



REGIONAL OBSERVATORIES FOR SUPPORTING THE DEVELOPMENT OF SMART SPECIALIZATION

countries | monitoring | future

The Minibook Four is the last out of four parts of the SMART_watch final publication. It has been written by Confindustria Veneto SIAV, which has the co-ordination of the whole publication. This fourth Minibook is written in cooperation with Hochschule Wismar and GAPR.

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The fourth and last Minibook goes in deep in the analysis of RIS 3 monitoring approaches and procedures in partner countries. Since the main purpose of the project is to increase the efficiency of Regional Observatories (ROs) and to equip them with tools needed to generate products (and services) corresponding to the real needs of end-users, partners decided to analyse accurately the way the implementation process of RIS 3 is monitored and evaluated. This investigation is necessary to find out elements and suggestions to share with the EU Commission and with all interested actors for the S3 system reshaping.

The in-depth analysis revealed that Central Europe partner countries have systems for RIS 3 implementation that are characterised by differences and dissimilarities, but it showed as well that similarities are many and that the room for fertile cooperation is vast and extensive. Similarly, monitoring systems are apparently individual, but for many aspects - including the indicators used - they are comparable.

Therefore, this Minibook deals with the procedures and tools used to collect data on RIS 3 implementation and links the data collection activity to the tools developed by SMART_watch, namely the Common set of indicators and the Benchmarking tool. The result is the design of a system that may overcome the existing differences and eventually lead to a real transnational monitoring system. An outstanding outcome from the project is the proposal to create a network of Transnational observatories on RIS 3 implementation that could be extended beyond Central Europe regions and refer to the whole European Union.

reface

This fourth and last Minibook is articulated in four chapters that clarify the project partners' proposal to manage the S3 market. The final part of the book contains recommendations for the EC and interested key actors on how to operate in the S3 environment.

Introduction

The **fourth Minibook** aims at presenting the results and outcomes of the activities performed by SMART_watch partners to analyse the way RIS 3 implementation processes are monitored and evaluated in CE partner countries. This Mini book contains also proposals for the process of reshaping S3, with specific reference to monitoring systems management.

Highlights of contents

FIND THE SIMILARITY: Investigating the RIS 3 monitoring system

Differences and similarities in Central Europe partner countries.

The **first chapter** is about the RIS 3 monitoring systems and practices in CE partner countries: SMART_watch investigated distinctions and similarities bringing out the potential for quality cooperation. Roles, actors and similarities are underlined, thus making it possible to outline a transnational system.

OVERCOME DIVERSITY: Common indicators and benchmarking tool

How to overcome differences and propose an organisational and functional solution to monitor and improve S3. This **second chapter** is about the project proposal to overcome existing differences that were identified in the analysis phase. Working on existing priorities and indicators, partners elaborated a Common set of monitoring indicators and linked it to the Benchmarking tool designed by the project in order to make reliable comparisons between regions and ROs.

TRANSNATIONAL VIEW: The SMART_watch model for a RIS 3 observatory

A well-argued model for cross-border and multi-scale cooperation on RIS 3 implementation.

The **third chapter** deals with the project proposal for a RIS 3 Transnational observatory. Although discussion is still on-going whether the operational level of the observatory should be regional or national, partners prefer to adopt a transnational perspective with focus on thematic fields.

LOOK TO THE FUTURE: The SMART_watch proposals on how to move forward

The project reflections on how to support Smart Specialisation to promote new growth opportunities in the EU.

The **conclusive chapter** is about the recommendations that SMART_watch consortium put forward in a period in which the S3 strategy is evaluated and suggestions for reform and reshaping are proposed. Suggestions refer to the ideas partners have to make the RIS 3 system more European and less fragmented.





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A recent survey on Smart Specialisation experiences across European countries and regions identifies the monitoring and evaluation function as the most challenging step, when designing and implementing RIS 3, since it is an on-going process for the whole funding period. This chapter is about the common and the different characteristics of the monitoring systems in SMART_watch partner regions.

