learn from the chosen comparable policy instrument of the chosen region / What are the characteristics of the chosen comparable instrument that you could implement in your region.

The mandatory condition of establishing a cooperation agreement with companies seems to be a good practice, to promote the dissemination of research results. However, it is necessary to guarantee the collective nature of the initiative.

Slovenia : Pomorskie

What are the main similarities between your policy instrument and the comparable policy instrument of the chosen region?

The main similarities between the two policy instruments that they both focus on the creation of better cooperation between companies and research organisations in terms of cluster policy (in case of Pomorskie region) and strategic research and innovation partnerships (in case of Slovenia). The objective of both instruments is to create modern economy and promote innovation. While the policy instrument of Pomorskie region, »Pomorskie Creativity Port« includes broader activities and puts a strong emphasis on higher education objectives that Slovenian policy instrument »Strategic Research and Innovation Platforms«, the objective of both instruments is similar:

- Innovation of enterprises - increased share of innovation-active enterprises launching technological and non-technological innovations;
- Internationalisation of the companies - increased share of enterprises integrated into global supply chains and consortia;
- Transfer of knowledge to the economy - increased share of high-tech exports among total exports;
- Attracting external investment and increased investment in RDI by the private sector.

Both policy instruments are also covering some similar thematic priorities, like food security, sustainable energy and health. ICT is a horizontal priority in Slovenian smart specialisation strategy while digital transformation is one of the main priorities in Pomorskie smart specialisation.

Both instruments are also planning to be financed from the centralised EU funds, especially framework programme for research and innovation.

What are the main differences between your policy instrument and the comparable policy instrument of the chosen region?

Pomorskie Creativity Port is a wider strategies policy instrument that targets enterprises and higher education, while Strategic Research and Innovation Partnerships are focused more on the cooperation between enterprises and researchers in order to improve the innovation performance and help putting research to the market. Pomorskie Creativity Port includes also several thematic areas, that are not included in the Slovenian smart specialisation strategy, like blue renewable energy and artificial intelligence.

There are also some differences in the implementation tools. Pomorskie Creativity Port offers wide range of implementation tools, like modern R&D facilities, tools for human capital development (workshops, trainings, establishing new academic centres), promotion on trade fairs, project partner search tool and other typical tools for the internationalisation of enterprises. SRIPs will focus more on Networking and strengthening of links and synergies in the innovation system, Investment in non-technological innovation, eco-innovation, Pilot lines, early product validation actions, advanced manufacturing capabilities and first production in key enabling technologies.

What can you learn from the chosen comparable policy instrument of the chosen region / What are the characteristics of the chosen comparable instrument that you could implement in your region

Pomorskie Creativity Port includes several objectives and actions in the area of internationalisation, that can be used in SRIPs, especially involvement in international value chains through participation in EU networks and initiatives and the support in searching for international project partners, also for EU funding programmes. Those activities can be taken as a good practice and be included in the action plan.

Central Macedonia : Tuscany

What are the main similarities between your policy instrument and the comparable policy instrument of the chosen region?

1. Both instruments are Axis 01 that dealing with innovation
2. Both have as main objectives to introduce new innovative products in the market
3. Lastly eligible partners and stakeholders are the same and generally there is a huge similarity form strategy to implementation and measuring activities between both instruments.

What are the main differences between your policy instrument and the comparable policy instrument of the chosen region?

1. The first one comes form the focus areas and not the innstrument per se. The bench mark region focuses more on technologies and less on market areas, thus giving more indensity in the innovation/technology aspect
2. In Central Macedonia the calls will have specific budget that will require delibarate co-operation between a company and a R&D center. In the bench mark region the proposal will take extra evaluation points if the partner or partners cooperate with a research center.

What can you learn from the chosen comparable policy instrument of the chosen region / What are the characteristics of the chosen comparable instrument that you could implement in your region

Despite the fact that we have choosen a region with more advanced ecosystem and more extrovert character we can see from the analysis that both instruments look alike very much. The analysis and the indepath interview with the local experts have shown that there are a few parametres that will probably lead to a more succesful rates :

- Established more advanced innovation support ecosystem and
- An existing global mentality and expertise by many Italian companies

Lastly we have choose this particularity region for three main reasons:

1. A long term cooperation on various areas
2. A specific cooperation in codeveloping new innovation model on the basis of S3 paltforms and
3. We have set this region as well as others as benchmarks for our future strategy and goals.

