Interreg
CENTRAL EUROPE
European Union
European Regional
Development Fund

SMART_watch

REGIONAL OBSERVATORIES FOR SUPPORTING THE DEVELOPMENT OF SMART SPECIALIZATION

analysis | methodology | audit

This Minibook One is the first 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 first Minibook is written in cooperation with GAPR and FH Joanneum.

While every precaution has been taken in the preparation of this document, the publisher and the author assume no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document. In no event shall the publisher and the author be liable for any loss of profit or any other commercial damage caused or alleged to have been caused directly or indirectly by this document.

Preface

SMART_watch project had the general aim to fill in the gap between the Regional Innovation strategies (RIS3) of Central Europe Countries and the real needs of smart specialisation of end users. More in detail, SMART_watch main objective was the elaboration of a model for Regional Branch Observatories (ROs), equipped with a set of monitoring and benchmarking tools, available to all RIS3 stakeholders and intelligent markets' actors. At the end of the project, results and outcomes are published to enhance SMART_watch impact within the CE Regions and beyond. The publication is articulated in four parts of which this is the first one.

The first minibook describes the competitive situation of partner Regions, with reference to innovation of local productive systems, to the strategic choices linked to Smart Specialisation Strategies (S3) and to the role of Regional Observatories to support their monitoring and implementation. The first minibook is articulated in five chapters: the first points out the level of innovation intensity of partner Regions, by analysing the actions and directions which characterize S3 in partner Regions in Central Europe. The second chapter describes the Smart Specialisation state of art in partner Regions and analyses to what extent S3 are part of local innovation strategies. In the third part, a common methodology to learn on the competences of Regional Observatories is presented. The Business Model Canvas has been adopted and adapted to become a self-learning tool for ROs. The fourth chapter deals with the results of the audits carried out with the Regional Observatories and makes available the map of the partnership's regional competences and services. The last chapter describes the content and characteristics of the on-line competence mapping and benchmarking tool. Policy makers, stakeholders, practioners and companies may use the competence map (c-map) to localize Regional Observatories, identify smart specialisations targeted by them and learn the nature and features of their services. Through the benchmarking platform, ROs may analyse thir potential and compare it with the one of other ROs. This first minibook is addressed to all key actors interested in the results produced by SMART_watch and is used to support the wide promotion of its outcomes in an innovative and attractive way.

Introduction

With the SMART_watch **first Mini Book**, the consortium points out the competitive situation of partner Regions in terms of innovation of the manufacturing system, the strategic choices related to Smart Specialization strategies and how the *Regional Observatories* support them at regional level.

Highlights of contents

ALL FOR ONE:
Regions and their economy

The **first chapter** analyses the degree of innovation intensity, starting from the Manufacturing and Innovation report, dealing with the actions and the directions towards the Smart Specialization supported by the various partners Regions in Central Europe.

SMART SPECIALISATIONS:
Beautiful and dutiful

In the **second chapter** an overview of the Smart Specialisation state of art in various Central Europe Regions is given. SMART_watch seeks to ensure that Smart Specialisation becomes part of CE's regional innovation strategies.

REGIONAL OBSERVATORY:
About business and
New Methodology Canvas

The **third chapter** is about how a common methodology and benchmarking tool have been developed by adapting the New Methodology Canvas for the surveys on the operations of the Regional Observatories.

AUDIT: About services

Audits allowed the collection and comparison of the relations between Regional Observatories and territories. The **fourth chapter** describes the development of the benchlearning tool and of the mapping of regional specificities in all regions of the consortium. An online standardized map of competences of Regional Observatories is available in several Countries of Central Europe, thus making available the mapping of the consortium's regional competences and services.

C-MAP: On-line benchmarking tool

In the **fifth chapter**, the results of the audits and the specificity of services are displayed in an on-line competence mapping and benchmarking tool with two features: a digital online geolocation tool, the c-map (competence map) https://cmap.smartspecialisation.tech/ and the benchlearning platform https://benchmark.smartspecialisation.tech/.
With the c-map the SMEs can easily navigate through the EU map looking for localizations of Regional Observatories (ROs), identifying Smart Specializations targeted by the ROs, searching for the nature, dissemination level and services. By using the benchlearning platform, the ROs can identify their potential and learn on other ROs performance.

The Conclusions and outlook final section sums up project's findings and sets the basis for further activity of the consortium.

All for One
regions and their economy

National/regional research and innovation strategies for smart specialisation (S3) are integrated, place-based economic transformation agendas that basically do five things:

- They focus policy support and investments on key national/regional priorities, challenges and needs for knowledge-based development;
- They build on each Country's/Region's strengths, competitive advantages and potential for excellence;
- They support technological as well as practice-based innovation and aim to stimulate private sector investment;
- They get stakeholders fully involved and encourage innovation and experimentation;
- They are evidence-based and include sound monitoring and evaluation systems.

The first phase of the SMART_watch project examined the state of art of RIS3 implementation and the issues to be addressed by the Regional Observatories. This is done with an analysis of the partners' regional systems, both from the economic and innovation points of view.

The analysis provided information on the RIS3 implementation and monitoring tools in their Regions: their economy, the institutional support in the Region, the evolution, the Smart Specialisations Strategy, the Business institutional environment, the supply, the monitoring practices.

The analysis highlights the positioning of each Region on the basis of the innovation index and manufacturing systems. The investigation of the Smart Specialisations of the various CE Regions represents the basis of the monitoring of the services offered by the different agencies to support smart specialisations implementation.