As a consequence of the productivity gap between Europe and other developed areas of the world, European policy-makers had to look for alternative expansion policies. So, when the Europe 2020 Strategy was designed and launched, the role of Smart Specialisation became central to the economic development and growth policy thinking. Smart Specialisation is understood as a framework that combines industrial, educational and innovation policies to promote new growth opportunities in the EU by selecting a limited number of prior areas based on the characteristics of regional markets and productive systems.

However, according to a recent survey on Smart Specialisation experiences across European regions and countries published in the S3 Working Paper series, steps like monitoring or governance seem to provide the most relevant obstacles for the policy makers implementing RIS 3. Main challenges for monitoring include the lack of data and the difficulty to gather information and the risk that monitoring and evaluation findings may not be readily available when needed.

Since regions and their productive systems are very different throughout Europe, their RIS 3 are very distinct and so are their priorities and objectives. As a consequence, their monitoring systems and their organisational bodies seem individual as well. SMART_watch consortium analysed existing monitoring systems in partner countries by using different sources:

- 1. first of all, RIS 3 priority axes were analysed and compared. This brought already out that a lot of common priorities can be identified and that all regions have at least one common priority in terms of content.
- 2. Second, partners compared the main aspects of the monitoring systems of their regions. Table 1 sums up the characteristics of analysed monitoring systems.

The results

The results of the comparison brought out several similar approaches of the regions for the RIS 3 implementation strategy and monitoring. For example, all regions appoint a responsible body for RIS 3 implementation and monitoring. In most cases working groups, observatories, NGOs or other kind of institutions support those appointed bodies. Besides that, all regions developed a set of indicators using context, output and result indicators at least having indicated base and target values for most of them. The monitoring with those indicators is mostly designed as an on-going procedure.

The focus on used indicators was the stepping point to identify a common set of indicators for Central Europe partner countries, which is the issue dealt with in the next chapter.

Table n.1 Comparison of monitoring systems

Monitoring system characteristics	DÉL-ALFÖLD & ÉSZAK- ALFÖLD	JIHOZÀPAD	LUBELSKIE	MECKLENBURG WESTERN POMERANIA	PIEMONTE	SILESIA	SLOVENIA	STYRIA	VENETO
Precise articu- lation of Policy intervention	Intervention tools follow monitoring results	Basic fun- ctions of RIS 3 implementation introduced	RIS supporting policy instru- ments formu- lated	Not applicable	Multi-level structure with clear bodies and respective tasks	Interventions dedicated to development of Innovation Ecosystems	Business Deve- lopment Strate- gies included	No RIS 3 docu- ment, but Eco- nomic Strategy 2025	Tables of con- sultation and credit tables implemented
Specific "Team" assigned being responsible	No responsi- ble body on regional level; Monitoring: Na- tional Research Innovation and Development Office	Regional Inno- vation Council	Marshalls Office; Respon- sibilities shared according to respective tasks (monitoring, implementa- tion)	Strategierat, Wissenschaft, Wirtschaft	Policy Unit, Management Committee, S3 Team	Management Unit of RIS, Implementation & coordination RIS	Strategic Development and Innovation partnerships in long-term aimed (SDIP) Ministry of Economic De- velopment and technology		Steering group
Clearly defined Monitoring tools and activi- ties	Not applicable	Smart Accelerator	Not applicable	Not applicable	Clear descrip- tion of respon- sible tasks	Process inclu- ding responsi- bilities descri- bed in timeline	Set of indica- tors, policy mix and action plan		Not applicable
Consensus on policy success and how to measure	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Defined mi- lestones for Innovation Ecosystem	Continuous monitoring in policy mix im- plementation		Not applicable
Design accor- ding to data capabilities	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable

Design accor- ding to data capabilities	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Design accor- ding to regional strengths and priorities	National stra- tegy trying to cover regional strengths	Strategy and indicators ac- cording to key areas	Setting up th- ree priorities to achieve objec- tives	Strategy deve- loped for key priority areas	Indicators cho- sen according to priorities	SWOT, envi- ronment and branch analyses conducted	Implementing responsible bodies along priorities	Indicators cho- sen according to priorites
Periodic Mo- nitoring and Evaluation (ite- rative process)	On-going	Not applicable	On-going monitoring	On-going monitoring	Implemented by Management Committee (Evaluation and Monitoring Unit)	Ex-ante, mid- term and ex- post evaluation	Not applicable	Management team imple- mented for on-going data collection, an- nual question- naire
Clearly defined data sources for used indicators	Sources given but no data base indicated for output indi- cators	Not applicable	Data sources named but not dedicated to indicators	Mainly Eurostat and national data bases	National and regional data- bases	Partly separate evaluation ne- cessary, no data base	Not applicable	National and regional data bases
Base values for all indicators (result, output & context)	Stated for con- text and outco- me indicators	Information on values only at national level	Not applicable	Only used for result indicators	Base and pre- dicted values included for all indicators	Partly no data for base values	Base and target values for all indicators	Base and pre- dicted values included for all indicators
Effective relationships between all actors	Not applicable	National and regional platforms, coordinator as intermediate	Already inclu- ded in strategy development	Working group with represen- tatives from policy, business and university	Policy Unit, Management Committee, S3 Team, Thematic Working Groups	RIS Steering Committee as coordinator of all actors, Network of RIS Observatories	SDIP in support of Governe- mental Working Group	Regional Stee- ring Committee with advisory functions

Clear informa- tion process to policy makers	Strategy and monitoring at political level	Regional RIS3 coordinator as intermediate to national strategy	Monitoring re- port published	Undersecretary of Ministry of Economics as head of Strete- gierat	Policy Unit involved in monitoring	Annual presen- tation of moni- toring results	Political level included in monitoring	Dissemination event and an- nual report
Clear informa- tion process to stakeholders	S3 support companies included	Regional inno- vation platform	Monitoring re- port published	One represen- tative from NGOs for each priority in wor- king group	Finpiemonte as intermediate to business	Stakeholders included in RIS network	SDIP contains enterprises, pu- blic institutions and universities	Dissemination event and an- nual report
Evaluation method inclu- ded to assess objectives	Not applicable	Target values at national level for indicators	Ex-ante, midterm and ex-post annualy	Not applicable	Target values for indicators	Monitoring and evaluation structure given	Yearly monitoring	Target values for indicators





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This second chapter is about the way the Common set of indicators was identified and which are the indicators. The developed set provides the necessary database to develop a Benchmarking tool to be used to compare RIS 3 implementation in the different regions. Moreover, the Benchmaring tool tries to cover the existing concepts of all participating regions to develop recommendations for further and better RIS 3 monitoring.

The overarching criterion for the indicators to be used in the Common set is their amount of appearance in the respective monitoring systems of the regions. Indicators covered by all regions or missing in only one region were integrated into the set. The Common set is intended as an approach to use existing indicator sets of the regions and unify them in one set that covers the RIS 3 implementation in a comparable way for all partner regions.

By analising the monitoring systems and the used indicators, it turned out that in most regions two different types are used: result and output indicators. RIS 3 result indicators measure the direct impact of the implementation for the whole region, focussing on innovation, research or economics. In some cases base values and target values are provided.

The second category of indicators are related to outputs. They measure project specific values and provide a certain amount as target value to be reached in the relative period. Examples are: number of patents, EU funded projects, persons employed in a specific sector, companies with new business products, clusters, R&D subsidies, supported networks and so on. The preparation of the Common set was articulated in different steps. In the first stage, considered indicators have to be used at least in six regions. Then, indicators have been divided in result and output ones, since nearly all regions use both types as well. The resulting common set is used as basic structure.

In the second step, indicators which appear at least four and five times were analysed individually in order to improve the amount and quality of the final set.