Catalonia : Lombardy

Which are the main similarities between your policy instrument and the comparable policy instrument of the chosen region?

Both instruments are linked to the KIC model as well as to the reinforcement and transformation of strategic economic sectors identified through the Regional S3. They emphasize the cooperation model and 'partnerships' as the way for fostering innovation, especially in the SMEs.

The instruments try to balance the partnerships through limitations and requirements in its composition, especially those which aim to reinforce the paper of the SMEs and its active participation. The indirect presence of the clusters' fabric as well as the importance of the research centres and universities are also a common treat.

Which are the main differences between your policy instrument and the comparable policy instrument of the chosen region?

The channels and implementation tools are similar but there are some differences. The Communities are validated in a previous phase in Catalonia and, once they are active, they can launch their projects. In Lombardia, the validation gravitates mainly on the projects and, in that process, on the partnership. There is not the same level of emphasis on the Community concept, although it is present in both instruments.

Communities in Catalonia work mainly through non-refundable grants, with the potential use of loans or other financial instruments, even with ERDF presence, but outside the Communities instrument itself. Lombardia uses a combination of grant&loan directly inside the instrument.

The product-to-market cycle appears to be shorter in the Lombardia instrument than in Communities, where there are some projects aiming for results in the mid-term range of applications. The scope of the thematics in the Communities in Catalonia is also broader than the Aggregations in Lombardia, including not just projects linked to research but also interregional cooperation or technical facilities.

What can you learn from the chosen comparable policy instrument of the chosen region? Which are the characteristics of the chosen comparable instrument you could implement in your region?

The evaluation process applied is very interesting and whilst similar to the one used in the Communities instrument, there is an emphasis on the projects that could also be applied in Catalonia, where there is a more intense focus on the Community itself.

The integration of the loan inside the instrument as part of the tools for funding the projects is very interesting and could be further explored as part of the tools in the Communities instrument. There are some complexities when the ERDF is present, but it could be worth working with an integrated

combination of grant and loan, all bundled in the same instrument and for the different projects of the Communities.

One aspect that could be then explored, as it has been learnt from the application in Lombardia, is the process to analyse and validate the financial aspects linked to the loan part and how to create a credit-scoring balanced enough to avoid deterring the smallest companies of participating in the Communities.

Lithuania : Poland

Whate are the main similarities between your policy instrument and the comparable policy instrument of the chosen region?

The thematic priorities of both - Lithuanian and Polish - policy instruments are strengthening research, technological development and innovation. The aims of both policy instruments are very similar – to provide a availability of broad spectrum of innovation support services: promotion of innovation partnerships, technology transfer, consulting on intellectual property rights protection, new product development and deployment to market, creation of new innovative enterprises, the development and growth of the clusters working in the field of R&D&I, participation of the companies in international R&D&I programs etc. Also in both policy instruments are involved the similar stakeholders group - innovation policy makers, innovation policy implementing institutions, innovation intermediate institutions, companies, that intend to carry on/carry on R&D&I activities. Implementation of the Lithuanian and Polish policy instruments are aimed at increasing number of innovative solutions, enterprises using the advanced services provided by business environment institutions etc.

Whate are the main differences between your policy instrument and the comparable policy instrument of the chosen region?

The main differences between both - Lithuanian and Polish - policy instruments are the implementation tool and scheme. In Lithuania, according to the policy instrument conditions, funding is provided to an institution which is providing innovation support services. Such institution together with its partners is implementing the project. During the project, innovation support services providing institution offering its services to businesses (innovation services “push” model). Meanwhile, in Poland funding receive business enterprises, which had identified needs of innovation support services and may decide by themselves to what authority wants to apply for the services provided (innovation services “pull” model).

As well in Lithuania the implementation of the financial instrument is included more stakeholders - business associations whose members’ activities are closely related to the regional innovation strategy

for smart specialisation, organizations from public sector that organize pre-commercial and innovative procurement etc. Meanwhile, in Poland in the implementation of the financial instrument is included only business enterprises and institutions which are providing innovation support services.

