

Enhancing HEI's participation in regional smart specialisation strategies using self-assessment

Module 2 RIS3 and Higher Education Institutions



Co-funded by the Erasmus+ Programme of the European Union



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Module Objectives

- Understand **what is a RIS3**, its role and stakeholders involved in its design and implementation.
- Explore the **potential role of HEIs** in place-based and innovation-driven **regional development**.
- Recognise the **potential benefit for HEIs** when engaging in design and implementation of RIS3
- Be acquainted with the features, status and main stakeholders of the RIS3 in your region
- Explore **existing tools to support HEIs engagement** in innovation-driven regional development.





What is RIS3... and why is it important?



RIS3 = National/regional research and innovation strategies for smart specialisation: integrated, place-based economic transformation agendas to stimulate the sustainable economic growth of Europe through knowledge and innovation.

Source: European Commission Factsheet

https://ec.europa.eu/regional_policy/sources/docgener/informat/2014/smart_specialisation_en.pdf

Smart specialization

Capacity of an economic system [...] to generate new specialities through the discovery of new domains of opportunity and the local concentration and agglomeration of resources and competencies in these domains, by merging the existing industrial base with scientific resources, competencies and new technologies.

Source: Foray, D. (2015) Smart Specialisation: Challenges and Opportunities for Regional Innovation Policies, Routledge





Self-reflection Tools for Smart Universities Acting Regionally

KEY ELEMENTS OF A SMART SPECIALISATION STRATEGY



- Place-based approach: S3 builds on regional and national assets and resources and on specific socio-economic challenges to identify unique opportunities for development and growth;
- Focus on priorities and choices for investment: S3 identifies priorities for knowledge-based investments and/or clusters, focusing on competitive strengths and realistic growth potentials. Priorities are identified through an inclusive and interactive process of stakeholders' involvement centred on an "entrepreneurial discovery".
- Innovation: supports technological as well as practice-based and social innovation and experimentation, also to stimulate private sector investment;
- Monitoring and evaluation system as well as a revision mechanism for updating the strategic choices are needed, as S3 is evidence based.

WHY IS RIS3 IMPORTANT?

But what is so different and important about RIS3? Why should it matter more for HEIs? Relies on the regional assets, i.e. taking stock of the strengths and potential of each region

- Strongly connected to innovation, knowledge and new opportunities
- □ It includes all "ingredients" to put HEIs in a central place
- Key to access to EU structural funds for research and innovation (need to be aligned with the respective RIS3)



Remember the concept of **Entrepreneurial University?** It matches perfectly with the RIS3 approach!



HEIs "are becoming engines that contribute to social, economic and cultural development of the regions in which they operate, by transferring knowledge and technologies to industry and to society at large".

THE ENTREPRENEURIAL DISCOVERY PROCESS (EDP)

The Entrepreneurial Discovery Process (EDP) lies at the heart of the strategy design:

Bottom-up process involving different stakeholders to identify potential new activities and opportunities that emerge through this interaction

ENTREPRENEURIAL

DISCOVERY

PROCESS

Building partnerships to integrate entrepreneurial knowledge fragmented over many sites and organisations

Who are the "different stakeholders" that should be involved in the EDP?

Support from policy makers to facilitate the realization of the entrepreneurial potential of the region Exploration and opening up of new domains of opportunities (technological and market)

THE QUADRUPLE HELIX

The process of entrepreneurial discovery relies on the so-called **Quadruple Helix approach**, facilitating interaction between **representatives of the industry, of research and education organisations, of government or public administration, as well as of citizens, consumers and workers** (European Union, 2012).



THE QUADRUPLE HELIX APPROACH AND REGIONAL DEVELOPMENT

Collaboration among the stakeholders of the quadruple helix allows a better conciliation of different visions, resources and competences into a shared regional vision



Source: Kolehmainen, J., Irvine, J., Stewart, L. *et al.* Quadruple Helix, Innovation and the Knowledge-Based Development: Lessons from Remote, Rural and Less-Favoured Regions. *J Knowl Econ* **7**, 23–42 (2016).

