Multi-Level Implementation Scheme RIS3 Ida-Viru region

Author: Uku Varblane, Kerda Eiert (PP03)

Introduction

This report presents the RIS3 process of Estonia and the multi-level implementation scheme for Ida-Viru region. The purpose of this task is to introduce different approaches in implementing RIS3 and to share best practices and possible practical solutions. To a large extent, effective implementation will be the litmus test for RIS3, as this has been the major weakness for many regions, despite RIS3 being clearly designed and set down in paper. One of the key issues to ensure the success of multi-level implementation schemes seems to be how to connect regional and sub-regional governments for the RIS3 implementation, as the regions are not homogeneous units, but have different governance and administrative configurations. In Estonia, RIS3 has been developed on the national level since the country is small enough to count as a single NUTS2 region in the EU. Despite that the process is steered at the national level, Ida-Viru region still has the elements of RIS3. This will be discussed in the following chapters.

RIS3 process in Estonia

The purpose of the smart specialisation and RIS3 process is to identify areas of the economy where the potential for growth and the value added are above average and where a competitive advantage can be achieved by investing in R&D. Initiated in 2011, the European Commission has placed smart specialisation in the spotlight among R&D activities and innovation strategies and turned it into a precondition for receipt of EU funds for CEE countries. The growth areas selected in the course of smart specialisation are the priorities in the 2014–2020 financing period. This has constituted a significant challenge for many regions as the absence of prior experience and established knowhow as well as the great variations in regional capacities to implement RIS3 have already appeared in the early stages of priority setting. This is also the case for Estonia and Ida-Viru County.

The design process of RIS3 should involve six major steps as proposed by D. Foray (2012)[1] and these steps were aimed to follow in Estonia:

- Analysis of the regional context and potential for innovation
- Governance: Ensuring participation and ownership
- Elaboration of an overall vision for the future of the region

[1] "Guide to Research and Innovation Strategies for Smart Specialisations (RIS 3)" http://ec.europa.eu/regional_policy/sources/docgener/presenta/smart_specialisation/smart_ris3_2012.pdf

- Identification of priorities
- Definition of coherent policy mix, roadmaps and action plan
- Integration of monitoring and evaluation mechanisms

The process for selection of growth areas in Estonia started in 2012. The task for monitoring and analysis of possible focus areas was provided to the Estonian Development Fund, a public institution that was made responsible for steering the process. Various aspects were taken into account in the selection of growth areas and the selection process involved both quantitative and qualitative analysis. First, an analytical report was composed providing a quantitative overview of the economic structure of Estonia and highlighting the most promising niches in terms of the level and the dynamics of value added. This was followed by qualitative analysis, which allowed ensuring stakeholder engagement (interviews, survey, conference). Several roundtables, working-group meetings and seminars were organised. Industry partners were well engaged at the first stage and the idea of entrepreneurial discovery was followed. However, the final selection of priority areas was not clear and transparent – some significant changes were made after the first selection of priority areas without adequate explanations. This significantly impaired the motivation of industry partners to be involved in the implementation process.

Estonian Development Fund chose the following fields of economic activities for RIS3[2].

1. **Information and communications technology (ICT) horizontally** via other sectors. It is important to note that the development of this sector around the world has reached a stage where larger opportunities can be found in the application of ICT technology in other sectors. The three sub-sectors of the highest priority are listed below but, in the case of ICT, the sub-sectors should not be strictly limited to the list and support may also be given to other sectors that cross paths with ICT. Sub-sectors: a) use of ICT in industry (including automation and robotics), b) cyber security, and c) software development.
2. **Healthcare technology and services.** Demand for healthcare services is growing globally as population ages. Estonia has the greatest potential in a) biotechnology (a strong scientific basis) and b) e-health (use of IT for the development of medical services and products).
3. **More efficient use of resources.** The increasing global population is likely to lead to the need to use resources more efficiently. Estonia's potential in this area is greatest in a) materials science and industry, b) the development of the 'smart house' concept (IT solutions and a more efficient construction of houses (passive house)), and c) food that supports health.

[2]http://www.arengufond.ee/upload/Editor/Publikatsioonid/Nutikas%20spetsialiseerumine%2020_02_2013.pdf http://www.arengufond.ee/wp-content/uploads/2013/06/AF_kitsaskohad_final2.pdf

Three relatively broad economic branches have been selected in Estonia, which are not precisely niches but rather the framework areas defined by the global trends. For each of the selected framework areas, a team of researchers and practitioners was formed by the Development Fund that implemented a deeper analysis of the defined focus areas with an aim to predict the future growth paths and propose the policy measures.