Further elaboration took place, by working on the fact that some indicators use the same data and concepts, but their labels are different. Moreover, five more indicators were added to cover the main aspect of RIS 3 implementation: the Entrepreneurial Discovery Processes (i.e. a potential specialisation in which the knowledge contributed by the entrepreneur does not concern a technical invention, but rather relates to a new area of specialisation beneficial for the locale, given its existing productive assets).

Besides that, it has to be considered that analysed indicators prevalently measure expenditures or number of employees and hardly ever seize performances.

Eventually, the proposed Common set of indicators is contained in Table 2, in which the second column describes the measurement of indicator values and the third column characterises the indicator type.

Table n.2 The common set of indicators

INDICATOR	TYPE OF MEASUREMENT	TYPE OF INDICATOR
The private sector spending on R&D as a percentage of GDP	Percentage	Output
Share of funds in public sector expenditure on R&D funded by the business sector	Percentage	Result
Incidence of R&D expenditure on regional in GDP	Percentage	Result
Incidence of total R&D expenditure on GDP	Percentage	Result
Expenditures on R&D in private sector referring to GDP	Percentage	Output
Expenditures on R&D in public sector referring to GDP	Percentage	Output
Expenditures on R&D at universities referring to GDP	Percentage	Output
Scientific employees	Amount	Outcome
Expenditures on R&D in public sector and universities per employee	Amount	Outcome

Number of patents and utility models protection rights granted to national entities per inhabitant	Amount	Outcome
Number of businesses introducing product and service innovations in % of total SME number	Percentage	Result
Number of companies supported that cooperate with research institutes	Amount	Outcome
Industrial SMEs (excluding micro-enterprises) introducing innovations as a percentage of SMEs	Percentage	Result
Share of innovation-active companies	Percentage	Output
Private investments to facilitate public support for innovation or R&D	Amount	Outcome
Spending on innovation activities in companies operating in the industry and service sectors other than R&D	Amount	Output
Share of R&D employees in private sector	Percentage	Result
Number of companies supported to introduce a new business product	Amount	Outcome
Number of companies suppo. to introduce new products being new to market	Amount	Outcome
Increase in business innovation activities	Percentage	Result

The Benchmarking tool

The Benchmarking tool uses the Common set of indicators described above as a database for the comparison of partner regions in the Central Europe Programme. This tool tries to provide an approach to benchmark the performance of the regions in the frame of Smart Specialisation implementation by using one Common set of indicators instead of following the respective national or regional monitoring systems. This ensures a better comparison since the same data are used to analyse the regional implementation in detail.

The implemented benchmarking can be seen as a combination of a competitive benchmarking that involves a comparison of processes with the participating competitors. Besides that, in combination with other tools created in the SMART_watch project (e.g. the c-map, see Mini book one), the tool supports the concept of benchlearning based on the idea to learn from external actors.

The benchmarking is built up in four stages: first, the development of the database which - in SMART_watch case - is the Common set of indicators. Second, the collection of needed data to measure performances; third, the comparison analysis and fourth the development of recommendations for performance improvement.

Methodology for creating the Benchmarking Index

For all participating regions the necessary and available data were collected and standardised to create one final index for comparison of the implementation of RIS 3. Since the indicators are not available via one single wellknown origin (e.g. dataset, scoreboard or scientific paper), different sources were taken into consideration for gaining necessary values and consequently, different approaches were adopted to standardise the data.

Data were taken from different data sources that are: the regional Smart Specialisation Strategy documents, the Regional Innovation Scoreboard 2019, the Regional Competitiveness Index and Eurostat. A combination of data sources was also used.

Via the Drop-Down selection in the Benchmarking tool, three regions can be displayed at the same time. After choosing the regions to be compared, the tool shows a multiplicity of data. At first, the structure index is shown next to the name of the region. This index is not a direct part of the benchmarking in the frame of Smart Specialisation. However, it helps to analyse the individual performance since the structure index tries to elaborate the starting conditions at the beginning of the funding period and Smart Specialisation approach.

