



# Online S3 Newsletter

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## *Methodologies and online tools for RIS3 – reviewing the state-of-the-art.*

Online S3 performed a comprehensive state-of-the-art review on the methods that European regions have employed in the design of Smart Specialisation strategies. This newsletter provides an overview of the main results of this analysis. The selection of the methods for further development is based on: 1) an in-depth current understanding of how regions have analytically tackled the issue of RIS3 design; 2) the detection of key

patterns in the RIS3 methodological approaches; 3) highlighting (frequent) methodological gaps in the present approaches to RIS3 design; and, taking into account the outcomes from the review of the state-of-the-art developments in the field; 4) identifying areas where implementation of new online tools could be particularly helpful for regional policy makers, analysts and consultants dealing with RIS3.

## *Mapping of the existing approaches to RIS3 design*

Online S3 investigated in detail the RIS3 design process in 30 European regions (9 strategies at national level and 21 at regional level). The

selected sample of regions included 6 Innovation Leaders, 9 Strong Innovators, 13 Moderate Innovators and 2 Modest Innovators. This



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distribution broadly reflects the overall situation across Europe, as mapped by the Regional Innovation Scoreboard 2016.

The exercise revealed that regions did not follow RIS3 steps as a rulebook for the design of methodological approaches. The analytical methods employed under various steps are highly intertwined. It can be concluded that **regions do not necessarily apply all steps linearly, but rather use the RIS3 theoretical framework holistically.**



The results also highlighted that the robustness of methodological approaches varied and **in many regions even the key concepts of the**

**various RIS3 steps were not (fully) understood.**

This view is supported by findings from the academic literature, which imply that “between 25% and 40% of the S3 strategies do not even claim to consider some of the most central notions of the RIS3 concept” (Kroll, 2015).

The qualitative review of the mapping results underlined that there is **no real link between the level of regional innovation** (as measured by RIS 2016 ranking) **and the methodological sophistication of RIS3 design.** Hence it cannot be claimed that moderate and modest innovator regions use fewer and less rigorous methods than the leading innovation regions.

The mapping exercise also revealed that there are **only a handful of online tools referenced as sources for RIS3 design.** Mainly these sources are EU level and international policy monitoring platforms and various competitiveness indexes.

On rare occasions, regional correspondents identified specific tools that went beyond these categories. This implies that there is room for improvement in providing guidance to regions about the existing analytical tools and design of tailored online functionalities in support of RIS3. The key findings on the main steps of the RIS3 process are as follows:

#### 1. Analysis of regional/national context

- Regions mainly use standard statistical analysis, SWOT, bibliometrics, benchmarking and working groups;
- Focus on the outward dimension is predominant in those regions that are geographically placed in favourable positions;
- There are very few examples of in-depth collaboration and networking analysis and value chain analysis.

#### 2. Governance

- Stakeholder engagement methods are the key approaches used;
- There are good examples of the set-up of dedicated networking/cluster platforms and online forums for discussions, yet in terms of numbers these novel approaches are not significant.

#### 3. Shared vision

- There is scarce information on how regions practically approached vision-building;
- Working groups, SWOT, statistical analysis and literature review are the most frequent methods indicated;
- Scenario building exercises were only identified in around one third of all mapped regions;
- Examples of any horizon scanning and foresight applications are scarce.

#### 4. Identification of priorities

- The identification of priorities has been undertaken mainly through various workshops and focus groups;
- Very little evidence exists to support the application of participatory deliberation, such as collaborative writing and annotation;
- There is some evidence that regions have used crowdsourcing elements (e.g. idea competitions) in priority setting, yet these applications are experimental

#### 5. Policy mix

- Roadmapping, workshops and focus groups are among the most frequent methods employed;
- Regions make use of benchmarking and peer review in about 30-40% of the cases;
- Ex-post evaluations of the previous policy mix have been conducted in about one third of the mapped regions.

#### 6. Monitoring and evaluation

- Most regions are in the process of defining a RIS3 monitoring and evaluation system;
- Definition of indicators is the most prevalent method used and it appears that regions are struggling with setting structural change and context indicators;
- Balanced scorecard elements are present in less than one quarter of the mapped regions.

As RIS3 design practice – defined by the six analytical steps of the assessment wheel - does not represent either a distinct, or well-understood policy-making process, Online S3 proposes the cycle of entrepreneurial discovery as a categorisation system.

The key reasons for this re-categorisation are: 1) EDP cycle is much more intuitive for policy makers as it follows the key steps of a classical policy cycle; 2) stakeholder involvement is incorporated in all phases; 3) EDP cycle explicitly includes the important phase of implementation that is omitted in RIS3 step approach (see Figure 1).