Initially, the Ministry of Economic Affairs and Communication, together with the Ministry of Research and Education was in charge for the implementation of RIS3 in Estonia. As mentioned, the task for monitoring and providing analytical information was subcontracted to the Development Fund. Two implementation bodies for EU Structural Funds were made responsible for implementation of the national smart specialisation measures. Estonian Enterprise Foundation has been in charge of implementing RIS3 measures related to entrepreneurship and Archimedes Foundation act as implementing agency for R&D related RIS3 measures. The Ministry of Economic Affairs and Communication and the Ministry of Education and Research developed the support measures for RIS3 in years 2014-2015.

However, besides these two, the Ministry of the Interior Regional Development Department (under the Ministry of Finance since 2015) detailed its own regional SS approach, which has been used for elaborating regional strategies and investment programmes. One of the Regional Development Department measures relevant for the Ida-Viru region is the development of regional competence centres outside the university cities Tallinn and Tartu. The Ida-Viru Oil Shale Competence Centre was financed from this source and serves as a relevant element in regional innovation system.

In addition, the Ministry of Agriculture is responsible for primary sector related R&D development, the Ministry of Culture for creative industries and the Ministry of Social Affairs for major investments into the hospitals and local health centres network and training programmes. Thus, Estonian RIS is very much dominated by central ministries and agencies and there is little cooperation between these administrative silos.

The implementation structure of the RIS3 on the national level has changed in 2016. The Estonian Development Fund, which was institutionally responsible for RIS3 design, was shut down – partly because of the ineffective implementation of their RIS3 related tasks. After the closure of the Development Fund, the Ministry of Economic Affairs and Communication is now in charge of steering the national level smart specialisation strategy. However, this abrupt change has weakened the horizontal coordination even more. Since the beginning of the liquidation process of the Estonian Development Fund, very little has been done in monitoring, evaluation and analysis of focus areas and therefore not much is done for overcoming the development barriers outlined in the sectoral reports of focus areas.

Currently, the process for revising the smart specialisation focus areas is ongoing. The Ministry of Economic Affairs and Communication has initiated a process for assessing the size and

economic capacity of currently selected economic niches and developing policy recommendations for supporting the growth of defined niches. This work is subcontracted to University of Tartu and Tallinn Technical University and should be finished by the end of 2018.

The elements and multi-level implementation scheme

The RIS3 has been developed on the national level in Estonia. This is a feasible option in smaller countries with small regions, but may lead to a more instable situation in the long term and makes more difficult to tackle regional heterogeneities (priority areas should be wider). However, in addition to the nationally centralised steering, the regional bodies are forming the actual environment for implementation of the RIS3. There is no county-level RIS3 in Estonia, however "Ida-Viru County Development Plan 2014-2020" serves as a regional development strategy and includes elements of RIS3, including underlining the importance of smart specialisation.

Multi-level implementation scheme of the RIS3 covers different layers and elements (Figure 1). The main motivation for the RIS3 in Estonia was to be in line with the ERDF regulations. Hence, the **initiator** of the RIS3 could be defined as the European Commission. The responsible entity on the national level is the Ministry of Economic Affairs and Communication, whereas the implementing bodies of EU Structural and Investment Funds carry out the implementation of the support measures. The Enterprise Estonia implements measures related to entrepreneurship and two measures are implemented by the Foundation Archimedes (applied research in smart specialisation growth areas and scholarships in smart specialisation growth areas). In addition, other measures with an aim to support RIS3 are implemented by the other implementing bodies of EU structural assistance or by State Shared Service Centre (e.g. support measure for regional competence centres).

Smart Specialization Steering Committee was created at the beginning of 2017 for steering the national process of RIS3. Representatives of the Ministry of Economic Affairs and Communication, Ministry of Education and Research, Ministry of Finance as well as the representatives of the State Chancellery Strategy Office, Rector's Council, Estonian Chamber of Commerce and Estonian Service Industry Association form the committee. The committee confirms the principles of the selection of subcategories for smart specialization growth areas, decides whether to carry out relevant analysis and studies, makes proposals for the implementation of the necessary changes to promote growth, including in a regulatory environment; makes suggestions in areas of smart specialization to relevant ministers and represents the implementation of the principles of smart specialization in others decision-making and advisory boards.

Within the Ida-Viru region, the RIS3 implementation comprises three interconnected and somewhat overlapping layers. The first layer comprises regional universities and a

competence centre, forming the regional knowledge base. The second layer represents the platforms for collaboration – this involves regional chamber of commerce, regional business support institution (Ida-Viru Regional Development Centre), Ida-Viru Industrial Areas and the Tourism Cluster. Third layer represents the support organisations – local authorities and the association of local authorities as well as the regional private sector consultancies and NGOs. Regional enterprises can be seen as the main beneficiaries of the RIS3 process in Ida-Viru region.