Framework for knowledge-based regional development



The role of HEIs in the design and implementation of RIS3



MAIN STEPS FOR RIS3 DESIGN



THE ROLE OF ENTREPRENEURIAL UNIVERSITIES IN RIS3

HEIs are expected to play a central role in the design and implementation of the Smart Specialisation Strategy of their region.



THE ROLE OF UNIVERSITIES IN INNOVATION AND REGIONAL DEVELOPMENT

Regional development and innovation are an increasingly important concern in Europe

- Emphasis on region's ability to generate endogenous development
- Transition to a knowledge-based economy with innovation as key driver

HEIs have a key role in these processes



THE ROLE OF UNIVERSITIES IN INNOVATION AND REGIONAL DEVELOPMENT



Possible contributions from HEIs to RIS3 design and implementation:

Participation in EDPs entrepreneurial contribution and a research contribution

Education for the development of Quadruple Helix partnerships

RIS3 higher level or strategic governance structures

definition of a shared vision for RIS3

strategy monitoring



HEIS AND SMART SPECIALISATION

Capacities of universities in the context of smart specialization:



Source: Adapted from JRC. Higher Education for Smart Specialisation Towards strategic partnerships for innovation. S3 Policy Brief Series No. 23/2017

BARRIERS AND CHALLENGES TO HEIS' INVOLVEMENT IN RIS3

Depending on various regional factors, there can be different challenges to a deeper collaboration between HEIs and other regional actors regional Innovation policy.

For example:

- Multi-level governance: higher education policies in many countries don't have a regional dimension and there can be lack of coordination between policies that impact on S3 at a national level.
- □ Local Capacity and Governance: there can be a mismatch between the academic profile of universities and the sectoral structure of their regions, harming their ability to work together.
- Access to funding: For the 2021-2027 programming period, smart specialisation strategies are an enabling condition for European Regional Development Fund (ERDF) expenditure made under Policy Objective 1-A: Smarter Europe by promoting innovative and smart economic transformation. However, for universities to access structural and investment funds, usually it requires administrative processes and rules that are difficult to navigate and meet, and are often incompatible with their own internal systems and processes.
- University Leadership and Management: HEIs are often independent from regional authorities when it comes to setting strategic direction and deciding on specific activities to become involved with; there may be no central management working to achieve a defined corporate vision and strategy.



Debate Sharing experiences

1.Do you feel this type of difficulties when interacting with other stakeholders of your region namely when it comes to regional innovation and related issues?

2. What do you think could help improving this situation?

- Changes/support from "outside", e.g. from public authorities, financing, etc.
- Changes/support inside your HEI, e.g. institutional changes, incentives, educational scope, etc.



BARRIERS AND CHALLENGES TO HEIS' INVOLVEMENT IN RIS3



The <u>RUNIN</u> project is analysing the **challenges associated to the involvement of universities in the RIS3 process**:

Challenges/problems:

- □ Focus on senior management or star academics;
- Missing communication/alignment between university leadership, operational departments and academics;
- Active involvement of universities in early design stages associated with less-developed regions and/or regions with a less complex innovation ecosystem;
- Dichotomy between formal and informal modes of involvement.



Suggestion:

Clarify the type of involvement required by the university, and suggest an integrated alignment at all levels of the organization (management, academics, technical staff)



One of the main barriers to a closer regional engagement is the lack of dialogue and knowledge about "the other". In order to build a sound S3 partnership the actors of the quadruple helix need to:

✓ Know and understand each other better as a basis for fruitful collaboration.



- ✓ Map the scope, focus, expertise and interests of each party.
- ✓ Understand the specific obstacles and challenges that are preventing a greater level of engagement between local universities and the region.



Stakeholders need to understand each other before action can be taken

Such good practices of collaborative partnerships are possible and already exist across Europe.