In addition, the Lithuanian financial instrument is aimed at a broader impact, such as increasing of R&D expenditure by businesses per capita or increasing share of the innovative companies, which cooperating with partners, comparing with all related companies. Meanwhile, the Polish financial instrument effects are more directed to the achievements, related to the implementation of measures i.e. "Number of enterprises using the advanced services (new and/or improved) provided by business environment institutions".

What can you learn from the chosen comparable policy instrument of the chosen region / What are the characteristics of the chosen comparable instrument that you could implement in your region

Polish chosen financial instrument implementation method shows that it is possible to encourage companies to use innovation support services on the basis of innovation services "pull" model, i.e. financing not innovation support service providers, but their recipients. It encourages competition between innovation services providers, which allows to ensure higher level of services quality and greater compliance with business needs. However, according to Lithuanian practice the implementation of such method requires a lot of monitoring and control.

However such financial instrument implementation method can be transferred to the Lithuanian context, providing an opportunity for businesses enterprises to purchase services not only from the direct project implementers, but from any innovation support service provider in the market. For such service payment would be responsible the project implementer.

Greater Cambridge Greater Peterborough : Rhône – Alpes

What are the main similarities between your policy instrument and the comparable policy instrument of the chosen region?

The strategic vision of the Rhône-Alpes region is to achieve better innovation and smart specialisation, to improve its companies' competitiveness and to create jobs and ensure sustainable and balanced development. This could also be said to be true of the GCGP area and of the wider East of England Region.

Such an approach also seems relevant for both regions as they share a focus on centres of excellence in scientific and technical research (Cambridge in the UK and Lyon in France). Both regions also share

established clusters and developed innovation systems. The policy instruments share an objective to build on these strengths.

What are the main differences between your policy instrument and the comparable policy instrument of the chosen region?

The main difference is the approach to Smart Specialisation in designing the policy instrument. The Rhône-Alpes Operational Programme draws heavily on the structured development of a regional smart specialisation strategy for the region, involving a diagnosis of the regional innovation ecosystem, an entrepreneurial discovery process, prioritisation and a planning phase based on the policy mix (planned budget and governance structure for implementation, RIS3 action plan and monitoring and evaluation measures). The outputs of this were an agreed Smart Specialisation Strategy which then underpinned the research and innovation strand of the regional Operational Programme.

A very high-level document, Smart Specialisation in England, was submitted to the European Commission in 2014, with the intention of providing a strategic framework for ERDF investments in research and innovation and setting out the main priorities for investment. However, this national approach to both Smart Specialisation and to operation of the 2014-20 ERDF programme was of limited support in identifying opportunity and need in local areas.

The ERDF Operational Programme for England bases its rationale for local prioritisation on known significant variation in levels of overall investment in R&D, with areas such as GCGP well ahead of the EU average because of their relative concentration of more productive economic activity and knowledge intensive industries. Cambridge is a leading example of a genuinely world class research intensive university providing access to advanced facilities and expertise, and where high-tech companies and are magnets for investment.

What can you learn from the chosen comparable policy instrument of the chosen region / What are the characteristics of the chosen comparable instrument that you could implement in your region

The Rhône-Alpes region has an integrated approach Innovative Public Procurement underpinning its RIS3 policy. The objective is to use public procurement as a lever to boost innovation in order to maximise public services dedicated to citizens, foster the emergence of innovative solutions, and reinforce access to public procurement for SMEs. This approach was adopted following participation in an Interreg project, Alcotra Innovation in 2011-13. The region has an action plan that builds awareness of innovative public procurement, identifies territorial needs, facilitates meetings between buyers and suppliers, and finances studies into innovative procurement projects. This is an approach that could be attractive to provide greater value for money in innovation investment in the UK post-Brexit, when EU funding may not be either reduced or unavailable.

3 BILATERAL COMPARISONS BETWEEN HIGHER AND BENCHMARK REGIONS

	Slovenia	Pomorskie
Instrument	Slovenian Innovation Hub – Strategic Research and Innovation Partnerships	Regional Strategic Programme for Economic Development 'Pomorskie Creativity Port' (RSP PCP)
Instrument objectives	<p>The specific objectives of this policy instrument are:</p> <ul style="list-style-type: none"> • increased share of innovation-active enterprises launching technological and non-technological innovations; • increased share of enterprises integrated into global supply chains and consortia; • increased share of high-tech exports among total exports; • increased investment in RDI by the private sector. 	<p>The main strategic and operational objective of the Regional Strategic Programme for Economic Development is "Modern Economy", the achievement of which will be implemented through two specific objectives: 1. Effective Enterprises and 2. Competitive Higher Education.</p>
Thematic focus/priorities	<ul style="list-style-type: none"> • Smart cities and communities • Smart Buildings and Home with Wood Chain • Networks towards circular economy • Sustainable food • Sustainable tourism 	<ul style="list-style-type: none"> • Digital transformation <ul style="list-style-type: none"> ○ Artificial intelligence, cognitive systems, augmented and virtual reality, visualisation, simulation, gamification & interaction technologies

