



RIS3 PEER REVIEW REPORT VOJVODINA



10-11 April 2014

Peer Review Workshop, Novi Sad (Serbia)

Vojvodina presented the current work on Research and Innovation Strategy for Smart Specialisation in the Peer Review Workshop organised by the S3 Platform and the Information Centre for Business Standardisation and Certification. The presentation was followed by peer discussions, which have provided the basis for this report.

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part 1| S3 Peer Review Approach

[ABOUT THIS REPORT]

Peer Review Methodology. An important tool currently offered by the S3 Platform (European Commission) to the EU regions and Member States is its RIS3 peer review workshops. The peer review approach developed by the S3 Platform team concentrates review activities both in time and space by allowing a number of regions to be reviewed by peers from across Europe. These workshops bring together regions for mutual learning and exploration of ways in which RIS3 strategies can be developed. The S3 peer review methodology allows creating an open and trusted learning environment where practical and conceptual aspects of RIS3 can be discussed and explored through challenges and experiences of individual regions.

Participatory approach. An S3 Platform team member facilitates each peer review session in line with the participatory leadership approach. Such a participative approach encourages all participants to share or participate in the decision-making. It allows engaging participants in a dynamic and creative discussion, which benefits both the regions under review and their peers.

Objectives and expected outcomes. Regions volunteer to be reviewed in an attempt to source both critical and well-timed advice addressing specific issue areas they are currently facing in the development of their RIS3 strategies. Regions also view the peer review workshop as a good opportunity to build their networks of counterparts across Europe. The RIS3 peer review workshops aim to fulfil two main objectives. The first objective is to allow regions meet their peers (as well as the European Commission staff and experts) and to discuss common issues related to Smart Specialisation. The second objective is to allow regions to peer-review each other's work on RIS3. Peer review sessions aim to achieve the following three outcomes: (1) *to provide* methodological and practical feedback to each region under review; to closer *examine* specific issues so as to understand what these really mean; and *to discuss* practical ways to address common problems (lessons to take home).

About 53 workshops. An average 53 peer review workshop runs over two full days, and includes peer review of four regions. Individual peer review sessions focus on one region and lasts around two hours. Peer review workshops are generally organised around four individual peer review sessions focusing on four regions. A presentation of each region's current work on RIS3 is generally followed by a Q&A session, and a number of simultaneous discussions of specific issue areas highlighted during presentations. Specific issues are then discussed at individual tables in three iterations, which ensure that participants can: (1) *work together* to understand the actual problem behind each issue; (2) *propose solutions* to these problems by discussing what worked well (good practices) and what did not work; and (3) *learn together* how to deal with new policy issues in new contexts.

Structure. The S3 peer review process generally includes three phases: preparation, workshop discussions, and the post-workshop follow-up. Prior to their workshop, each region under review is asked to prepare two documents describing region's socio-economic and political background, as well as its research and

innovation system. These documents outline pre-selected priorities and specific questions to guide and focus further discussions. Each reviewed region carries out a comprehensive self-assessment of its current work on RIS3. This assessment covers nine principal areas: stakeholder engagement, analytical work behind RIS3, a shared vision, priorities, an action plan, a policy mix, the outward-looking dimension, synergies between policies and funding sources, and a convergence and monitoring system. This assessment exercise allows regional authorities to examine their region's smart specialisation strategy from a perspective of an external expert.

Structured Feedback. Peer-review sessions are followed by a final session during which all participants (experts, representatives of the regions under review and peers) summarise the results of four peerreview sessions, and discuss individual and mutually learnt lessons. The regions under review are at this point provided with the opportunity to respond to any feedback collected throughout the workshop. They then share with peers their new lessons, as well as any short- to mid-term plans to implement these lessons. During the workshop, the S3 Platform team members collect any relevant information and data covering different elements of each region's peer review exercise. To ensure regions under review receive adequate feedback from their peers, the S3 Platform employs a newly developed approach to the analysis of outcomes associated with individual peer review session. This data triangulation is based on dedicated evaluation forms, which are completed by three groups of participants: regions under review, their critical buddies, and experts. Based on the feedback from three groups of participants (see Table 1), the S3 Platform team further develops summary/feedback reports.

