



Annex no.2 – Methodological guidelines for drafting, updating and reviewing the North-East RIS3

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1. Methodology for identifying sectors with potential for specialisation

The identification of the priority areas of RIS3 North-East 2021-2027 was based on regional multi-criteria analysis (using statistical indicators over a time horizon of minimum 5 years) of the following selection criteria:

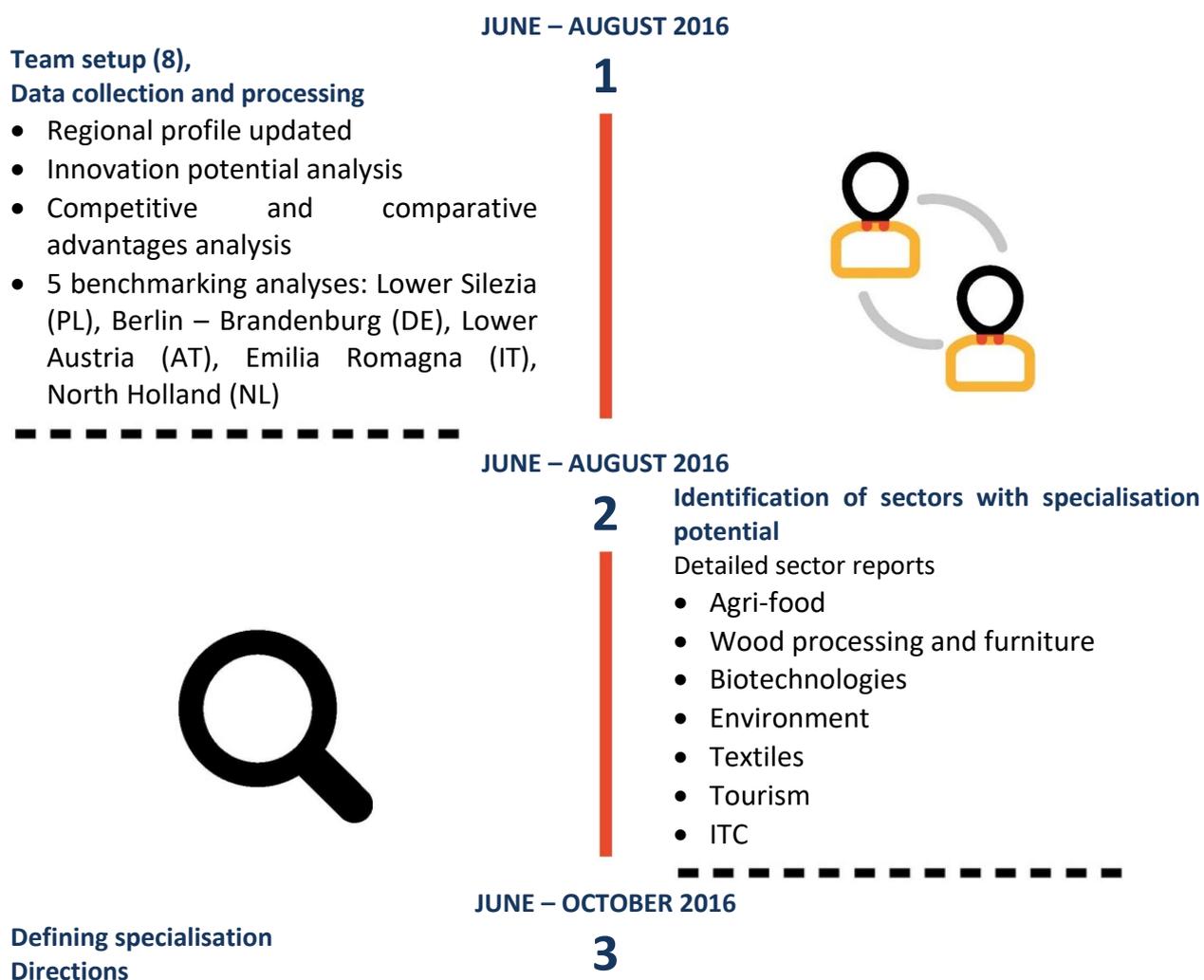
- 1. the existence of industrial agglomerations** – we identify the existence of territorial concentration of economic activity, the existence of a critical mass of economic agents at regional level. Indicators for measuring the fulfilment of these criteria: number of companies active in the field (at class level according to the classification of NACE CODE, 2nd Revision), identification of the types of products and services offered, the total annual turnover of these companies, the share of total annual turnover in the regional gross value added (GVA), the average annual number of employees related to these companies; the share of the sector in the total employees at regional level; key numbers on the region's place in the national ranking;
- 2. the existence of natural factors leading to the development of the sector** – for example, the size of agricultural or forestry areas, their share in the total area, natural curative factors for tourism, resources for alternative energy production, etc.;
- 3. the existence of associative structures** – we identify the existence of clusters, business support networks, etc. in the selected field. The indicator is the number of existing associative structures; total annual turnover, average total annual number of employees, total annual expenditure on the RDI activity; performance of the cluster management entity (ESCA labels, innovative projects promoted over the last five years);
- 4. analysis of regional industrial and innovation value chains for that area** – we analyse the type of production chains, the positioning of industry firms in these value chains, the connection with national and global value chains. We also consider the cooperation with other regions;
- 5. the innovative nature of the analysed field** – we analyse the technology level of the companies in the field, the labour productivity compared to the overall level of labour productivity in the region;
- 6. the region's performance in the field** – we analyse the positioning of the main companies in the field at national level (rankings), the existence of leaders in the field, presence of foreign investors (location, country of origin, company name, amounts invested; results, type of products/services offered, annual turnover, average annual number of employees);
- 7. competitive and comparative advantages of the region** – we analyse the value of exports by group of goods related to the analysed field, the share of the field exports in total regional exports, the value evolution of exports related to the field. It also specifies whether there are other comparative advantages compared to other regions e.g. access to skilled labour, raw materials, proximity to markets, etc.;
- 8. the existence of a regional competence base in that area** – the indicators to be analysed are: the existence of technological high schools, vocational and technical schools, dual education, faculties, doctoral schools. We specify the number of training units and their territorial distribution;
- 9. the existence of RDI and TT infrastructures** – we analyse the existence of accredited research-development-innovation organisations included within the national RDI system according to Law 324/2003, of the technological transfer entities included in the National Register of accredited entities, companies with RDI activity, scientific and technological parks. The indicators pursued are the number of researchers/staff involved in research, number of patents and their field, value of research projects and their field, projects targeting fundamental and applied research, available testing infrastructure and the applicable field, personnel involved in TT activity, number of technology transfers;
- 10. the correlation with major societal challenges (including societal ones)** – we analyse the correlation with major societal challenges and sustainable development goals identified at European and global level, identify growth opportunities due to technical developments and discoveries. The information is taken from scientific studies and researches on economic potential, official forecasts, on-going investments or investment plans, sectorial SWOT analysis carried out within the EDP.