The first chapter illustrates the comparison among different regional situations by analysing their positioning with respect to: manufacturing intensity, innovation and propensity of export. The analysis takes into consideration 10 Regions from 7 different countries in Central Europe and classifies them according to their propensity to innovation and manufacturing.

To rank the different Regions, two main indexes were used and matched:

1. The Manufacturing Specialisation Index: this variable is measured for each Region, by the ratio between the number of employees in manufacturing sector and the total number of employees in 2015.
2. The Regional Innovation Index, as described by the Regional Innovation Scoreboard published yearly by the European Commission.

The calculation of the Manufacturing Specialisation Index for 254 European Regions shows that seven of the ten Regions involved in the SMART_watch project have a higher manufacturing specialization than the European average.

The Regional Innovation Index, provided by the Regional Innovation Scoreboard, when applied to the 10 Regions participating in the project, shows that the one with the highest innovation index is Steiermark (118).

Table n.1 *Results of the Regions involved in the project Manufacturing Specialisation Index*

	REGION	MANUFACTURING INDEX
CZ	JIHOZÁPAD	27,9
IT	VENETO	24,8
SI	VZHODNA SLOVENIJA	23,5
IT	PIEMONTE	19,6
PL	ŚLASKIE	19,1
HU	DÉL-ALFÖLD	17,8
AT	STEIERMARK	17,7
HU	ÉSZAK-ALFÖLD	15,9
DE	MECKLENBURG-VORPOMMERN	10,9
PL	LUBELSKIE	8,4

Table n.2 *Results of the Regions involved in the project Regional Innovation Index*

	REGION	INNOVATION INDEX
AT	STEIERMARK	118,0
DE	MECKLENBURG-VORPOMMERN	108,1
SI	VZHODNA SLOVENIJA	89,1
IT	PIEMONTE	84,2
IT	VENETO	84,1
CZ	JIHOZÁPAD	81,0
HU	DÉL-ALFÖLD	62,2
HU	ÉSZAK-ALFÖLD	58,1
PL	ŚLASKIE	51,1
PL	LUBELSKIE	46,6

Source: Fondazione Nord Est

Matching the data provided by the manufacturing and innovation indexes, the following graphic was created: the chart shows the position of the ten Regions compared to the 155 European Regions. In the upper right area, the two German Regions, Stuttgart and Tubingen (in the red square), have a high manufacturing specialization combined with a high innovation index. In the green square, the Utrecht Region is characterized by a high rate of innovation and low manufacturing specialisation.

Graphic n.1 *Matching manufacturing and innovation indexes*

Focusing the analysis only in the ten Regions involved in the project we can see that the investigation highlights the existence of four groups of Regions. The largest is composed by Regions with a high level of manufacturing specialization and an index of innovation close to the median value. The second group is characterized by Regions with a high index of manufacturing specialization but innovation indexes below average. Two Regions are characterized by having significantly different values compared to others. Steiermark has a significantly higher innovation index than other manufacturing specialisation Regions. Lubelskie is characterized by a low innovation index with a non-manufacturing production specialization. Finally, Mecklenburg-Vorpommern has a significantly higher innovation index than other non-manufacturing.

In the following chapter we will see whether similar Regions have developed similar Smart Specialisation Strategies.

Source: Fondazione Nord Est

Beautiful and Dutiful
smart specialization strategy

The main objectives of this chapter are:

- Analyse the RIS3 and smart specialisations identified by each Region covered by the project consortium within the Central Europe area.

- Propose an aggregation in areas of specialization of the smart specialisations, from the punctual scientific and economic domains to the policy objectives targeted by each Region.

- Investigate the linkages, dependences, interrelations between RIS3 priorities and how territories and markets are included in global value chains.

The Regions dealt with have indicated a total of 53 Smart Specialisations, each one linked to specific eco-nomic domains, scientific domains and policy objectives. By aggregating economic and scientific subdomains and policy objectives, a short-list of shared macro areas was created, in view of a benchmarking activity and to facilitate auditors to work on desk and on spot at Regional Observatories' premises. Seven macro areas of specialisation emerged from the data aggregations:

1. Transport and Logistic;
2. Artistic, Creative and Cultural Industries;
3. Agrifood;
4. Manufacturing;
5. Medicine, Health and Sustainability;
6. Energy and Environment;
7. ICT.

The results of this aggregation are the following:

Graphic n.2 *Areas of specialization aggregated*

Area	Value
TRANSVERAL SSs	4
ICT	3
ENERGY AND ENVIRONMENT	7
MEDICINE, HEALTH AND SUSTAINABILITY	16
MANUFACTURING	12
AGRIFOOD	6
ARTISTIC, CREATIVE AND CULTURAL INDUSTRIES	2
TRANSPORT AND LOGISTICS	3

Source: Confindustria Veneto SIAV

Hence, three prevalent macro areas of specialisation identified appear in line with the general trend arisen at EU level and analysed directly by the JRC[1] though the establishment of 3 Thematic Platforms: Agri-food, Energy and Industrial Modernisation. The Regions covered by the consortium are therefore included in the main development and R&I strand at EU level and could largely benefit from the establishment of durable and functional linkages with other EU regions sharing similar smart specialisations.

In 2016, during the Smart Regions conference, the European Commission has launched two Smart Specialisation Platforms: for Industrial Modernisation and Agri-Food, in addition to the existing S3 Platform for Energy. These initiatives offer hands-on support to Regions to foster interregional cooperation based on matching Smart Specialisation priorities related to these three areas, such as Key Enabling Technologies, service innovation or resource efficiency. Particular support will be given to Regions to combine different EU investment instruments, such as the European Structural and Investment (ESI) Funds, COSME, Horizon2020 and the European Fund for Strategic Investments (EFSI), the heart of the Investment Plan. More information available at: http://bit.ly/2zaOl84.