	<ul style="list-style-type: none"> • Factories of the future • Health - Medicine • Mobility • Materials as products 	<ul style="list-style-type: none"> • Sustainable innovation <ul style="list-style-type: none"> ○ Sustainable energy & renewables • Public health & security <ul style="list-style-type: none"> ○ Ageing societies ○ Food security & safety • Blue growth <ul style="list-style-type: none"> • Aquaculture • Blue renewable energy
<p>Implementation tools</p>	<ul style="list-style-type: none"> • Networking and strengthening of links and synergies in the innovation system • Applied research; research and innovation projects for the development of new products, services and processes, and for the use of new technologies • Investment in non-technological innovation and in sustainable value elements • Eco-innovation • Pilot lines, early product validation actions, advanced manufacturing capabilities and first production in key enabling technologies • Support for projects for the development of innovations and their testing in practice • Commercialisation of developed solutions and demand stimulation 	<ul style="list-style-type: none"> • Modern R&D facilities • Improvement of Human capital • Knowledge and mentoring • Promotion • Joint undertakings

	<ul style="list-style-type: none"> Strengthening of development competences 	
Stakeholders focus	<p>Target groups: development partnerships, enterprises and knowledge institutions.</p> <p>Beneficiaries: legal entities under public law, including ministries, enterprises, different forms of linking of enterprises among themselves and with knowledge institutions, supportive environment for innovation, chambers, institutes, research organisations, regional development agencies, NGOs, knowledge institutions, decision makers at national level.</p>	companies, representatives of higher education, clusters, business support institutions, hospitals, NGOs, municipalities and others.
Funding type	grants	grants
Expected results	<ul style="list-style-type: none"> increased share of innovation-active enterprises launching technological and non-technological innovations; increased share of enterprises integrated into global supply chains and consortia; increased share of high-tech exports among total exports; increased investment in RDI by the private sector. 	<ul style="list-style-type: none"> An increase in export activity and the level of investment in enterprises; An increase in activity of external investors, including foreign ones (also through reinvestment); An increase in employment in sectors of high addend value and the largest development potential; Strengthening of the Tri-City Metropolitan Area as a centre of international trade; Extension of control over the key economic assets of the region by the Pomorskie companies;

		<ul style="list-style-type: none"> - An increase in activeness of research institutions and enterprises in research programmes; - An increase in the number of foreign lecturers and students and those from outside the region; - Improving cooperation between universities, business and government to offer better educational offer; - Increasing access to broadband internet with very high performance parameters; - Becoming the first tourist destination in Poland.
Impact indicators	<p>Share of business expenditure on R&D as a percentage of GDP – target is 2% by 2023</p> <p>Share of innovationactive enterprises – target is 55% by 2023</p>	GDP <i>per capita</i> growth dynamics in 2013-2020

	HIGHER Region North Portugal	Selected comparable region Emilia Romagna
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Instrument	Norte 2020 – Regional Operational Program of North - Scientific and technological knowledge transfer - Collective actions (Action 1.2.1)	Regional Operational Program of Emilia-Romagna – Strategic industrial research projects within the framework of the priorities defined in S3 (Action 1.2.2)
Instrument objectives	The objective of the policy instrument is the promotion of science-industry collaborations, supporting projects under public-private partnerships: companies, universities, R&D centres, associations, public bodies. A collective approach is privileged because the projects should be oriented to answer to common risks and opportunities of an enlarged group of companies, promoting positive externalities, especially under the challenges established by the regional S3.	The objective of this policy instrument is the reinforcement of the regional innovation system oriented to the promotion of R&D and technology transfer activities in order to enhance industrial innovation. It also aims to potentiate the role of industrial research laboratories and innovation centres integrated in the “Regional Advanced Technology Network”.
Thematic focus/priorities	<p>Priorities are the strategic areas defined in S3:</p> <ul style="list-style-type: none"> - Life and health sciences; - Culture, design and fashion; - Sea-related economic activities; - Food and agriculture environmental systems; - Mobility industries and environment; - Key enabling technologies; - Human capital and specialised services; - Symbolic capital, technology and tourism services. 	<p>Priorities are the strategic areas defined in S3:</p> <ul style="list-style-type: none"> - Agri-food; - Building and construction; - Mechatronics and transport; - Health and well-being industries; - Cultural and creative industries. <p>Projects should also be coherent with the drivers of innovation foreseen in S3, namely: sustainable development, information society, healthy and active living, and services innovation, as well as with the Enabling Technologies, such as micro-nano electronics, nanotechnology, photonics, industrial biotechnology,</p>