REGION/COUNTRY	NAME OF GOOD PRACTICE (MORE DETAILS IN ADITIONAL MATERIALS)
Hungary, Central Transdanubia	The Introduction of the Role of the Corvinus University of Budapest in Central Transdanubian Region as a RIS3 actor
Italy – Apulia Region	SmartPuglia2020 – Innovation and collaboration for RIS3 in Apulia Region
Centre (Centru) Development Region from Romania	Development of the third mission at the Transilvania University in Brasov
South-Moravian region, Czech Republic	Long-term commitment and leadership





RE-ACT

- □ Brief presentation of the RIS3 main priorities, status of development and implementation in each partner country/region.
- □ Identification of main challenges to stronger HEI involvement in RIS3 (based on the interviews performed by partners with each regional/national RIS3 responsible organization).
- Debate/Activity: Opinion and input on the RIS3 and the role of their HEI and others of the region (this can be a basis for following activities)





RIS3 in Hungary



The Central Transdanubian Smart Specialization Strategy (RIS3)

The purpose of the RIS3 strategy is to provide a starting point and framework for the planning processes and implementation of innovation activities in the Central Transdanubian Region (CTR). At the same time, the aim of the RIS3 strategy, which also requires the adjustment of the governance structure, is to further develop previous innovation activities, as follows:

- Considering the regional border crossing nature of the industrial and service sectors;
- Integration, of sectoral division of tasks and specialization between Hungarian regions, into the innovation system;
- Unlocking the exclusively economic orientation of innovation;
- Stabilization and operation of an efficient service / support portfolio.

The aim of the strategy is therefore to create an internationally competitive, specialized innovation system by strengthening the sector's capabilities, which exceeds the innovation systems of previous periods in terms of its resource absorption capacity and resource use efficiency, and thus contributes to the creation of a competitive European economy.

- ✓ As a first step, the role of the regions in the innovation system needs to be redefined in the governance structure of the RIS3 strategy. A smaller, decentralized allocation of up to 15-25% operating in addition to the central resource allocation should be a fundamentally good solution.
- ✓ The task-oriented approach is expedient in defining the organizational framework.



The Central Transdanubia Smart Specialization Strategy (RIS3)

Future goals:

Maintaining its favourable economic potential, the Central Transdanubian Region is increasing its knowledge-intensive economic potential and reinforcing it with community networks becoming an open region that is sustainable in the long run, competitive, having a crucial role in the Central European economic space.

> Considering the aim and nature of RIS3, a specific sub-goal can be formulated:

The aim of the Central Transdanubian Region is the innovation-driven development of the currently determinant and emerging sectors, the renewal of the related infrastructure, the prioritization of knowledge production and utilization, and the strengthening of networking. It also aims to strengthen the social dimension of innovation and to integrate horizontal instruments in support of sustainable growth.

In order to realize these goals, the followings need to be accomplished:

- Differentiated development of the R&D efficiency, resources and background conditions of the region, which also includes the increase of the infrastructural supply of traditional, emerging and complementary economic branches and social activities;
- Development of the innovation capacity of the companies operating in the region, provision of conditions supporting knowledge production, technology transfer and knowledge utilization;
- Developing partnerships and networks to support innovation; supporting co-operation within and outside the region, tailored to the region's capabilities.

Traditional, determinant branches of CTR economy: Automotive Industry, Electronics, Materials Technology Industry, Environment and Health Industry, Informatics.

In the interviews, the importance of RIS3 was highlighted in a context that it is important in the renewal process of the Hungarian HEIs, making them more innovative and making HEIs more relevant to today's challenges. The goals include the broadening of R&D potentials of universities.



RIS3 in Hungary

- Responders highlighted the importance of sharing the infrastructure – opening HEIs' research infrastructure for the businesses can be a significant contribution to the development and implementation of RIS3 objectives. The role of big, multinational companies setting up joint RDI laboratories with universities also came up in the interviews.
- Hungarian experts stressed the importance of technology transfer and services that support market entry and intellectual property issues.
- The lack of coordination of projects and the prevalence of several smaller projects is also an issue.

RIS3 in Hungary

•An expert noted that universities are slow in adapting their supply of fields of study to the demand of businesses, while another expert also noted that business sector actors do not really know what services universities can offer.