Business institutional environment - the monitoring

Having observed the areas of specialisation, let us consider the overall situation of the RIS3 monitoring activity in each region. The table below shows an interpretation of each regional monitoring system through 3 variables:

- Institutional organisation and operative model designed;
- Methodology and monitoring evaluation system/process selected;
- Availability of knowledge and technology information platform for smart specialisations chosen.

1 JRC - Institute for Prospective Technological Studies, Seville, Spain.

Table n.3 *Monitoring systems in partner countries*

VARIABLE	ASSESSMENT RANGE		
	Being Finalised	Rather Defined	Defined
ORGANISATION	Észak-Alföld (Still under definition)	Veneto Region (Public-Private collaboration under systematisation)	Śląskie Voivodeship (3 SSs → 3 ROs dedicated)
	Dél-Alföld (Still under definition)		Piedmont Region 1 ROs (NUVAL)
	Jihozápad Plzn Region (RRA-PK) Budweis (South-bohemian Technology Park)		Lubelskie Voivodeship (Centralised syst. Marshall O.)
			Steiermark (Centralised SFG)
			Vzhodna Slovenija (National centralised NIP-Horizontal/Strategical)
			Mecklenburg-Vorpommern (Federate State centralised system)
	Informal	Mixed System	Formally Established
MONITORING & EV. METHODOLOGY	Észak-Alföld (Still under definition at regional - defined at national)	Lubelskie Voivodeship (being finalised)	Piedmont Region (Ev. Unit+Monitoring Unit, Ext/Int)
	Dél-Alföld	Veneto Region (Public-Private collaboration system for policies procedures & tech.	Steiermark (Centralised EPIS)

Source: *Confindustria Veneto SIAV*

	Not Available	Being Finalised	Fully Available
	(Still under definition at regional - defined at national) Jihozápad (predominantly informal)	Vzhodna Slovenija (institutionally defined (WHO), Process still under definition (HOW))	Śląskie Voivodeship Mecklenburg-Vorpommern (State system of result and impact indicator)
SSs KNOWLEDGE PLATFORM AVAILIBILITY	Észak-Alföld (Under construction) Dél-Alföld (Under construction) Jihozápad (under construction) Vzhodna Slovenija (under construction)	Lubelskie Voivodeship (being finalised-transport info.) Veneto Region Under construction (almost ready)	Piedmont Region (Inn.Hubs+Tech. Platforms) Steiermark (Centralised WIBIS) Śląskie Voivodeship Mecklenburg-Vorpommern Regional S3 dedicated website

Source: *Confindustria Veneto SIAV*

The analysis of the S3 in the investigated countries highlights a wide variety of approach in carrying out the "entrepreneurial discovery path" and in identifying smart specialisations. Some Regions focused specifically on technological/scientific domains, in line with the RIS3 methodology; some others have preferred to use economic/sectoral domains, more related to specific value chains, particularly relevant at regional or transregional level.

A further focus is on the Innovative Ecosystem itself at regional level, transversally to technological/scientific and economic/sectoral domains. We refer here to SS System Science, Human Resources support, Networks for the transition to circular economy, Inclusive and Sustainable Society, Support for R&D.

Then, a specific point is needed in relation to ICT and related services, which is largely classified basing on its application within other SSs due to its transversal and pervasive nature. The analysis of the SSs highlights as well elements of potential weakness linked to:

- The novelty of the mapping process itself; in terms of relationship and networking among different technological development actors and networks, as well as among the technological fields and business environment, including services and, in particular, KIBs;
- The lack of a common methodology applied at EU level. In fact, the European Commission itself provided only detailed procedural Guidelines and minimum criteria for each RIS3 Governance System, including interim/final assessment, evaluation or seamless monitoring.

A third element that can hamper the fully operationalisation and decreasing the overall impact of RIS3 policies is the repeatedly mentioned extent of the smart specialisations selected that makes it necessary to propose an aggregation, in order to bring each smart specialisation in a common framework (although simplistic). This may cause repetitions and overlapping of single specialisations in order to cover all the related subdomains identified by regions.
This is also the result of a lack of a common classification system and a common reference language at EU level. For example, it is not easy to clearly establish the exact limits and boundaries in terms of technological contents, value chains and markets for specialisation domains such as "Health", "Energy", "ICT" and "Smart Manufacturing/Production".

About Business
new methodology canvas

Why this model?

A central part of the audits for the Regional Observatories was the identification of an appropriate methodology for analysing ROs' functional business models. The identified approach was the Methodology Canvas which was deemed proper to investigate ROs. These are basically of two kinds:

Bodies involved in RIS3 monitoring process (policy observatories), i.e. ROs which gather cross-cutting data on regional economy, analyse trends in economic structure, identify key actors of their regional innovation systems, run the processes of entrepreneurial discovery and propose RIS3 strategies;

Institutions/service providers offering support to business and at the same time involved in monitoring regional smart specialisation (technology observatories), i.e. ROs which run trend watch, animate clusters and networks, offer technology transfer services, design and implement market analyses. The challenge in adapting the Business Model Canvas to ROs was that some of them (especially the policy observatories) are pure public services. Moreover, they also need to reach their customer segment with certain value.

In this chapter the methodology used to analyze the different regional branch observatories is described, in particular the adaptation of the Business Model Canvas proposed by Alexander Osterwalder (http://alexosterwalder.com/) and developed within Strategyzer (https://strategyzer.com/).

The Business Model Canvas is a strategic management template for documenting existing business models.