Elements	Description
Regions under review	Following its peer review session (presentation and discussions), each region under review completes a short evaluation form to take the results of discussions in their session to a level up. Representatives of these regions are also asked to list three specific actions that could be undertaken in their region to further improve their RIS3. Regions are then additionally asked to indicate which specific steps they are likely to follow in order to implement any learnt lessons and related conclusions.
Experts	A number of experts attend each session and provide comments to regions under review using a dedicated evaluation form which they fill in based on the information provided before/during the workshop. Experts are also encouraged to offer suggestions to regions under peer review and to share any relevant good practices.

Table 1: Feedback structure

part 2| Current Work on RIS3

[PRESENTATION OF VOJVODINA]

REGION'S BACKGROUND AND INFORMATION ON THE WORK ON RIS3

The regional smart specialisation strategy for the Vojvodina region (S3) was elaborated by the Centre for Business Standardisation and Certification (BSC) and is related to the joint work on a cross-border innovation strategy developed together with Szeged Innovation Agency in Hungary through an IPA-funded project (CBC HU-SRB).

General remarks

Vojvodina is a relatively small region covering an area of 21,500 km2 and has almost 2 million inhabitants, the GDP/capita is close to the national average with 3,200 \in (in 2009). The gross added value is 52% in the service sector and 28% in the industry sector. Nearly half of the employed population is active in agriculture, with a contribution of only 9.9% to gross added value. The unemployment of 24% is relatively high. The region is comparable to Slovenia in terms of area and population size; it produces, however, a significantly lower GDP. This points to Vojvodina's large development potential.

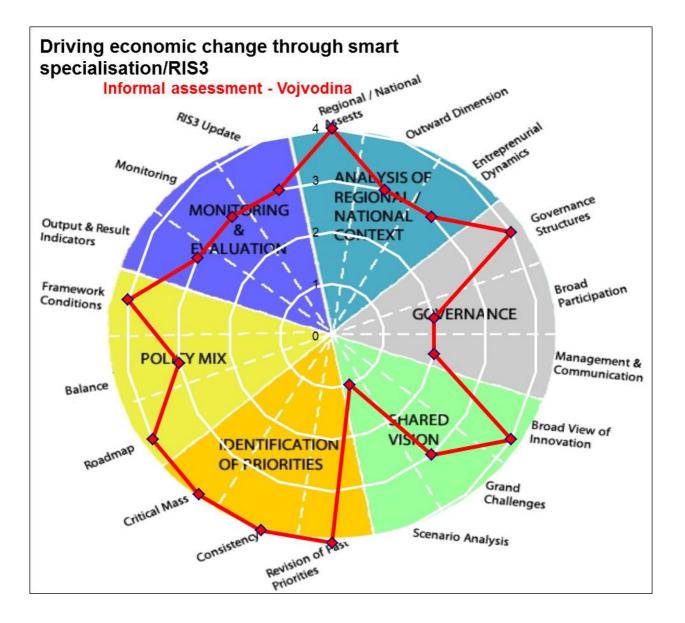
Vojvodina is situated at the borders of the EU where important European infrastructures routes cross: Corridor X and Corridor VII (river Danube). Its railway network is one of the densest in Europe, but the whole road and rail infrastructure is in poor conditions and needs large investments for revitalisation. Vojvodina possesses potential for river transport, incl. the river Danube and the connected canals. The multi-ethnic population (26 nationalities) together with advanced education system provides the necessary human resource base for dynamic economic development and networking with neighbouring regions and countries.

Another specific advantage of the region is that 77 % of total land – 1.65 million ha – is cultivable agricultural land. Almost half of the employed population is active in agriculture which means there is a high development potential within agricultural production. Fertile land and agriculture is a competitive advantage of the region. The irrigation canals, watered form the river network, are an important factor for sustainable agricultural production. The irrigation canals fed by the river network are potential resources and an important factor for sustainable agricultural production. Most of them still have to be cleaned and reactivated.

Another important factor of the regional economic development is the University in Novi Sad (UNS), which generates more than 70% of the entire research, development and innovation activities. UNS has about 50,000 students and it is not only a research university but an entrepreneurial university as well. In the ICT domain almost 100 spin offs were created providing about 2,000 high quality jobs and achieving almost €100 million turnover. The UNS has connections to multinational corporations like e.g. Schneider Electric DMS Novi Sad with over 1,000 experts in in power and computer engineering incl. 30 PhDs. This company plans to extend considerably the number of its employees within the coming years. The main source of new recruits is the regional education system led by the UNS.