•Collaboration in some cases occur only for one-shot innovative projects without a system of continuous planning. RIS3 stakeholders get involved in projects only if there is an availability of funds to cover the costs.

•The experts taking part in the interviews mentioned the the poor communication and the inferior quality of cooperation as problems in Hungary. It is important that RIS3 stakeholders and HEIs become attractive partners of each other, beginning with the improvement of communication. Main features of the next RIS3

- HEIs can connect a place to the rest of the world, through international research collaborations. They act as hot spots: by listening to their territory to gain insights on specific local needs, through their international networks they collect the best experiences and potential solutions and they spread them in the territory, following the "think global, act local" philosophy.
- In terms of expertise, according to one of the interviewees, the region would need more skills in managerial and business management and HEIs do not respond adequately to this need. So, in Hungary, a specific innovation management program was launched.
- An expert in Hungary also mentioned that universities in the CEE region do not step up as lead partners and creative R&D projects tend to avoid Hungary. Hungarian HEIs usually take a more inferior role in EU-wide projects.
- Although, EU funds are given, they do not always bring the desired improvement in innovations. Nonetheless, there are several programmes that target the promotion of innovations.





RIS3 in Marche Region



Content

- Introduction
- Main phases
- Results
- S3 priority areas 2014-2020
- S3 Priority areas 2021-2027



Introduction

Marche Region

Marche Region economic tissue is mainly characterized by SMEs specialized in the mechanical sectors and in some traditional sectors (including leather, footwear, textile and clothing, wood and furniture, food). Within this framework, the university system is moving towards applied sciences with the aim to achieve specialisation and innovation in the scientific and technological sectors.

There are 4 universities in the region with both scientific and humanistic competences. Moreover, academic spin-offs are also part of the regional research system, thanks to which the results of the research carried out in the universities are directly applied in business activities.

R&D activities in Marche Region

In 2011, Marche Region's expenditure on R&D is one of the lowest at national level (0.7%) with 0.29% for R&D expenditure in the public sector and 0.34% for the business one, compared to the Italian average (1.3%, fourth last in EU). About 50% of the expenditure is attributable to companies and the rest to the public sector (public research bodies and universities). In terms of R&D employees, Marche region's has lower values than in the rest of Italy (3.3 employees x 1000 inhabitants vs. 4 employees at national level).

Over the last decade, especially since 2007, a loss of attractiveness in Marche's university system has been detected (despite of an increase of interest in technical-scientific disciplines). This, in addition to the difficulty for graduates to enter the labour market, has led to the risk of brain-drain (i.e. that graduates from the Marche region leave the region to find a job).

Innovative regional performance

In terms of innovative performance (product, service and process), Marche Region stands below the Italian average; at European level it is defined as a region with "moderate" innovative performance.

It is important to point out that collaborations and networks stimulate research and innovation, if carried out within the region itself.

Introduction

Lessons learned from the past

The evaluation of past strategies has shown that:

- the evolution in process and product innovations is positive, in particular thanks to interventions addressed to specific technological areas and to the promotion of networks with universities;
- positive but limited effects of employment in R&D; growth in employment in collaborative interventions between research bodies and companies;
- the performance of companies, on average, in terms of turnover, is particularly positive in the case of networks between companies and universities;
- regional calls for proposals aim to create horizontal networks, based on the exchange of knowledge and on the involvement of universities and scientific partners, to complement vertical networks;
- the technological and scientific specialisation of the projects demonstrates a strong territoriality thanks to the partners involved and to the concentration of projects around university clusters.

Effects of the involvement of universities in the companies

Construction and consolidation of networks and relationships; enrichment of human capital with specialized skills or high professionalism; increase in quality and innovative capacity; openness to collaborations beyond the supply chain of the company sector.