2. Methodology for updating and reviewing the North-East RIS3

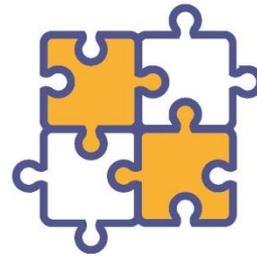
The methodology for updating and reviewing the North-East RIS3 followed the steps and indications included in:

- **Guide to Research and Innovation Strategies for Smart Specialisations - RIS3**, published in May 2012 by JRC – IPTS Seville, under the supervision of the Directorates-General of the European Commission;
- **Implementing Smart Specialisation Strategies, A Handbook**, edited in June 2016 by JRC – IPTS Seville, under the supervision of the Directorates-General of the European Commission;
- Methodological guidance for the organisation of the entrepreneurial discovery process (EDP) prepared under the project **“Targeted support for RIS3 implementation in Romania”**, implemented by the Joint Research Centre and DG Regio according to the CTEX2014D228220-102 agreement;
- **North-East Regional Operational Programme 2021-2027.**

The timeline of the activities carried out to update and review the North-East RIS3 for the period from June 2016 to November 2017:



- Analysis of research-innovation and IT offer
- Identification of competences for specialisation
- Development needs assessment
- Mapping of major value chains
- Identification of societal challenges
- Reviewing the selection criteria for sectors and specialisation directions
- Organising EDP, meetings with universities, public consultation



OCTOBER 2016 – NOVEMBER 2017

4

RIS3 Development

- Defining the matrix structure of RIS3 sectors
- Drafting the vision, mission, values
- Defining the priorities, measures, types of projects
- Developing the governance, monitoring and assessment methodology
- Setting up the Regional Innovation Consortium, the Academic Consultative Commission and the Funders Consultative Group
- Endorsing the RIS3



Between 2017-2020, the following activities were implemented in order to operationalise the North-East RIS3:

- open call for collecting project proposals for the North-East RIS3 portfolio – March - May 2017;
- analysis of funding sources of North-East RIS3 portfolio projects – organising Project Development Laboratory (PDL, JRC DG Regio and North-East RDA methodology), 24 April 2017;
- activation of Funding Consultative Group – organising the workshop, 19 June 2017;
- analysis of Project Fiches included in the North-East RIS3 portfolio, assistance to promoters of integrated projects for the development of project concept – August 15 – October 31, 2017;
- attracting resources to finance the integrated projects from North-East RIS3 portfolio – ROP 2014 – 2020, 15 October 2017;
- consultation of RIC members and endorsement of North-East RIS3 updated in RIC and North-East RDC respectively, 16 November 2017 and 7 December 2017;
- organisation of 6 meetings with North-East RIS3 governance structures, respectively RIC and CCA: July 2018, November 2018, May 2019, July 2019;
- development of financing guide for the Priority Axis 1, Investment Priority 1.1, Specific Objective 1.2 – January – May 2018;
- organisation of PDL (project development lab) – June 2018;
- organisation of information session for Priority Axis 1, Investment Priority 1.1, Specific Objective 1.2 – July 2019;

- organisation of the conference Smart Specialisation in North-East Region – Opportunities and Challenges, in order to improve the process of entrepreneurial discovery, to continuously update the priority niches of intervention and to generate innovative projects in the region. On this occasion, the role of North-East RIS3 (RIC and CCA) governance structures in the elaboration and implementation of the North-East RIS3 was brought into question on new coordinates – December 2019;
- organisation of 14 (online) workshops such as EDP Focus Group to validate the specialisation niches and the opportunity to introduce additional niches – March – May 2020;
- public consultation to validate the intervention mix for North-East RIS3, June – July 2020;
- collection of strategic project ideas for North-East RIS3 portfolio, July – August 2020;
- public consultation on North-East RIS3 2021 – 2027, September 2020;
- volition of North-East RIS3 in RIC and endorsement in North-East RDC, September 2020.

3. Methodology for the configuration of the specialisation areas and niches of the North-East Region

Taking into account the opportunity to exploit cross-sectoral links between the areas of specialisation (horizontal character with the potential to extend benefits to other sectors of activity) and the diversity of reconfiguration directions of these areas that may result from addressing the challenges identified at regional level, the following activities have been carried out to identify and revalidate the smart specialisation niches in each sector with potential:

1. Identifying the major societal challenges relevant to the smart specialisation strategy of the region. The consultation process with local actors identified the following challenges:

 <p>Healthy aging, demographics and well-being</p>	<p>Maintaining the active, efficient and safe treatments, capitalising on the therapeutic effects of food and probiotics, development for eco-tourism</p>
 <p>Food security, sustainable agriculture and bioeconomy</p>	<p>The bioeconomy involves the complete and complex capitalisation of renewable natural resources</p>
 <p>Clean, effective and safe energy</p>	<p>Measures to improve energy efficiency through production methods and rational use of energy</p>
 <p>Safe and secure water</p>	<p>Resource efficiency and protection of aquatic ecosystems through innovation</p>

2. Mapping the value chains for each sector with specialisation potential, which can help address these societal challenges; the approach aimed at chaining the local actors, identifying missing or narrow links, identifying smart specialisation directions;
3. Defining common, cross-sectoral elements of smart specialisation areas, looking at how they respond to the global need for smart regional development;
4. Defining the common elements between the smart specialisation niches of each sector and the major regional challenges, looking at how they can contribute to their mitigation and to a smart, sustainable and inclusive regional development.

The following identification / argumentation criteria are used to identify the specialisation niches related to RIS3 North-East:

- a. the existence in the region of research-development and training competencies in the specialties related to the niche (details in Annex 3 - Areas of competence);
- b. the regional development potential of the niche - existing resources, number of companies active in the proposed niche, their development needs and their interest in innovation;
- c. the competitive advantages of the region in the proposed field - economic performance, in research-development and education;
- d. the niche relation to the current innovation trends in the field.

The targeted sectors are: *Agri-food, Textiles & Advanced Materials, Biotechnology, Energy & Environment, Information and Communication Technology, Tourism for a healthy lifestyle (areas with specialisation potential identified for 2014-2020)*, the representatives of the regional quadruple helix being encouraged to evaluate the relevance of the specialisation niches included in the previous edition of North-East RIS3 and to advance new niche proposals.

The niche proposals received were analysed and integrated, to outline a new structure of the North-East RIS3 priority sectors, which is subject to public debate. By analysing and integrating the observations and recommendations received following the public debate, the priority areas for intervention and investment of North-East RIS3 are reconfigured.

To reconfigure the sectors and related niches, we used the methodology for implementing the entrepreneurial discovery process recommended by the Ministry of Public Works, Development and Administration – MPWDA Order 3630 of 13.08.2020, published in the Official Gazette no. 770 of August 24, 2020.