		advanced materials, advanced production systems, and digital technologies.
Implementation tools	<p>The policy instrument is implemented through calls for proposals.</p> <p>The types of projects supported are:</p> <ul style="list-style-type: none"> - Knowledge transfer projects oriented to promote the economic valorisation of knowledge, including networking and national and international promotion activities; - Technological development and demonstration projects oriented to promote the economic valorisation of knowledge; - Pilot projects oriented to the dissemination and diffusion of knowledge and new technologies created within the R&D system to companies; - Projects centred on the economic valorisation of research results, namely patents and licenses; - Projects oriented to promote spin-offs in the framework of the R&D system, with the objective of transforming innovative ideas into businesses. 	<p>The policy instrument is implemented through calls for proposals.</p> <p>This measure supports strategic projects, comprising industrial research and experimental development activities oriented to the demonstration of new products and processes and benefiting the industrial fabric.</p> <p>Some call for proposals have already been launched. The last approved projects started in 01/04/2016 and will finish in 31/03/2018 (24 months).</p> <p>Evaluation criteria are:</p> <ul style="list-style-type: none"> - Scientific and technical quality, and contribution to the development of S3; - Economic and financial quality and economic sustainability; - Level of industrial viability; - Level of innovation in relation to the state-of-the-art of technological development.

	<p>Two calls for proposals have already been launched (2015 and 2016) with a total ERDF of 20 M €. 14 projects were approved under the 1st call.</p> <p>Evaluation criteria are:</p> <ul style="list-style-type: none"> - Quality of the project; - Impact in the economy, namely the contribution to S3. 	
Stakeholders focus	<p>The policy instrument is under the responsibility of CCDR-N – Regional Coordination and Development Commission of North. The beneficiaries are universities, R&D centres, and technology institutes.</p>	<p>The policy instrument is under the responsibility of Emilia Romagna Region.</p> <p>The beneficiaries are groups of research laboratories accredited by Emilia-Romagna region (DGR n. 762/2014), as well as innovation centres and non-accredited research institutions. The groups should integrate 5 entities (max), being at least 2 of them research laboratories accredited by Emilia-Romagna region. These accredited laboratories must have a budget non-inferior to 80% of project's costs. A cooperation agreement with at least 2 companies must be established.</p>
Funding type	<p>Grants (financing rate of 85%, except for organizations operating under the <i>minimis</i> rule – 50%)</p>	<p>Grants (financing rate established according to the type of activities and type of beneficiaries – 25% - 100%)</p>
Expected results	<p>Expected results are:</p> <ul style="list-style-type: none"> - Enhance knowledge transfer activities; 	<p>Expected results are:</p> <ul style="list-style-type: none"> - Enhance industrial innovation; - Enhance knowledge transfer activities;

	<ul style="list-style-type: none"> - Creation of new partnerships between research organisations and companies; - Increase in the employment of the supported companies; - Increase private R&D investment. 	<ul style="list-style-type: none"> - Creation of new partnerships between research organisations and companies; - Reinforcement of the regional innovation system; - Strengthen the role of industrial research laboratories and innovation centres integrated in the “Regional Advanced Technology Network”.
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	HIGHER Region: Stockholm	Selected Comparable Region: Copenhagen
Instrument	Strategic Innovation Collaboration Between Public and Private Actors in Stockholm (ERDF, Thematic objective 01: Strengthening research, technological development and innovation, and thematic objective 04: Supporting the shift towards a low carbon economy in all sectors)	CopenVirk
Instrument objectives	Instrument aims to stimulate innovation projects in the Stockholm Region, based on co-financed structures for the support of strategic collaborations between higher education institutions, research centers, public authorities and the industry. Main activities that are to be funded under the present instrument are related to collaboration to develop new products and services (fostering mobility between different sectors to address cross-sectorial challenges), test labs, infrastructure, innovation related	The main objective of the instrument is to help local SMEs to gain greater access to public funding and increase access to global markets through the development of global value chains with other interantional companies and businesses involved in EU projects.