Main phases

The process to the creation of the RIS3 strategy in Marche Region started in 2012:
>SWOT Analysis
>Stakeholder Engagement
>EDP
>Identification of Priorities and Actions



Results

Obstacles and needs:

- loss in the industrial system's competitiveness (manufacture – districts – predisposition to export) due to the threats related to the global international market context's uncertainty and high competition
- low spreading of innovation in high technologic products and services
- brain-drain risk 2 2 low public resources for the university management and for research
- lack of technologic infrastructures for the enterprises' growth (with consequences in the loss of innovation capacity for the regional system and for future opportunities)
- limited excellence research activity: Marche Region stands among those who "utilize and transform knowledge" but it doesn't "produce new knowledge" in order to make the productive regional context grow.

Mid-term variables (objectives):

- 1. public/private system's capacity to attract additional national and European resources for research and innovation;
- 2. creation of networks among businesses and between universities and businesses
- 3. productive system's capacity to produce high added value products (capitalization of innovative and productive excellence niches and advanced services' trends)
- 4. capacity to invest in innovative technologic fields
- development of new intelligent modes to provide services to the community (through "Innovative technologic clusters" and "Smart Cities and Communities")
- 6. Employment of young talents (R&D and businesses' productivity improvement)
- 7. Training of the top management in order to support businesses in the turn-over and in the change in the business model


S3 priority areas 2014-2020

	Fields of Specialisation	Research topics	
	Home automation	0 ,	Food Safety Food Quality and Manufacturing
ІСТ	Health & Wellness	Ambient Assisted Living Active ageing at home Comfortable, sustainable and safe life environments	Educating cities Social museum and smart tourism Zero-consumption buildings Intelligent mobility
	Sustainable manufacturing	Sustainable production Flexibility and adaptability Intelligent production High performances	
	Mechatronics	Sustainability and Health ICT Nanotechnologies Sustainable Innovative Materials	



Identified priorities of action (which directly involve HEIs)

- 1. Promotion of investments in R&D and innovation through collaborative projects (businesses, universities and technology centres), systematic actions for higher education in the smart specialisation fields
- 2. Promotion of innovative solutions to face local community social challenges (especially health and wellness) through collaborative research projects (university, businesses and public authorities)
- 3. Engineering and industrialisation of the research results, piloting and first testing of the products
- 4. Promotion of the innovation capacity in businesses for digitalisation, organisation and management
- 5. Promotion of the valorisation of the Made in Italy supply chain through cross-fertilisation among businesses
- 6. Improvement of the ICT infrastructure equipment, the public/private advanced service provision and fruition
- 7. Promotion of the accessibility to alternative energy sources and to integrated systems of eco-innovation among business networks
- 8. Promotion of innovative solutions in the agricultural and agri-food sector for sustainable competitiveness and for food high-quality and healthiness



Regional Innovation Scoreboard 2011 and 2019: Marche Profile

Indicator Design applications Non-R&D innovation expenditures Employment medium and high tech manufacturing & knowledge-	Country 197.29 124.38
intensive services	104.56
SMEs innovating in-house	102.53
Sales of new-to-market and new-to-firm innovations	100.22
Marketing or organisational innovators	97.84
Product or process innovators	95.61
Trademark applications	86.55
EPO patent applications	78.92
Scientific co-publications	75.13
R&D expenditure public sector	72.49
Innovation index	72.14
Innovative SMEs collaborating with others	67.78
Most-cited publications	61.58
R&D expenditure business sector	51.12
Public-private co-publications	46.83
Population with tertiary education	44.73
Lifelong learning	39.6

v	Indicator	Country
	Design applications	183.4
	SMEs innovating in-house	137.18
	Non-R&D innovation expenditures	135.61
	Trademark applications	132.52
	Product or process innovators	123.72
	Sales of new-to-market and new-to-firm innovations	114.74
	Marketing or organisational innovators	100.08
	Employment medium and high tech manufacturing & knowledge- intensive services	92.66
	Innovation index	81.2
	Scientific co-publications	76.85
	Population with tertiary education	73.05
	Most-cited publications	71.33
	R&D expenditure public sector	70.68
	Innovative SMEs collaborating with others	67.98
	R&D expenditure business sector	66.97
	Lifelong learning	66.02
	EPO patent applications	60.02
	Public-private co-publications	46.81