In sum, Vojvodina meets all preconditions for a dynamic economic development based on agriculture, manufacturing and knowledge development, especially through the use of the innovation potential in the ICT domain. The RIS3 document including the background information and the presentation generally follow the RIS3 Guide of the European Commission. This is very advanced considering the fact that Serbia is not a member of the EU yet. It is the first attempt of developing a RIS3 in Vojvodina. Still, there remains of course ample potential for further development.

VOJVODINA'S SELF-ASSESSMENT



part 3| Questions under Review

Questions/issues for peer discussion

QUESTION 1	How to connect science and economy-industry?
QUESTION 2	How to increase awareness of innovation importance in general?
QUESTION 3	How to run innovation process within priority sectors?
QUESTION 4	How to set up a sustainable financing system to support RIS3 implementation?
QUESTION 5	How to take part in transnational innovation processes?

For the peer discussions, participants self-organised into 5 separate tables all of which had representatives from different European regions from 11 countries. A summary of discussions around these questions is presented below.



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EVOLUTION OF QUESTION 1: KNOWLEDGE TRANSFER

QUESTION	How to connect science and economy-industry?
UNDERLYING PROBLEMS OR ISSUES	SMEs don't have information on what is being done at universities (esp. at the University of Novi Sad). Academics are not aware of industry demands. Predictable funding for innovation is lacking.
	\bullet
RECOMMENDATIONS	Establish online platform for exchange to share information and experience (info days, matchmaking). Develop a "marketing offensive" with emphasis on R&D and innovation skills, on existing innovative companies and on transnational company involvement. Develop innovation vouchers for SMEs. Provide targeted tax incentives for innovative SMEs.
	\bullet
LESSONS LEARNT	Since the real R&D and innovation potential is higher than most external ob- servers would assume, it is now important to "market" this in Europe and be- yond. Government should finance online platform.

Evolution of question 2: Innovation awareness

QUESTION	How to increase awareness of innovation importance in general?
	\bullet
UNDERLYING PROBLEMS OR ISSUES	Different stakeholders have different needs.
	Awareness of benefits needed at all levels (horizontal governance).
	How to explain to politicians who decide about budget allocations that R&D and innovation is a real economic power?
	How to explain to local companies that innovation increases their competitiveness and is an important growth factor for them?
	\bullet
RECOMMENDATIONS	Show good examples with clear benefits.
	Streamline importance of innovation into general education system.
	Streamline importance of innovation into general education system. Start media promotion campaign.
	Start media promotion campaign. Try to establish a regional "Innovation Forum" involving all R&D&I stakeholders and innovation processes. Such a forum was introduced by BIC Bratislava and is highly appreciated by government, academia and entrepreneurs). Unofficial
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Evolution of question 3: Managing prioritised areas

QUESTION	How to run innovation process within priority sectors?
UNDERLYING PROBLEMS OR ISSUES	 BSC has an unclear mandate/role. Need to improve connection between firms and universities in some cases. Lack of bridging organisations/representatives of priority sectors. Lack of modern education programmes (too theoretical). Lack of practice oriented teaching. Lack of basic infrastructure (labs). Lack of positive innovation climate. Difficult to keep the best students in Serbia. No simple answer: the innovation process within the ICT sector is running quite well, but it has to be developed within the agro and food sectors in order to reach EU-wide competitiveness. This is a complex but an unavoidable process.
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RECOMMENDATIONS	 Spin-off firms can provide good examples of activities (e.g. scholarships, training, mentorships). Set up bridging organisations to facilitate clusters, connections and projects between firms and researchers in priority sectors. Make stronger use of the Enterprise Europe Network (<u>http://www.een.rs</u>). Strengthen education of innovation and entrepreneurship (e.g. through the existing UNESCO Chair for Entrepreneurship). Strengthen inter-disciplinary education. Establish requirements for innovative diploma theses. Create system for valorising good ideas from university students (e.g. awards and other incentives). Create public programmes on innovation and job opportunities. Try to upgrade the "direct farming" technologies, to innovate the food processing sector and to develop food distribution chain(s) in the region, in Serbia and beyond. An active innovative and entrepreneurial agro-food policy is crucial.



LESSONS LEARNT

Promote good practice examples of successful spin-off firms and researchers (make them stars), who can serve as mentors for others.

Start from strong home base and anchor/engage such firms and individuals in the region.

A region that generates relatively low GDP per capita output can be innovative in the ICT sector. It is also worth the effort to implement innovativeness and competitiveness within the agro-food sector.