It is composed by 3 main blocks:
- the activities that generate value for the organization;
- the activities that determine of how the value is delivered;
- the financial fundamentals where every business based its activities.

The original Business Model Canvas has been adapted for auditing Regional Observatories (ROs). For the purposes of SMART_watch, the Business Model Canvas was articulated in the following issues:

Value Propositions
What value is provided by the RO to its customers and how? What value should be provided by the RO to its customers and how? What is the rationale behind the strategic focus of the RO? What are the key challenges related to sound delivery? What information is gathered by the RO? Which services are offered by the RO?

Key activities
Is the RO capable of gathering relevant information? Is the RO capable of producing reliable information? Is the RO capable of delivering quality services based upon information?

Key Resources
What is the structure of the RO? How many employees are involved ? What are the competences of the employees? How does the general budget of the RO look like? Which tools are fundamental for the activities of the RO?
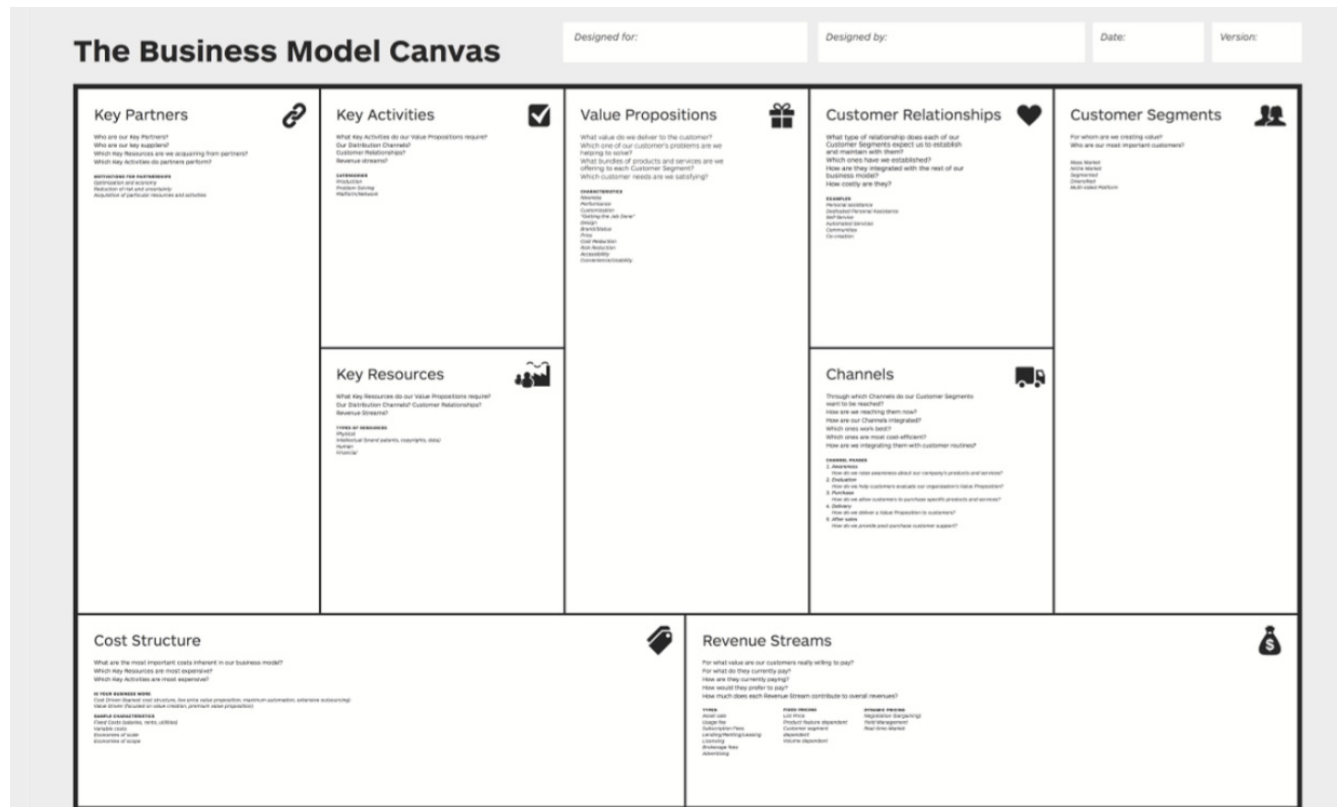
Key Partners
Who are the key collaborating entities? Who are the key sponsors? Who are the key subcontractors?

Customer Segments
Who is the recipient of the services provided by the RO? Who are the most important recipients of the services provided by the RO? Are the services targeted at the needs of certain business entities?

Customer Relationships

What is the level of the RO's credibility? - What is the level of customer loyalty? Which tools are used to maintain customer relationships?

Channels

Does the location of the RO impact the performance? Through which channels does the RO reach customers? Which channels work best? How are the channels integrated?

Cost Structure

Which key resources are most expensive? Which key processes and activities are most expensive?

Revenue Streams

What is the financial status of the RO? For what do the customers currently pay? For what are the customers really willing to pay?

The adaptation of the model implied also a common methodology for interviewing and data gathering through self-learning audits, and a platform for gathering data from institutions for the development of a benchmarking tool. By doing so, partners supported the collection and comparison of the relation between Observatories and reference territories.

To carry out the common methodology, the person assisting the audit (audit facilitator) must have sound knowledge on regional economy and business support services. They are expected to:

- know and understand the relevant regional innovation system and its organisations (professional or strong academic background in the field is needed),
- be familiar with common innovation support instruments,
- know the basics of the Business Model Canvas approach.