S3 priority areas 2021-2027 and industrial properties

Strengthen the innovative capacity of the consolidated and representative productive systems of the Marche Region

A1. Home and interior design

A2. Clothing and personal care

A3. Mechanics-engineering

Strengthening industrial systems with high growth potential and drivers of social innovation

- **B1.** Products and services for culture and education
- **B2.** Agrifood and health

Strengthen cross-functional services as drivers for innovation

C1. Service Innovation



Policy mix

RESEARCH AND INNOVATION

- Strategic projects for collaborative research
- Individual and supply chain R&D projects
- · SMEs' innovation and diversification
- Hi-tech startups; Research infrastructures/centers
- · Governance.

INNOVATION AND DEVELOPMENT

- Attraction and promotion of investments
- SMEs' innovation and investments, trade, handicrafts and cooperatives
- Funding tool for SMEs' growth
- Fund for new enterprises
- Local infrastructure per entrepreneurial development

INTERNATIONALISATION

- Promotional strategies for productive supply chains
- Support for SMEs' internationalisation
- · Internationalisation of the R&I system
- Twinnings and cluster-to-cluster collaboration

TRAINING AND JOBS

- High-level skills
- Higher technical education
- Lifelong learning
- Entrepreneurship and management
- · School/HEI's orientation and traineeship
- Employment policies



CHAPTER

2.3.3

RIS3 in North-West Development Region, Romania



Content

- Introduction
- RIS3 North- West 2018 2020
- Implementation of RIS3 North West 2018 2020
- RIS3 North West 2021-2020



Introduction

- Research and Innovation Strategy for Smart Specialisation or Smart Specialisation Strategy of North- West Development Region (RIS3 North-West) 2018 – 2020:
 - Finalized and adopted by the Regional Development Council in 2018,
 - Contributing to the fulfilment of the ex-ante conditionality for European Regional Development Fund (ERDF) under Thematic Objective 1 – *Research, Technological Development and Innovation*,
 - Relying on the Concept Note or Framework Document for RIS3 finalized in 2017 and elaborated to support implementation of Priority Axis 1 of the centralised Regional Operational Programme 2014-2020 – *Promoting technology transfer*,
 - This Priority Axis is the only direct financing source for smart specialisation projects.
- RIS3 North West 2021-2020:
 - Revised version of the previous strategy, adopted in September 2020, but further updates expected,
 - Contributing to the fulfilment of the ERDF enabling condition under Policy Objective 1 A smarter Europe through innovative and smart economic transformation (min. 35% of ERDF allocation in less developed regions), including the decentralised Regional Operational Programme 2021-2027.
 - Estimated regional allocation in ROP North-West 2021-2027: 270 milion EUR (ERDF + national co-financing)
 - There are also other indirect national and European financing sources.



RIS3 in 2018-2020

Smart specialisation priority areas

- Pillar I Innovation for health and wellbeing
 - Agro-food
 - Cosmetics and food suppliments
 - Health
- Pillar II Development of emerging sectors
 - New materials (metal working technologies, paper, plastic, packaging, furniture)
 - Advanced production technologies
- Pillar III Regional digital agenda
 - Information and Communication Technologies (both vertical and horizontal)

•Priorities of the policy mix

- The RDI "tripod" adapted to market needs
- An innovative and digitalised business environment
- Support for the creation of a connected innovation ecosystem

(for niches corresponding to each smart specialisation priority area and actions under the priorities of the policy mix see additional material)

PA 1 of the ROP 2014-2020

- Specific objective 1 (all less developed regions)
 - Operation A: Innovation and Technology Transfer Entities (ITTE) -> 2 closed calls
 - Operation B: Technology Transfer in Scientific and Technological Parks -> 2 closed calls
 - Operation C: SMEs in partnership with ITTEs -> 2nd call to close on 15th of March

• Specific objective 2

- Integrated projects developed under the "Lagging regions" initiative (*NW*, *NE*, *SE* regions) -> closed call,
- Research Valorization Programme (*NW and NE regions*) -> to be launched,
- Proof of Concept Programme (all regions) -> to be launched.