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SMART_watch partners consider the model of RIS 3 observatory as a framework that encompasses all the actors involved in the Smart Specialisation implementation, their tasks and responsibilities as well as interactions between each other and the overall structure. Partners developed guidelines to unfold a strategy to implement RIS 3 and this strategy determines the structure of the observatory, identifying crucial activities, functions and aspects. Besides that, pivotal issues for the observatory are the realisation of an on-going monitoring system for the whole RIS 3 implementation process and the networking approach, described in Mini book three.

One aspect to care about is the fact that Central Europe partner countries may have different approaches to RIS 3 monitoring: only national systems, national and regional systems, only regional systems.

In a similar way, CE countries have different performances in implementing RIS 3, as SMART_watch clarified by using the Common set of indicators and the Benchmarking tool. However, partners do not intend to assume that best performers automatically have the best monitoring systems, for many reasons which include the heterogeneity of the regions in terms of economic and innovation potential.

Therefore, SMART_watch proposal for a RIS 3 observatory is based on eight guidelines provided for by the EU Commission for the S3 Platform and the design of RIS 3 strategies.

1. Identification of regional strengths and future activities.

The existing situation of the region should be analysed in terms of innovation capacities, technological and scientific specialisation as well as economic conditions. The future development of the region should be analysed as well.

2. Ensure stakeholders' involvement and support entrepreneurial discovery processes.

The strategy development needs to involve all direct

(and potentially indirect) stakeholders at an early stage in the process, including Government, agencies, industry representatives and others. This ensures a detailed dialogue and broad view on possible contribution and cooperation between the actors.

3. Identifying a set of priorities.

According to the identified regional strengths, a limited number of priorities have to be derived for future development. The priorities should represent economic potentials and local industries by analysing existing future concepts and actions.

4. Establish clear actions and activities.

Following the agreed priorities and strengths, future activities and actions have to be formulated. This includes a respective time schedule. The responsible bodies for each activity have to be identified for all participating actors and stakeholders.

5. Including cross-border potentials.

The strategy should not consider the region as an island - a more global approach needs to be implemented. Internationalisation of SMEs and clusters should be facilitated as well.

6. Identifying synergies between different levels and funding programmes.

National priorities and strategies have to be considered and followed at regional level. Cooperation and coordination between different political levels have to be ensured for an efficient implementation. This includes a schedule for applying different funding sources for innovative actions.

7. Setting up an efficient monitoring and evaluation system.

Concrete and achievable indicators – e.g. context, result and output - have to be developed including starting and target values. An existing national monitoring system has to be considered to ensure comparison with other regions. The evaluation should lead to political interventions and adjustments of the strategy. Annual monitoring and data collection is recommended. Data sources for each indicator have to be identified from the beginning. The results should be published and communicated regularly to all stakeholder and public society.

8. External evaluation and strategy improvement.

An external evaluation of the strategy is recommended to identify possible weaknesses and potentials. If the strategy is based on previous innovation strategies from the region, it needs to be improved and adjusted to the Smart Specialisation approach.

Taking into account those eight principles, SMART_ watch partners designed their model for a RIS 3 observatory. Though the regional and national levels cannot be excluded (considering the differences and dissimilarities between CE regions), the partnership prefer to concentrate on the development of a transnational RIS 3 observatory with focus on thematic fields.

To justify a transnational observatory approach, the concept of clusters shall be introduced. Cluster are interconnected companies and institutions in a particular thematic field with a certain geographic concentration. Transferring this definition to RIS 3, we can indicate in every region with an own strategy and priorities, several RIS 3 clusters according to the amount of priorities.

As mentioned before, the national sphere should not be excluded from the overall structure. National bodies are integrated in the model below as well, but serve as a facilitator and coordinator for the regions.

Moreover, the European sphere is relevant: as a matter of fact, European sources - such Eurostat, the Regional Innovation Scoreboard, and Smart Specialisation documents - were used and considered to get values for the common set of indicators. **Figure n.1** Below highlights the transnational RIS 3 observatory model and the relations between the several actors involved



Source: Hochschule Wismar

Figure 1 connects several regions coming from different countries according to their chosen priorities. In this example, three regions are implemented coming from two different countries (highlighted in red and green). Following this model, every region is developing an own strategy, exploiting a detailed regional SWOTanalysis (or similar tools) to derive priorities – only the monitoring system will not be developed by the regions individually. The chosen priorities are represented by numbers (this model assumes that there is a unified set of priorities to choose from).