The audit facilitators are expected to have the following soft skills:

- self-motivation, determination and confidence,
- interpersonal, team-working and communication skills (speaking-talking to other to convey information efficiently),
- active listening (full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times),
- critical thinking (using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems),
- oral presentation and report-writing,
- self-organisation skills (including time management and the ability to work under pressure and to deadlines as well as the ability to work on his/her own initiative and as part of a team),
- active learning (understanding the implications of new information for both current and future problem-solving and decision-making),
- social perceptiveness (awareness of others' reac-

tions and understanding why they react as they do),
- coordination/responsiveness (adjusting actions in relation to others' actions),
- negotiation (bringing others together and trying to reconcile differences).

The self-learning process introduced during the audit of each observatory covers the following stages:

1. Desk research related to identification of audited institution's main characteristics.
2. Pre-filling of the initial on-line audit report by the auditor (basic data, key services identified).
3. Initial audit report on-line validation by the audited institution (check-up concerning the pre-filled information, delivering detailed information on services and performance).
4. The in-site audit session implies individual semi-structured interview or small group semi-structured-interview (qualitative reflection upon the elements of the audited institution's business model, drafting the main part of the report).
5. Completion of the full on-line audit report by the auditor.
6. Full audit report on-line validation by the audited institution.

Audits are conducted using secure web-based tools. These tools are developed on the base of Open Source Frameworks taking into account best practice security techniques.
The web-based platform is available at https://audit.smartspecialisation.tech/. Data processed with the platform is only available for:

- the audited RO in the process of self-learning on the business model it operates;
- the audited ROs in the process of networking and their pursuit of the best practice based on benchmarking;
- the audited ROs in the process of analysing and forming the functional business model of the RO;
- the project consortium for building up the freely available web-based tool competence map (c-map).

The approach for high-quality audits

The audit facilitator had to ensure that:

- Sound judgement is exercised throughout the audit process;
- Methodologies are appropriate and combined to capture a range of data;
- Risks to delivering the audit are analysed and managed;
- Tools are suitable for successful delivering of the audit;
- Evidence is sufficient, relevant and reliable to support the audit findings;
- Significant substantive conclusions and recommendations are considered from the planning phase onwards;
- Transparency - a 'no surprises approach' - is adopted with the auditee.

There is an important set of standards which must be assumed as a foundation for the credibility of auditors' work in general and within the SMART_watch project. This set covers two dimensions of the auditor's activities:

- The professional/competence dimension;
- The auditing process dimension.

About Services

audit

Audited ROs gather a great assortment of data and offer a great variety of services. As an example, they gather information on companies' dataset, on networks and clusters, on B2B data, producing quantitative and qualitative reports. As for examples of services, they offer general and specialised training, assistance for brands and licenses, assistance and consultancy for the companies within and out of Districts, study groups, information and dissemination actions.

Interviews and data gathering through 62 audits allowed the collection and comparison of the relation between Observatories and territories. The fourth chapter describes the development of the benchlearning tool, securing a cross-cutting mapping of regional specificities in all regions. With the key aim to set upon offering an online standardized map of competences of Regional Observatories available in several countries of Central Europe, the final audits data have therefore been methodically selected, mapping the consortium's regional competences.

By using the benchlearning tool, the ROs can identify their potential and learn on other ROs performance, comparing the level of innovativeness in similar regions.

The access to the tool is offered only to the ROs who agreed to provide details of their activities during the auditing phase of the project. ROs can compare their activities using the statistical benchmark data against other ROs. This should significantly improve the learning effect within corresponding ROs from clustered Regions. The benchlearning tool incorporates the so-called demand overlayer, that is a set of information on the expectations reported by SMEs regarding the services and datasets needed. This should help the ROs to improve their performance in RIS implementation as well as monitoring.

The benchlearning can also be used directly by the regional stakeholders, including policy-makers and other regional actors responsible for monitoring and for implementation of the current and future regional innovation strategies.

The key aim of the online benchmarking tool for competences mapping is about offering an on-line standardised map of competences of Regional Observatories available in several countries of Central Europe. Based on the audits of Regional Observatories, the specificity of services and offered datasets is displayed in a modern and functional mapping tool. Two key features were implemented to the on-line benchmarking tool. The first one (a c-map), addresses the needs of SMEs to inform them on the offer of Regional Observatories. The second one (a benchlearning) enables the comparison within the reference groups and identifies possible areas of improvement of the ROs.
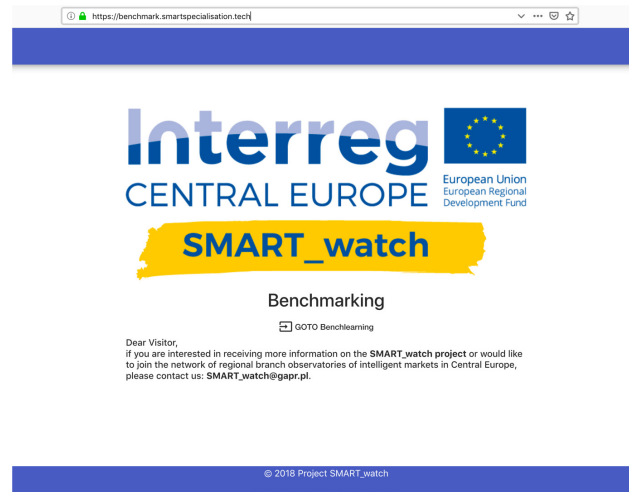
Accordingly, with the c-map the SMEs can easily navigate through the map of Europe looking for localisations of Regional Observatories, identifying Smart Specialisations targeted by the ROs, as well as browsing advanced features including the nature, dissemination level and price of the offer.