Main features of the RIS3 2021-2027

• Vision:

• The North-West Regional Development Region will become one of the most innovative regions in Central and Eastern Europe by 2034 through the enhanced performance of research and innovation activities with the aim of increasing revenues, employment opportunities and living standards, at the same time considering the principles of a green, sustainable economy.

Strategic objectives:

- The structural transformation of the economy through innovation relying on new technologies and meeting the main social and economic challenges, based on the principles of sustainability and circular economy
- The development of the regional innovation ecosystem and connecting the latter to national, European and global networks
- The development of the research capacity and the valorization of research results in order to increase the level of innovation
- Maximizing the advantages of digitalization in both public and private sectors



Main features of the RIS3 2021-2027

Specialisation priorities

SAME PILLARS, SAME SMART SPECIALISATION
PRIORITIES but REVISED LIST OF NICHES AND
POLICY MIX

• Pillar I:

- **Objective:** Support for innovation in traditional areas from the North-West region in order to improve the health and well-being of a large number of inhabitants.
- Areas: Agro-food, Cosmetics and food supplements, Heath

• Pillar II:

- **Objective**: Capitalizing on the results of research and development activity based on advanced technologies in order to develop emerging economic activities, of niche, in line with global trends.
- Areas: New materials, Advanced production technologies

• Pillar III:

- **Objective:** Digitalisation of the economy and society, supported by the transition of the ICT sector to innovation.
- Area: ITC (vertical and horizontal)



Main features of the RIS3 2021-2027

Policy mix

- **Objective**: Sustaining innovation in the smart specialization priority areas through concrete actions solving bottlenecks and challenges supporting the structural transformation of the regional economy
- Priority 1: The research-development-innovation (RDI) "tripod" adapted to market needs
 - **Objective:** Consolidating the performance of RDI activities and the adaptation of technological transfer services to market needs and smart infrastructure development.
- Pillar II: An innovative and digitalized region
 - **Objective**: Increasing the number of innovative businesses by ensuring access to new technologies, aligned to Industry 4.0 standards with sustainable economy standards, mobilizing private capital, developing human capital and supporting Smart City initiatives.
- Pillar III: Supporting the creation of a connected innovation ecosystem
 - **Objective:** Reducing the level of fragmentation at innovation chain level by facilitating an effective cooperation between the actors of the innovation ecosystem at regional level and by supporting the collaboration of these actors with national, European and international entities.

(for more information on niches corresponding to each smart specialisation priority area and actions under the priorities of the policy mix see additional material)





RIS South Moravian Region The Role model





South Moravia RIS and JIC – Jihomoravské inovačné centrum: Long-term commitment, leadership, entrepreneurship

RIS: stimulate quality conditions for innovative entrepreneurship in the region by raising the level of education, encouraging research into activities in the local environment, strengthening the image of the region or directly supporting entrepreneurial activities in the event of market failure.

Participatory approach: intended for all actors of the innovation ecosystem who are interested in contributing in a structured way to the growth of living standards in the region through their individual activities - to share and make coordinated decisions.

The partnership approach: to meet common goals and oversee proper implementation of RIS.

Leadership, long-term strategic commitment: RIS 2021-2027 represents the fifth generation of RIS. In this way, the JIC develops its innovation environment on a long-term and systematic basis.

Measuring impacts: The progress of RIS is regularly monitored through indicators at the level of strategic objectives and individual projects. Impacts are assessed at the level of individual interventions (eg evaluation of creative vouchers, JIC consulting services for companies, program for talented students, etc.). At the same time, a comprehensive evaluation of the entire RIS was carried out in 2018 using an econometric model and counterfactual analysis.

Multi- source financing: The JIC seeks to coordinate innovation policy activities in the region, regardless of the origin of the resources.



South Moravian Region – success story



2009: Innovation vouchers: inspired by the Netherlands led to the implementation of the innovation tool in other regions.

2010 The first start-up accelerator in the Czech Republic has supported 62 start-ups since its establishment, which received investments worth more than 122 million Cezch crowns.