Another crucial aspect for every region is to find one responsible institution or representative in charge for one of the priorities. This includes representing the respective sectors in the region as well as supporting all participating actors in the field. This proposal foresees for managing the observatory at least three main bodies:

- 1. managing committee;
- 2. communication body;
- 3. thematic experts/stakeholder.

The **managing committee**, which consists of one representative from each included region for the respective priority. Figure 1 gives an example for the priority No. 31, which means that the Management Board in the illustrated example would be builded by the three representatives responsible to facilitate priority 31 in their region. The main activity for this committee is the general management of any actions related to their regions in the respective priority as well as coordinating the regional Smart Specialisation implementation in a cross-regional cooperative way.

Then, the **EU cross communication body**, which is mainly responsible for the external communication of results, action plans, events, success stories and so on. Furthermore, this body would have the responsibility to exchange all necessary information on European level.

Finally, **thematic experts/stakeholder** are included in the observatory to provide consultancy with specific thematic expertise.

As for a monitoring system for a transnational RIS 3 observatory, SMART_watch proposal should follow the cluster policy cicle containing three stages: Analysis, Strategy and Action. The main challenge to develop an efficient monitoring system is probably to set up a useful and effective set of indicators. In the model, this task would be solely in responsibility of the Transnational RIS3 observatory, to allow a comprehensive comparison between individual performances. It is recommended to unify the used indicators for RIS3 implementation. This ensure a sufficient comparison between different regions even with respect to their individual priorities. Additionally, every thematic observatory should develop indicators trying to cover the respective priority (Figure 2).





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This conclusive chapter is about the reflections and recommendations that SMART_watch partners made in order to support Smart Specialisation to promote new development opportunities in Europe. In particular, it deals with the outcomes of the analysis carried out by partners on existing mechanisms to monitor RIS 3 strategies and which lead to 12 proposals for improvement.

1. To begin with, as we have seen in the previous chapters, SMART watch partners compared the priority axis of all regions, to focus on the thematic fields dealing with RIS3. This comparison shows that similar priorities could be found for every combination of the regions, while the main differences indicated were found in the priority labels. On the other hand, the amount of priorities is different for the partner regions. Therefore, the recommendation coming from partners is clear: to unify the labels and provide a clearly described selection of priorities. From this, it may result the assumption of having different focusses in the thematic implementation. As explained earlier, unification of priorities is one of the conclusions and recommendations which can be made, with the purpose to have a unified set of priorities to choose from.

2. In addition to this, partners compared and evaluated as well the structure of the regional / national strategies. Again, several similarities referring to how the monitoring systems are implemented emerged. Resulting from this, a high potential for cooperation and synergies between the regions can be derived. One crucial recommendation to be made from this overview is to unify the monitoring systems of the regions.

3. In fact, at first sight the monitoring systems and their organizational bodies are highly individual referring to

their tasks in the monitoring and implementation of the regional Smart Specialisation Strategy. This may be an early recommendation for the next funding period and Smart Specialisation period: to provide an approach to establish a more unified monitoring system over all NUTS-2 regions by the European Commission. But having in mind the quite high number different conditions, strengths and weaknesses such a monitoring system needs a well justification.

4. Referring to monitoring RIS 3 systems, the basic idea is another recommendation: to unify the used indicators to measure the Smart Specialisation implementation. Currently, the decision on the chosen indicators is still made by the regions individually, which leads to biased comparisons. As the best practices which have been examined have shown, at least context, output and result indicators have to be implemented in the final set.

5. Besides that, partner considered innovation driven processes to improve the indicators' sets currently used in existing systems. This may lead to an add-value of the current monitoring systems due to a larger framework. Moreover, digitalisation indicators were considered as well as potential and networking indicators.