The c-map can be used freely by all the interested parties, including the EC, regional stakeholders interested in RIS as well as research organisations. The c-map is indented to expand regarding more functionalities and areas covered.
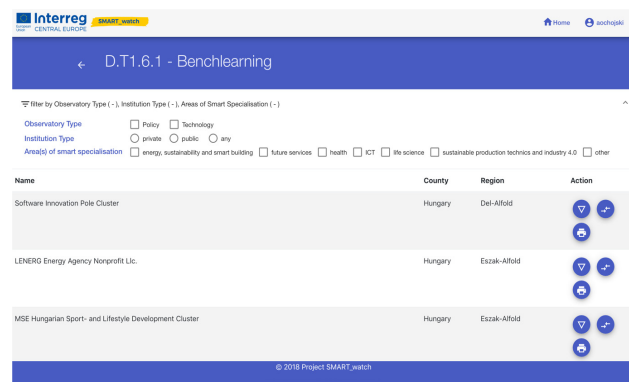
The filters applied to the c-map allow to select geographical coverage of the support, a particular RO and the type of services/datasets availabe. Selections of smart specialisation and types of ROs apply consequently. Further functionalities are displayed as business-card type of information: the short history of the RO, the add-value for business (including up-to-date and future services/datasets description) and collaborators.

The benchmarking tool offers several opportunities to learn on the competences of ROs. The main issue targeted by this tool is to provide the appropriate level of comparability.
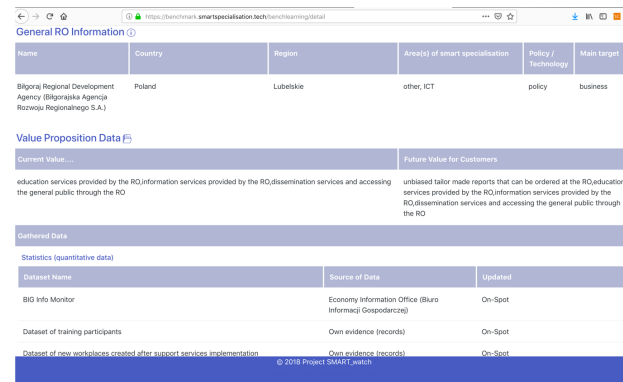
To access the online benchmarking tool for competence mapping, one should use the link: https://benchmark.smartspecialisation.tech/ - Access is granted upon request.
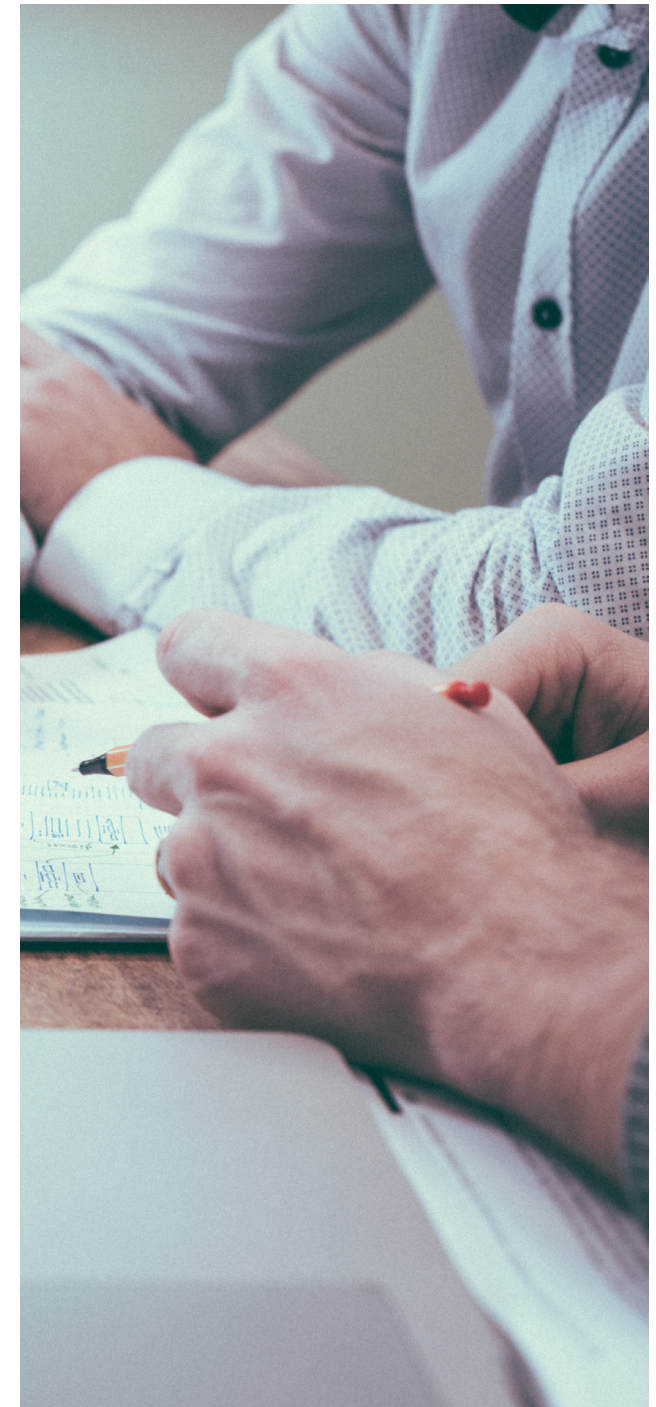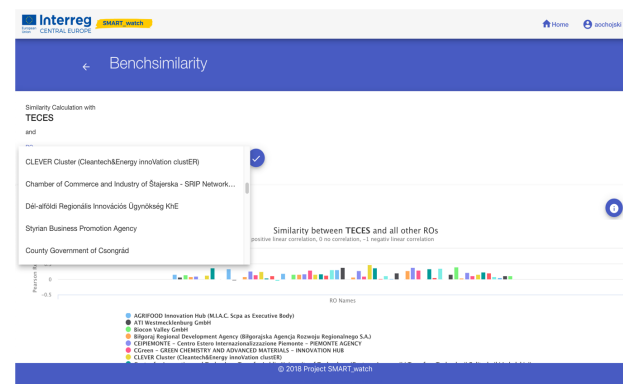The welcome screen will lead to the navigation page with ROs listing.