### Gap analysis and pointers to avenues for online tool development

Tools and methods used for the **analysis of regional and national assets** are the best documented in the literature. Most of the regions use standard statistical analysis, with data from Eurostat, but also from national statistical offices and regional organisations such universities or research centres. Many regions also use existing statistical indexes such as the rankings of the Regional Innovation Scoreboard and context indicators of the Innovation Union Scoreboard. Specialisation indexes are built by many regions, as well as some basic bibliometric analysis. However, there is no evidence of any more sophisticated quantitative tools being used for the analysis of the regional context. Even if most of the standard statistical analyses are robust, very few regions have a sophisticated view of emerging areas, using predictive analysis or building on hypotheses of potential regional changes or emerging areas for the future.

Regarding the implementation of **governance** systems that ensure participation and ownership

of the RIS3, most of the focus on literature concerns the structures themselves, how they were designed and how they will facilitate the RIS3 process. Most of the methods used concern participatory discussions, involving all regional stakeholders in the form of focus groups,



Figure 1 The cycle of EDP

discussion groups, interviews and/or working groups. Less is mentioned, however, about the demand-side of the governance systems, especially in relation to **enhancing and increasing transparency of the RIS3 process and providing accountability** to all regional stakeholders of the process itself.

Tools and methods used in the **elaboration of a vision for the future of the region** are not widely mentioned in the literature. This gap is likely to exist because most of the regions involve **participatory deliberation and consensus building** that is not extensively documented as part of the RIS3 process relative to the other steps. Moreover, this step has a lot of synergies with governance and identification of priorities.

Regarding the **identification of priorities**, evidence from the literature shows that qualitative methods are preferred in the form of participatory deliberations. The **use of**

**quantitative methods** to inform the prioritisation process and/or a better articulation of the use of data (analysed and collected in Step 1 of the RIS process) is an identified gap.

The methods and tools used for the **definition of coherent policy mixes, roadmaps and action plans** are not widely documented in the literature.

Several of the RIS3 strategies reviewed did not go into detail when defining their policy mixes. Regions report roadmaps as the means to achieve their objectives, but the methods used for designing them are not well described. Regions also make links to other policy documents, or reference their regional action plans, without going in detail about how they conceived them. Most of the methods used refer to qualitative

approaches, mostly through policy workshops and discussion groups with the help of a Steering Committee or an advisory body. There is room for **the use of more quantitative methods and experimentation with crowdsourcing elements** in defining priorities.

With respect to **the monitoring and evaluation**, most of the examples cited in the literature refer to the definition of RIS3 indicator and monitoring systems, with different levels of complexity and technicality. The most important gap is in policy intelligence, or the **absence of methods able to reflect how the monitoring process will be applied to revise RIS3** and update such statements.

## *Methods selected for further development*

### **1. Governance**

1.1 RIS3 vision sharing

1.2 Stakeholder engagement

1.3 RIS3 debate at a glance

1.4 RIS3 legal and administrative framework related to ESIF

### **2. Analysis of context**

2.1 Regional assets mapping

2.2 Research infrastructure mapping

2.3 Clusters, incubators, and innovation ecosystem mapping

2.4 Benchmarking

2.5 Science and technology profile and performance

2.6 Specialisation indexes

2.7 SWOT analysis

### **3. Strategy formulation – Shared vision**

3.1 Collaborative vision building

3.2 Scenario building

3.3 Delphi - Foresight

### **4. Priority setting**

4.1 EDP focus groups

4.2 Extroversion analysis

4.3 Related variety analysis

### **5. Policy mix – Action plan implementation**

- 5.1 RIS3 intervention logic
- 5.2 RIS3 action plan co-design
- 5.3 RIS3 budgeting
- 5.4 State aid law compliance for RIS3 implementation
- 5.5 RIS3 calls consultation
- 5.6 RIS3 innovation maps
- 5.7 RIS3 open data tool

## **6. Monitoring and evaluation**

- 6.1 RIS3 monitoring
- 6.2 Definition of RIS3 output and result indicators
- 6.3 Balanced scorecard
- 6.4 RIS3 beneficiaries and end users' satisfaction online survey
- 6.5 RIS3 social media analysis

## *Reference*

Kroll, H., (2015). Efforts to implement smart specialisation in practice - leading unlike horses to the water. *European Planning Studies*, 23 (10): 2079-2098.

*ONLINE S3 project aims to develop an e-policy platform augmented with a toolbox of applications and online services, which will assist national and regional authorities in the EU in elaborating or revising their smart specialisation agenda, in terms of policies and strategy.*

ONLINE S3 Project

<http://www.onlines3.eu>



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