The Entrepreneurial Discovery Process (EDP) focus group is a concept developed within the European Smart Specialisation Platform S3 by the Joint Research Centre of the European Commission (JRC). This is an interactive and inclusive, "bottom-up" process, aimed at:

- identification of regional development directions through smart specialisation (niche sectors with significant competitive advantage & their major challenges);
- identification of innovative development solutions (sectoral, cross-sectoral, local).

Starting from the JRC methodology, North-East RDA plans and organises entrepreneurial discovery meetings (EDP).

4. Methodology for identifying and selecting projects in the North-East RIS3 portfolio

The Research and Innovation Strategy for Smart Specialisation of the North-East Region is the result of a bottom-up process, which involved extensive consultation with regional actors involved in priority areas of activity (where the region benefits from competitive and / or comparative advantages). This consultation process was accompanied by an Entrepreneurial Discovery Process (EDP), embodied in a portfolio of project ideas, built in two stages:

- through entrepreneurial discovery workshops;
- within the Project Ideas Development Laboratory (PDL).

Both stages were carried out by North-East RDA for the first time in 2017, within the Project “RIS3 Support for Lagging Regions”, initiated by DG REGIO and implemented by the Joint Research Centre of the European Commission (JRC)¹.

The stages of identifying and maturing the project portfolio are:

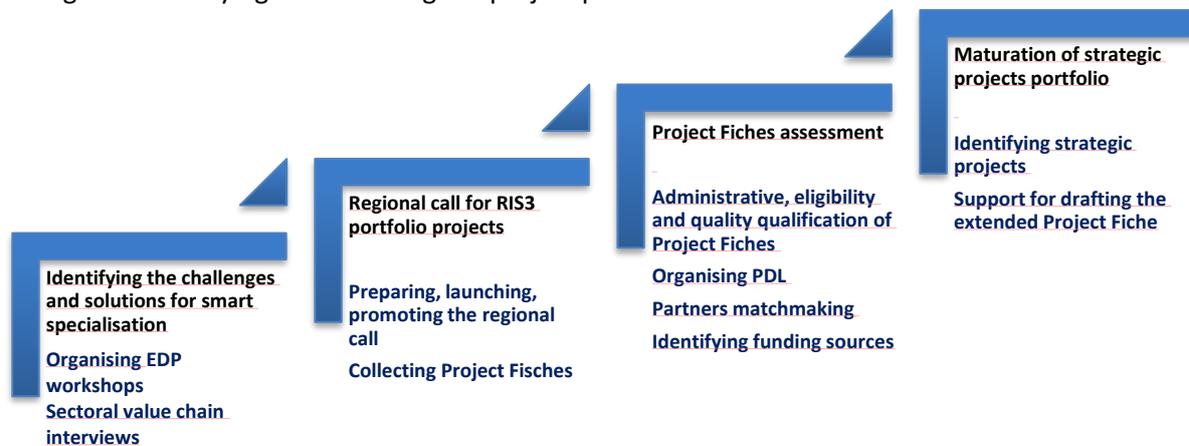


Figure 1. The process of elaborating the North-East RIS3 project portfolio

Project proposals can be submitted by any company, university, research and development institute / organisation, innovation and technology transfer entity, science and technology park, local public administration, association / foundation (including clusters), business support structures, etc., with activity located in the North-East Development Region, individually or in partnership with other entities from the categories listed above.

The process of analysis and prioritisation of the project proposals that may be included in the North-East RIS3 portfolio is the subject of an Operational Instruction developed by North-East RDA which considers the following stages:

- organisation of the open call for project proposals respecting the principle of transparency and equal opportunities - open online call with submission deadline, publication of results;
- the Project Fiches received and registered are analysed (from the administrative, eligibility and quality viewpoints) by experts from the RDA North-East, on a 4-eye basis, using an individual analysis grid for each project;
- from the qualitative assessment, each project proposal will be able to obtain up to max. 100 points, the score being obtained by the arithmetic average of the score given by each evaluator; to be qualified in the RIS3 North-East portfolio, the project must meet all administrative and eligibility conditions and obtain a minimum of 50 points in the qualitative assessment;
- the project portfolio will include all qualified project proposals, regardless of the area of smart specialisation or horizontal priority addressed. The Regional Innovation Consortium approves the final list of project proposals included in the North-East RIS3 portfolio.

¹

The North-East Region is a pilot region under the “RIS3 Support for Lagging Regions” project, carried out by DG REGIO and implemented by the European Commission's Joint Research Centre (JRC), under the Preparatory Actions AP1 (“Support for economic growth and governance in less developed European regions”) and AP2 (“Competitive advantages and potential for smart specialisation at the regional level in Romania”) of the European Parliament, during 2016-2017.