Here, the ROs can learn on the competences they have and compare them with the other ROs. A selection panel located over the names of the ROs can be used.
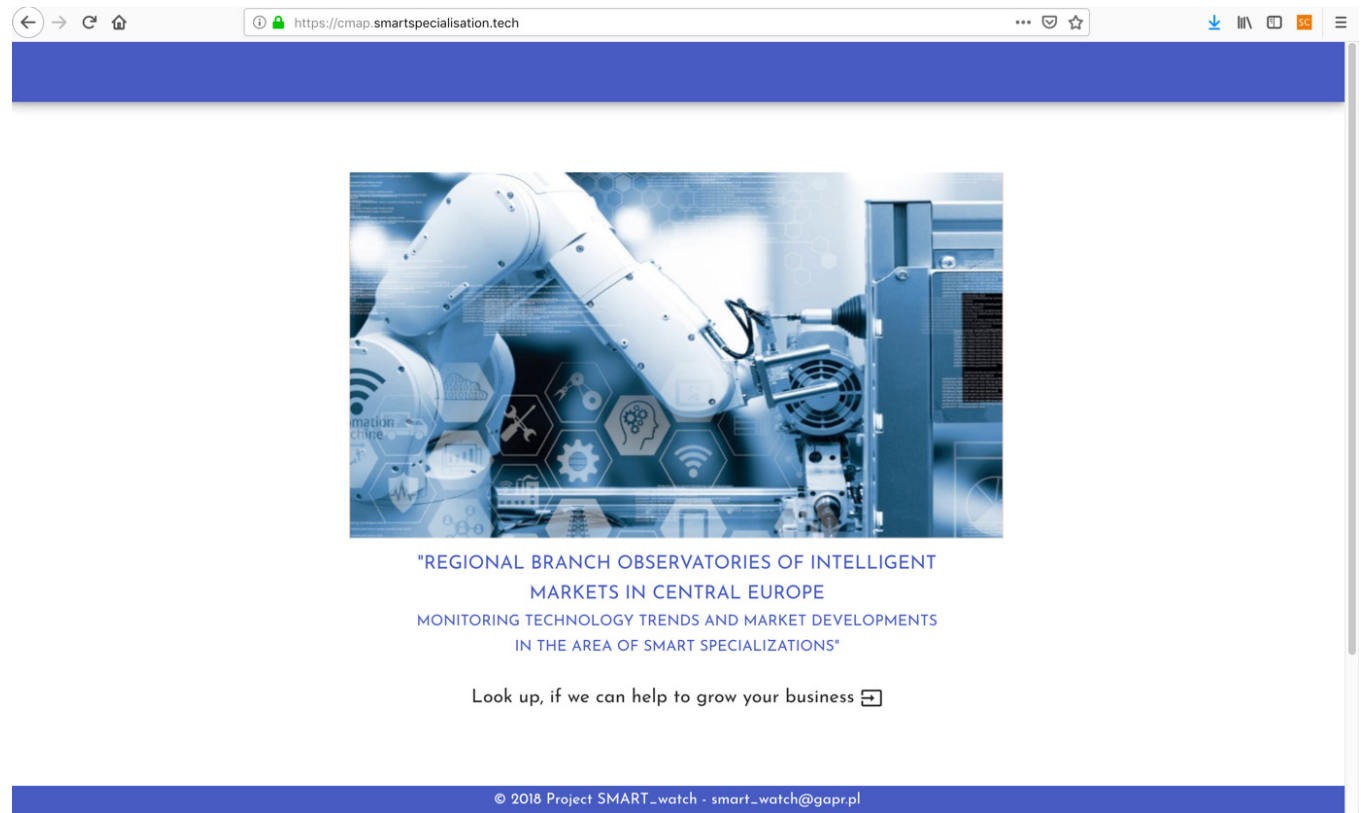

Simple information can be extracted with the icon marked with a triangle.

The comparison made under the "compare icon" allow to identify the most similar and the most distant RO. Further learning can follow several of the possible categories of comparison.

"REGIONAL BRANCH OBSERVATORIES OF INTELLIGENT
MARKETS IN CENTRAL EUROPE
MONITORING TECHNOLOGY TRENDS AND MARKET DEVELOPMENTS
IN THE AREA OF SMART SPECIALIZATIONS"

Look up, if we can help to grow your business ⊇

© 2018 Project SMART_watch - smart_watch@gapr.pl

C-Map
online benchmarking tool

This chapter provides for a description of the on-line competence map (c-map) platform https://cmap.smartspecialisation.tech/.