	pre-commercial procurement and the development of open data sources in this framework, always related to sustainable urban development.	
Thematic focus/priorities	Sustainable urban development related to societal challenges (e.g. green city, smart city, inclusive city, healthy city and attractive city). In mid-2017, five projects had been approved.	Medicine and Healthcare Technologies, Clean Tech and Smart Cities, Smart Mobility and Infrastructure, Smart Growth Digitalization, Innovation in SMEs.
Implementation tools	The key implementation tool for the policy instrument is the “Stockholm model”, applied by the EU structural funds partnership in Stockholm. Before an ERDF call has been launched, a mobilization process in close collaboration with regional stakeholders has taken place. The aim is to inform about the call and support potential projects owners in the preparation phase. Larger/strategic project or smaller projects in collaboration have been prioritized and collaboration between ESF and ERDF encouraged.	CopenVirk is managed and financed by Copenhagen EU Office and is being conducted in cooperation with the Growth House, the local business promotion, cluster organizations, GTS institutes and the universities of the Capital Region of Denmark.
Stakeholders focus	Public actors (e.g. County Administrative Board of Stockholm, County Council of Stockholm, City of Stockholm and other municipalities), academia (e.g. Stockholm University, KTH Royal Institute of Technology, Karolinska Institute), support	CopenVirk is managed and financed by Copenhagen EU Office and is being conducted in cooperation with representatives of the local business services, Væksthuset, cluster organizations, GTS institutes and universities in Copenhagen.

	organisations (e.g. incubators, science parks, research institutes), business and NGOs).	
Funding type	EU grants with co-funding provided by participants from academia, research institutes, municipalities, the County Council of Stockholm, CAB, private and non-profit actors.	EU grants and loans with co-funding provided by public authorities, universities and businesses.
Expected results	Increased number of growing innovative companies through enhanced collaboration in research and innovation.	An increase in the amount of investment received through EU funding for SMEs and enhanced access to international value chains, which will increase the possibilities for local businesses to get their products into global markets.
Impact indicators	<p>Increased number of participating companies</p> <p>Increased number of collaborative partner organisations</p> <p>Increased number of new jobs</p>	<p>Increased investment revenue from EU funding sources</p> <p>Development of new spin-off businesses</p> <p>Increase in the number of jobs</p> <p>Increase in the number of products reaching the market place</p> <p>Attract more skilled workers to the region</p>

		<p>More young people in education/training</p> <p>Increase in the number of patents</p> <p>Increased in industry/business exports</p>
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	Central Macedonia (Higher Region)	TUSCANY Region
Instrument	<p>Axis 01 focuses on promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector. Under this axis there is a more specific priority that called 1b1 - Promoting private R&D&I investments, to develop new products and services in RIS3 areas.</p>	<p>AXIS 01 (supporting innovation and links between Knowledge and Market), Action 1.1.5 R&D investments aid scheme</p>
Instrument objectives	<p>Priority 1b1 has been drafted to deal with the following goals:</p> <ul style="list-style-type: none"> - Support local SMEs to invest in R&D & Increase private R&D&I spending to reach averages - Develop more funding mechanisms and tools - Increase research and Market linkages - Focus more on the commercial exploitation of results - Better support of new startups 	<p>Within this scheme, main instruments objectives are:</p> <ul style="list-style-type: none"> - to enhance the development of dynamic companies through investments on R&D on the technological priorities of RIS3; - to support local SMEs to invest in R&D and cooperate with Research (raise innovation demand);