EVOLUTION OF QUESTION 4: FINANCING STRATEGY IMPLEMENTATION

QUESTION	How to set up a sustainable financing system to support RIS3 implementation?
	\bullet
UNDERLYING PROBLEMS OR ISSUES	No fixed financing system for RIS3. No business plan (what to finance?). How to reach the regional and if necessary national consensus about RIS3 im- plementation, incl. the financing?
RECOMMENDATIONS	 Not all steps and measures have to be costly (involve researchers, graduate students etc.). Develop/apply some sort of crowdfunding. Agree upon and apply for national and IPA funds. Assure and achieve wide regional consensus. Try to activate funds from IPA II combined with the national and regional financial means and with the private funds as well, in order to facilitate RIS3 implementation. Develop a clear implementation and financial plan incl. the multi annual budget necessary for, inter alia, financial tools such as for risk financing, lending schemes and quarantine schemes, for material and non-material "soft" innovation infrastructures, and for the steering RIS3 implementation itself.
	\bullet
LESSONS LEARNT	 Be aware that this is a long-term process. Make implementation reactive on developments at regional, national and EU level. Respect all stakeholders relevant for this process. Ask for constructive criticism. The Innovation Fund of the Republic Serbia could be extended and partially used in combination with other accessible funds for RIS 3 implementation.

EVOLUTION OF QUESTION 5: MAKING TRANSNATIONAL INNOVATION HAPPEN

QUESTION	How to take part in transnational innovation processes?
UNDERLYING PROBLEMS	Lack of clearly recognisable and widely known profile (external).
UN ISSUES	Few firms work internationally (only few notable exceptions).
	Academic networks need strong strategic research links, e.g. support Institute for Crop Research to cope with changing market conditions.
	New European agreements, regulatory standards and questions of restructuring all constitute significant challenges for most firms. Firms struggle because they lack the necessary experience.
	The EU Strategy for the Danube Region (EUSDR) is important, but it has little political support.
	How to transfer the successful internationalisation of regional ICT innovation
	processes to other prioritised sectors, like agricultural and food processing?
	\bullet
RECOMMENDATIONS	Motivate and lead by example.
	Change the mind set of government officials and stakeholders.
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Don't be too enthusiastic about the EU, but move quickly.

This process was successful for the ICT sector and UNS spin-offs like Schneider. Insights gained there should be transferable, even under more difficult circumstances, to the agricultural and food processing sectors as well.

part 4| Additional Comments and Recommendations from Experts

The analysis of the regional context and potential for innovation

The regional assets have been analysed but the dynamics of the entrepreneurial environment, especially the entrepreneurial discovery process, have not been sufficiently addressed. For instance, the numerous university spin offs or the cooperation with multinational companies have not been mentioned. Also, the mentioned clusters should be analysed in greater detail in terms of their contribution to the prioritised areas. Two other elements that are missing or not depicted in a more prominent way are the very strong academic research and the potential for social innovation in a multi-cultural context. On the other side, it is true that the business infrastructure in the region is very recent and the limited financial sources could be a threat to sustainable development. The strengths and opportunities in the SWOT analysis could be defined more precisely. It is not true that "practical innovation processes do not exist" as evidenced by the spin off examples (Schneider DMS). Given the difficult framework conditions and the low GDP, the innovation performance is relatively good. It is recommended to **rethink the entrepreneurial discovery process** much deeper in order to be able to identify the opportunities but also the needs and bottlenecks of developing and supporting entrepreneurial activities. For this, a stronger involvement of motivated and relevant stakeholders (UNS, companies etc.) is crucial.

Setting up a governance structure

Who should be the 'owner' or supervisor and implementing body of RIS3 is a permanent and pertinent question. The question of ownership is closely related with the financing of RIS3 implementation. IPA II-Funds, national and regional state funding and private funds will be necessary for the implementation of the innovation strategy. This is the reason why not only the government of the APV (Autonomous Province of Vojvodina) but also the central government should be involved during RIS3 implementation. In order to successfully implement the RIS3, a Steering Committee could be established, that consists of relevant stakeholders (representatives of central and regional governments, implementing agencies, UNS, industry representatives and financing organisations incl. investors). For this, it is also important to divide clear responsibilities between the concerned Secretariats of the APV government (Science & Technological Development, Agriculture, Economy, Inter-regional Cooperation, Energy).