2011 Media interest New York Times, Financial Times present JIC as a successful start-up incubator and Brno as a technological paradise.

2013 JIC PLATINN: Not only start-ups, but also established companies looking for a new impetus. Inspired by the Swiss model.

2015 JIC VENTURES Investment Facility supports promising companies in faster growth.

2016 CREATIVE VOUCHERS BRNO In cooperation with the city of Brno, support for cooperation between companies and experienced creative people in the form of creative vouchers.

2017 FabLab: non-stop publicly available digital prototype workshop for technology companies, start-ups and the public.

2018 ESA BIC Brno: (European Space Agency) use of space technologies in everyday life and support of research, development, innovation and monetization of results.

2019 FabLab Experience is a mobile trailer, offering elementary and high school students practical education in the field of digital production technologies.

2020 New RIS 2021-2027: the heart is successful entrepreneurs, operating globally but with a home in the South Moravian Region. Development of technical skills and personal development of young people.







RIS3 in the North Region of Portugal





Tools to support HEIs engagement in regional development



HEINNOVATE - SUPPORTING ENTREPRENEURIAL AND INNOVATIVE UNIVERSITIES

Self-assessment tool used as basis and reference in RE-ACT

heinnovate

□Aim: support higher education institutions to empower students and staff to demonstrate enterprise, innovation and creativity in their teaching, research and third missions.

Resources: guiding framework, additional resources and training materials

Self-assessment: Users can rate statements related to each area on a scale from 'not applicable' (n/a) to 5, according to how much they agree or disagree with the statement in relation to their institution.



Follow up: HEIs can capitalise on the results of the self-assessment along the eight dimensions in order to propose and implement actions and measures that help them in becoming more innovative and entrepreneurial



HEINNOVATE - SUPPORTING ENTREPRENEURIAL AND INNOVATIVE UNIVERSITIES





HEInnovate is very beneficial for supporting a better involvement of universities in regional development through innovation and entrepreneurship. But is it fully **tailored to RIS3 as a new approach towards innovation policies? RE-ACT aims to contribute for this!**



OTHER TOOLS

There are several tools that help HEIs to assess and support their engagement in regional development.

ΤοοΙ	Description
TEFCE	Towards a European Framework for Community Engagement in Higher Education: Policy tools at the university and European level for supporting, monitoring and assessing the community engagement of higher education institutions
<u>U-Multirank project –</u> <u>Universities compared</u>	Multidimensional, user-driven approach to the international ranking of higher education institutions. It compares the performances of HEIs in the five dimensions of university activity: (1) teaching and learning, (2) research, (3) knowledge transfer, (4) international orientation and (5) regional engagement.
Governor Self-Assessment Tool	This resource addresses the challenges and rewards of being a governor in higher education. This tool helps to confirm the strengths they bring to the task and also to identify areas for developing knowledge and understanding of what is required in the dynamic and changing world of higher education.
Higher Education Institutional Capacity Assessment Tool (HEICAT)	Tool to help HEIs gauge their performance across a range of management and academic functions by evaluating the extent to which they meet a series of good practise criteria.
Advance HE	Aimed at helping higher education shape its future, enhancing organisational performance to deliver sustainable change; developing and connecting people in order to deliver impact; accrediting achievement to be recognised; supporting transformative leadership and management, teaching and learning, equality, diversity and inclusion, and effective governance.

Debate Sharing experiences

- Do you know or have used any of these tools?Do you have more detailed information on how
- HEInnovate was/is being used in your HEI?



Conclusions

- HEIs are more and more at the core of regional innovation policies and thus should be familiar and prepared to participate in these dynamics.
- HEIs engagement in the design and implementation of regional place-based and knowledge intensive strategies is an advantage for all stakeholders of the quadruple helix and thus for the region.
- HEInnovate, as well as other tools, was designed to support HEIs in their entrepreneurial journey, but additional aspects should be considered when a HEI assesses its conditions to fully engage into RIS3.



Coming up...



Module 3. HEInnovate and the new HEInnovate for RIS3