	<ul style="list-style-type: none"> - It is aligned with the Commission’s Pact with Greece and - It is also aligned with the national operational goals and programs. 	<ul style="list-style-type: none"> - to increase research and Market linkages (exploit research results); - to focus on RIS3 strategies; - to enhance open innovation dynamics (fostering also spin-off and start-ups).
Thematic focus/priorities	<p>General thematic priorities of Central Macedonia’s RIS3 strategy are:</p> <ul style="list-style-type: none"> - Agrifood - Tourism - Material (mainly building) and - Textile (mainly asset management) 	<p>Within the general objective of promoting business investments in R&D, main thematic priorities are related to RIS3 technological axes:</p> <ul style="list-style-type: none"> - photonic and ICT; - smart manufacturing; - Chemicals and nanotechnology.
Implementation tools	<p>Key implementation tool will be the calls that will be specify more policy’s goals and objectives and these call will also be framed under EU general block exemption regulation.</p>	<p>Key implementation tools are call for proposals for Research and development state aids schemes.</p> <p>The R&D aids scheme, activated under the GBER (general block exemption regulation) are integrated with aids to SMEs for purchasing knowledge intensive services.</p>
Stakeholders focus	<p>All triple helix entities are and will be involved in the formulation and implementation of this policy. The main stakeholders that are going to be involved in the implementation of this policy are:</p> <ul style="list-style-type: none"> - universities, - R&D centers, 	<p>Main stakeholders involved are:</p> <ul style="list-style-type: none"> - technological districts; - research centers; - universities; - Enterprises.

	<ul style="list-style-type: none"> - R&D entities, - SME's - Startups 	Under this action and calls proposals that partner with research and knowledge centres get more points during their evaluation phase.
Funding type	Grants	Grants
Expected results	<p>The main output indicator:</p> <ul style="list-style-type: none"> - Number of enterprises introducing new products in the market - Number of companies cooperating with research institutes. 	<p>The instrument has several output indicators, mainly linked to:</p> <ul style="list-style-type: none"> - number of R&D employees generated; - number of enterprises introducing process and product innovation; - number of enterprises introducing new products in the market; - Number of companies cooperating with research institutes. <p>Outcomes indicators are related to:</p> <ul style="list-style-type: none"> - increment of the number of R&D employees on total employees; - Increase of the percentage of enterprises introducing new products in the market on total.
Impact indicators	<p>The performance indicator is related:</p> <ul style="list-style-type: none"> - R&D expenditures by businesses (in comparison to regional GDP/GVA) 	<p>The performance indicator is related:</p> <ul style="list-style-type: none"> - Number of enterprises introducing new products in the market.

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	HIGHER Region	Selected comparable region
Instrument	RIS3CAT Communities	R&D line for Aggregations
Instrument objectives	<p>Boosting collaboration and active groups of companies and different stakeholders within the R&D&I framework and systems.</p> <p>Boosting economic transformation.</p> <p>Promoting mid- to long-term planning regarding R&D&I projects.</p> <p>Improving job-creation and new economic opportunities.</p>	<p>Promoting stable and long-term collaboration in the R&D field.</p> <p>Enhancing the whole R&D system and spreading the innovation and culture in SMEs as well as whole economic sectors.</p> <p>Boosting economic transformation.</p>
Thematic focus/priorities	<p>Major industrial research and experimental development projects in leading sectors: food; energy and resources; industrial systems; design-based industries; sustainable mobility; health industries; cultural and experience-based industries.</p>	<p>The projects should address one of the specialisation areas identified by the RIS3 in Lombardia: aerospace; agri-food; eco-industry; health/life sciences; creative and cultural industries; advanced manufacturing; sustainable mobility.</p> <p>They must be specialized unless they are developed in the context of 'transversal projects', or so-called "Smart Cities and</p>

	<p>Technical and scientific facilities development, including actions directed to deploying laboratories and/or pilot plants as tools for industrial validation</p> <p>Interregional cooperation projects, regarding innovation and promoting collaboration as well as joint-ventures in other European regions and countries</p> <p>Innovation projects for processes and organization, especially for SMEs.</p>	<p>Communities" projects, which can integrate different specialization areas.</p>
Implementation tools	<p>It is a two-stage competitive process in a public call for proposals: There is an accreditation process for the Communities to be considered as such in order to access funding.</p> <p>Once validated, each Community submits a working plan with different projects, which are awarded a non-refundable grant through the ERDF Operational Program with the intensity of the funding depending on the beneficiary and according legislation (state-aid help, etc.) up to 50% of total eligible cost of each project.</p>	<p>It is a two-stage competitive process in a public call for proposals: The first phase has an admissibility revision – basically in terms of formal attributes and administrative requirements – and a technical evaluation. The second one includes a deeper technical evaluation as well as a financial one (because of the loans involved in the instrument)</p>
Stakeholders focus	<p>Companies.</p> <p>Business associations.</p> <p>Universities.</p> <p>Research and technology centres.</p> <p>Foundations and different institutions.</p> <p>Associations and other organisations that are users of technology.</p>	<p>Companies.</p> <p>Universities.</p> <p>Research and technology centres.</p>