With the c-map, SMEs can easily navigate through the map of Europe looking for localisations of Regional Observatories, identifying smart specialisations targeted by the ROs, as well as browsing advanced features including the nature, dissemination level and price of services offered. Since the implementation of Regional Innovation Strategies is targeting support to SMEs based on the smart specialisation, the businesses can find relevant business information on the partners of ROs and on their networks.
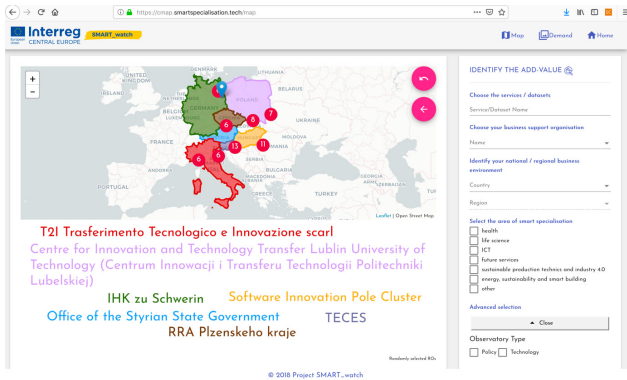
The tool shows the geolocation, services, tools offered for SMEs by the Regional Observatories, including both the

Regions with existing observatories and monitoring institutions as well as those who have the potential to deal with the RIS monitoring in the regions that are still building those observatory systems, with the possibility of extending information from the CE to an EU level.
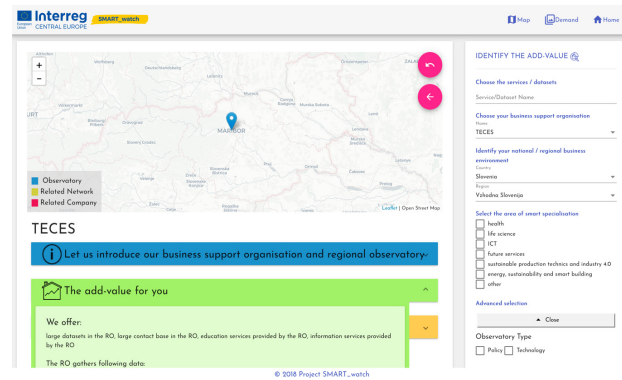
The competence map is intended to expand regarding more functionalities and areas covered, thus extending the interest of ROs and making use of the competence map in promoting the RIS-based activities.

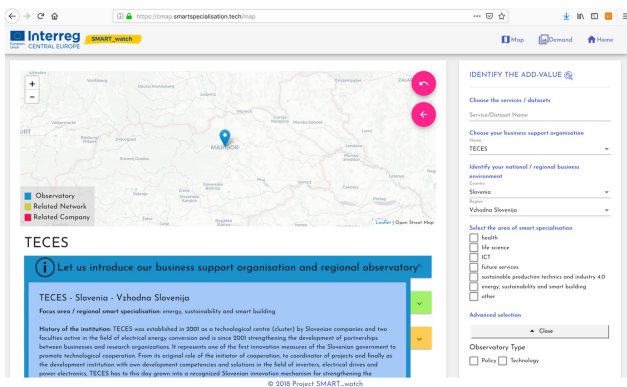The welcome screen leads to the map with ROs' competences.

Use the upper-left box to navigate several functionalities of the competence map.
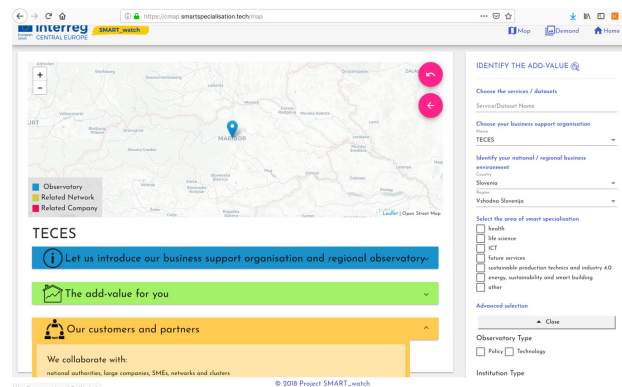
It is possible to select directly the RO either with the geographical map or with the cloud of tags. It will lead you to some basic facts on the RO.

Further features will appear, once a selection of customers and partners is made.

Should you need information on the add-value the RO can offer, see the selectable bars on the lower left.

The c-map shows in a map all ROs which were entered into the Audit tool. As the initial zoom level shows a map of Europe, the markers of the different observatories are clustered. If a user zooms in the map, the single marker gets visible for the different regions.

Conclusions and outlook

SMART_watch partners gathered information on their Regions' economy and SME's situation, on RIS3, the available monitoring tools, the services provided by partners, potential niches, market demands, weak points of the RIS3 implementation processes and the issues addressed by the Observatories. The consortium examined and verified this data providing a comprehensive information on the RIS3 implementation and monitoring tools in their Regions.
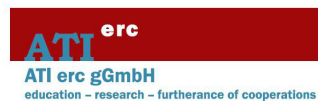
Analysis and diagnosis of the regional situation also covered institutions which monitor technology and market trends and the tools used by them. This included both the existing observatories and monitoring institutions as well as those who have the potential to deal with the RIS3 monitoring in the Regions that are still building those observatory systems.

In order to present clear and aggregated results of the analysis, the good practices and experiences - a common guideline has been prepared for the project partners, by adopting the Business Model Canvas approach. The guideline and manual accuracy have been verified through a pilot action on auditing and peer review. Each partner used the guideline for presenting the potential of their Regions.

A map of competence has been created to give the image of the supply side concerning the RIS3 market and its stakeholders, that is: services provided, potential opportunities offered by the project's partnership to the SMEs, involved associated partners and other regional actors, monitoring tools and RIS3 implementation state of art.

The tool secured a cross-cutting mapping of regional specificities in all Regions of the consortium, enriching the set of tools and guidelines to facilitate the process of building the competence map (c-map) and the benchmarking platform in terms of learning process.

Partners