Shared vision about the region's future

The presented vision is generally sound but rather generic. It should be based more on the regional development potentials and strengths. Also, it should lead to the structural change of the regional economy towards sustainable growth based on an increased innovation capability of manufacturing and emerging knowledge-intensive sectors. This would support socio-economic transformation, catching up with developed regions, job creation and improvement of living conditions under the main umbrella topic "sustainable innovation".

Selection of a limited number of priorities for regional development

The proposed five sectors might be too broad, since probably not each of them has the critical mass needed in a region with a population of two million. Based on the strengtths indicated by the UNS ICT spin-offs (Schneider DMS) and the excellent conditions for agriculture in Vojvodina, one viable option is to emphasise and prioritise these two sectors: agriculture and food production & ICT. This does not mean that that other mentioned sectors would not be important. Rather, these two areas have the best potential for smart specialisation since they constitute unique characteristics of Vojvodina. This is why they are also very suitable to serve as 'brands' to attract investments and attention EU-wide and globally.

Establishing a suitable policy mix

The defined horizontal measures seem in general appropriate. Based on a more concrete vision and revised priorities, strategic goals should be defined. The proposed policies and measures and following action plans are the main implementing instrument of the RIS3 and its vision and strategic goals. The proposed regional action plan should reflect these strategic goals. The measure "Implementing financial instruments to support creation and development of innovative companies in the region" seems to be the most relevant one.

Monitoring and evaluation mechanism

The monitoring of the RIS3 implementation should be done by regional and possibly central government, by providers of financial resources for its implementation and by appointed organisations, e.g. by the BSC. The presented monitoring and evaluation indicators are a good starting point and should be fine-tuned according to the experience during the implementation of RIS3.

part 5| Lessons and Actions

Vojvodina is likely to implement suggestions collected during the peer review workshop. More precisely, Vojvodina identified 6 main lessons learnt and 16 short and medium term actions:

Lesson learnt 1:	Necessity to implement RIS3
Short and medium term action:	1. Establish Steering Committee with all stakeholders
	2. To make RIS3 a strategic document of Vojvodina government
	3. Starting process of national RIS3 of the republic of Serbia
	4. Monitoring of RIS3 of Vojvodina
Responsible body:	BSC

Lesson learnt 2:	Value gained through work in multinational teams and exchange of knowledge
Short and medium	1. Participation in peer review workshops of other regions
term action:	2. Action plan for coordination with other regions
	3. Setting up multinational teams for priority sectors
Responsible body:	BSC

Lesson learnt 3:	Coordination with more developed and more experienced regions (benchmarking) & openness to interactive approaches to problem-solving
Short and medium term action:	 Visit more developed regions and look for cooperation opportunities Action plan for visits to more developed regions Joint innovation and R&D activities with more developed regions
Responsible body:	BSC

Lesson learnt 4:	Lack of interest of regional policy bodies in the workshop
Short and medium	1. Follow up activities with UNS and other stakeholders
term action:	2. Create innovation programme for the education system
	3. Establish sustainable and safe system for financing of innovation

	activities
Responsible body:	BSC

Lesson learnt 5:	Lack of knowledge about achieved results in clusters
Short and medium term action:	1. Analysis of functioning and results
	2. Action plan to improve functioning and results of clusters
Responsible body:	BSC

Lesson learnt 6:	Lack of data about entrepreneurial discovery process
Short and medium term action:	1. Analysis of entrepreneurial discovery process
	2. Action plan to improve entrepreneurial discovery process
Responsible body:	BSC

ANNEX | Feedback on the Format of the Workshop

Since this was the first peer review workshop in a non-EU country and the first part of the DANUBE-INCO.net project, it was important to collect feedback on the format of the workshop. Since Western Balkans and Danube countries vary very strongly in terms of their innovation systems and capacities and face very particular challenges, the standard peer review method might have to be modified. In the following, we present the main recommendations voiced by participants after the workshop.

- Place a good practice presentation at the beginning of the workshop as a benchmark (ideally from a region or country with similar structures/challenges).
- Give more comprehensive introduction to RIS3 at the beginning (also mentioning useful tools and indicators like e.g. UNU MERIT indicators, Eye@RIS3, benchmarking tools etc.).
- Organise more in-depth thematic follow-up workshop.
- Create online blog to continue discussion and exchange feedback.
- Establish stricter deadlines for all documents to be sent before the workshop; restrict any further changes to documents after that. This facilitates a proper preparation for the workshop.
- Organise structure to support follow-up of peer review workshop and action plans for RIS3 implementation.
- Organise annual event (forum) for regions to exchange experiences.