Funding type	Grants. The limits are those applied through the State Aid and ERDF regulations.	Grants and Loans. The tranches are delimited in the instrument, with also references to the regulations' limits applicable.
Expected results	Inputs: Investment amount – 70 M EUR ERDF – 140 M total amount. Outputs: Number of enterprises involved – 1,700	Inputs: Total amount for the instrument: 120,000,000 € Outputs Enterprises linked to projects: 564
Impact indicators	15 Comunitats generated in 7 different economic sectors 270 new highly skilled workplaces in the R&D&I system 200 M EUR induced private investment	Enterprises linked to projects: 564 Enterprises cooperating with Research Centres: 256 Partnerships introducing a new product/process at the end of the activities: 140

	HIGHER Region Greater Cambridge Greater Peterborough / East of England)	Selected comparable region Rhône-Alpes (France)
Instrument	ERDF Priority Axis 1: Enhancing Research and Innovation National ERDF programme England 2014-2020	ERDF Priority Axis 1: Enhancing Research and Innovation Regional ERDF-ESF programme Rhône Alpes 2014-2020

Instrument objectives	The Programme's strategy focuses firmly on growth, building on England's competitive advantages and addressing key bottlenecks in specific sectors and geographies. The aspiration is for locally driven growth and development. The resources will be focused on the core objective of strengthening research, technological development and innovation.	The ERDF-ESF Programme "Rhône-Alpes" aims to boost economic growth in the region) and contributes to achieving the Europe 2020 targets for smart, sustainable and inclusive growth. It should create jobs and boost productivity, particularly in SMEs. About 30% of the budget will be allocated to the adaptation to climate change and more than 10% of the ERDF budget will be allocated to urban areas.
Thematic focus/priorities	Enhancing R&I infrastructure and capacities to develop R&I excellence, and promoting centres of competence, in particular those of European interest. Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation.	Increase research and innovation in RIS3 (smart specialisation strategy) sectors.
Implementation tools	ERDF Operational Programme and RIS3 Strategy for England. Not regional / local RIS3 strategies in place, but national Smart Specialisation Hub funded from Technical Assistance supports programme delivery throughout England	ERDF Operational Programme and RIS3 Strategy for the Rhone-Alpes region based on integration of Key Enabling Technologies; analysis of innovative regional potential; RIS3 action plan

Stakeholders focus	A local area ESIF sub-committee is responsible for the strategic oversight of local investments under within the ESIF programmes and their operational delivery in line with the Operational Programme. It reports directly to the national Programme Monitoring Committee. The sub-committee comprises representatives from the Local Enterprise Partnership, Local Authorities, business partners, the Voluntary and Community Sector, Higher and Further Education and the Managing Authority.	Central government representatives; local governments and cities; business organisations (Chambers of Commerce, etc); clusters and enterprises; Universities and techno platforms; users’ associations and social groups.
Funding type	Grants, delegated grant schemes, innovation vouchers, knowledge transfer interventions	Grants and innovative financial instruments.
Expected results	<ul style="list-style-type: none"> - 41 FTE researchers working in improved research infrastructure, research or innovation facilities - 227 enterprises working with research institutions - €855,880 private investment matching public support in innovation or R&D projects - 67 enterprises supported to introduce new to the firm products 	<ul style="list-style-type: none"> - 60 FTE researchers working in improved research infrastructure facilities - 350 enterprises working with research institutions - €119,700 private investment matching public support in innovation or R&D projects - 300 enterprises supported to introduce new to the firm products
Impact indicators	150 enterprises co-operating with research entities from 2015 to 2023	Increase in the regional rate of investments in R&D and innovation by 15% from 2010 to 2020 (3.08% to 3.57%)

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