6. It should be noticed, that the proposed selection is only build on the monitoring systems of the participating regions. However, ideally the Common set of indicators and the deriving benchmarking tool should be improved by integrating more NUTS-2 regions of the European Union. By doing so, the selection of indicators has to be re-analysed regarding the overlapping and adoptable indicators. For the developed methodology, it is crucial to have a certain amount of monitoring systems using the indicators to justify their need to be in the set and specially to have a common set of indicators.

7. In the process of finalising indicators and monitoring systems a specific role is played - in SMART_watch vision - by the Transnational RIS 3 observatories. In fact, SMART_watch partners designed their model for a RIS

3 observatory. Though the regional and national levels cannot be excluded (considering the differences and dissimilarities between CE regions), the partnership prefer to concentrate on the development of a transnational RIS 3 observatory with focus on thematic fields. To justify a transnational observatory approach, partners considered the concept of clusters which are interconnected companies and institutions in a particular thematic field with a certain geographic concentration. Transferring this definition to RIS 3, we can indicate in every region with an own strategy and priorities, several RIS 3 clusters according to the amount of priorities.

8. However, partners believe that the starting point for a sufficient set of indicators has to be at European level in dialogue with the Transnational RIS3 observatories. In fact, by elaborating a Common set of indicators, partners already introduced one approach to unify the indicators from a restricted number of regions as an example. Additionally, to the agreed indicators to measure Smart Specialisation implementation – and in agreement with the European level – the Transnational RIS3 observatories should add specific indicators according to their thematic fields. Here the recommendation is to expand a set with more indicators coming from different strategies that may also be able to measure Smart Specialisation. Figure 2 tries to summarise the presented structure for the set of indicators and shows the responsibilities for the decision-making.

9. The final step for the Transnational RIS3 observatory to conclude the setting up phase for a set of indicators is to derive clear base and target values for each indicator in each region. At this step, the heterogeneity of all regions under the observatory has to be considered. Each region has different base values and should have different target values according to their economic, innovative and competitive circumstances and potentials. The used data sources for each indicator have to be clarified at an early stage.

10. The decision on the system implementation in detail needs to be derived at European level in order

Figure n.2 How to improve the Common set of indicators



Source: Hochschule Wismar

to guarantee the unification of the monitoring systems among all defined Transnational RIS3 observatories. Since the received data from all observatories cover also all European regions, the monitoring system provides a comprehensive analysis and overview as well as fundamentals for future development for RIS3 implementation.

11. In partners' vision, Transnational RIS 3 observatories should be connected in networks. The intended network of the SMART_watch project is expected to be a dynamic, target-oriented network, which deals with clearly defined tasks that are too complex to be handled

by a single actor; resources of different actors are therefore combined and coordinated (see Minibook 3 for more details on the network).

12. As concluding appreciation, the Transnational RIS3 observatory model is a well-argued model for cross-border and multi-scale cooperation of RIS3 implementation. From the theoretical perspective, the implementation is recommended for the next funding period. Nevertheless, the next steps would be to develop a detailed feasibility study on the model including actors from all participating levels.

Conclusions and outlook

This fourth and last Minibook dealt with the RIS 3 monitoring systems in Central Europe partner countries. The consortium analysed local systems, tools and procedures to collect and elaborate data on RIS 3 implementation. From hence, partners designed a Common set of indicators to be used as a base for applying the benchmarking tool and make comparisons between regions and regional observatories.

SMART_watch as well produced a proposal for a Transnational RIS 3 Observatory, that aims at overco-

ming the differences in the monitoring systems and at realising a common Central Europe approach. Partners proposed a functional and organisational model for the Transnational Observatory, based on thematic fields.

Eventually, partners elaborated suggestions and recommendations for reshaping the S3 system. Recommendations refer to the adoption of common tools and approaches, the networking between Observatories, practitioners and policy makers, the realisation of common patterns for RIS 3 monitoring and evaluation.



Partners