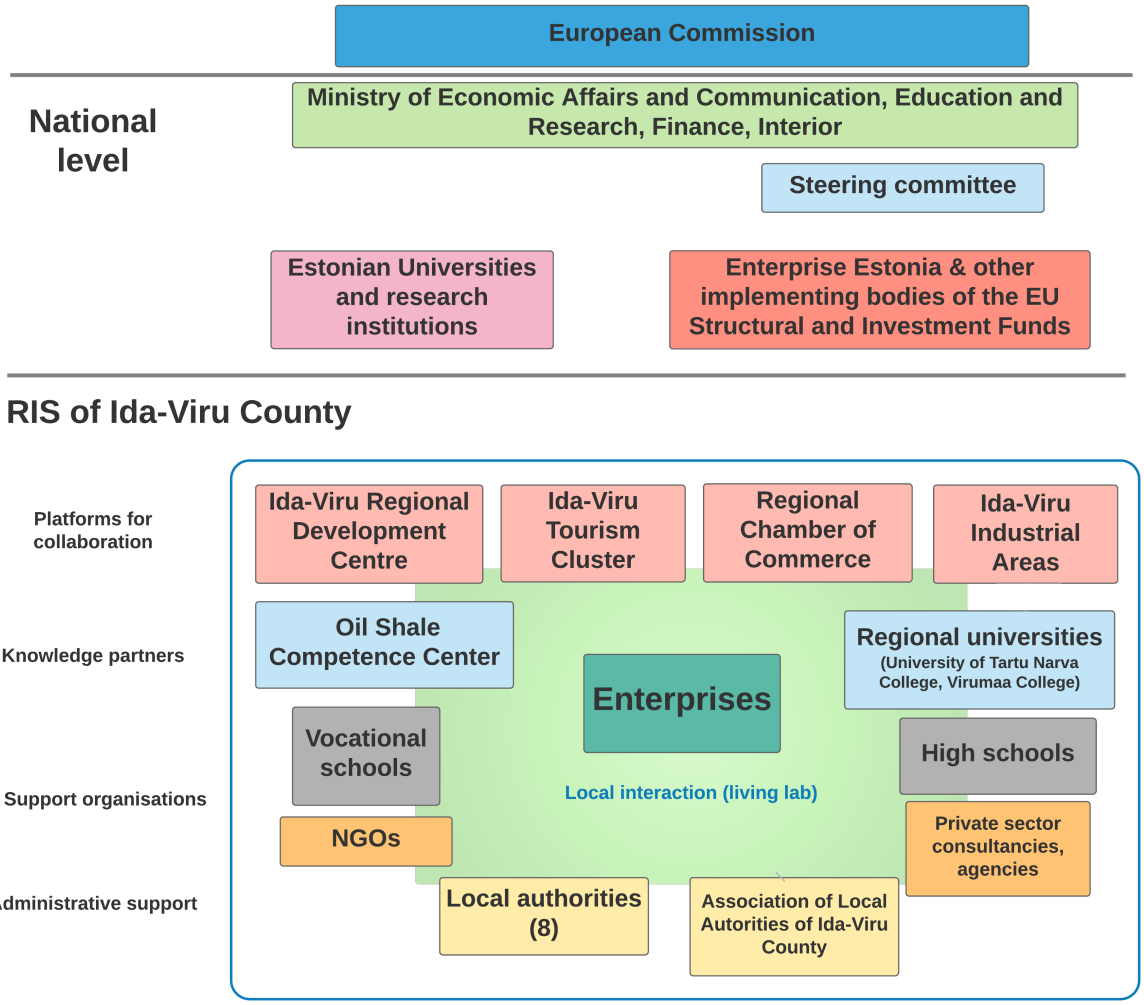

Figure 1 Multi-Level-Implementation Scheme RIS3 Ida-Viru County

In case of Ida-Viru region, there is no clearly defined **platform for exchanging ideas** about shaping the innovation process in the region. The interaction of the regional stakeholders can be seen as a living lab – "it is about experimentation and cocreation with real users in real life

environments, where users together with researchers, firms and public institutions look together for new solutions, new products, new services or new business models."[3]

However, various platforms for collaboration, not directly related to RIS3, exist in the region. Ida-Viru Regional Development Centre (IVEK), funded by the Enterprise Estonia, provides counselling services to various groups – individuals for starting the business, as well as for operating businesses, investors and non-profit sector. They also help to bring together people with organising open seminars and lectures. Regional chamber of commerce is located in the regional capital Jõhvi and aims to help with searching for cooperation partners, organising contact events, trainings and offering other activities necessary for business activities of entrepreneurs. The Ida-Viru Tourism Cluster contributes in the growth of the tourism sector with offering advisory services, organising trainings and information days for enterprises (e.g. annually organised Ida-Virumaa Business Days), but also offering a mentor program where the participating entrepreneurs can expand the contact network, learn from others' experiences and contribute to the development of the county's business. Another platform for collaboration can be found in Ida-Viru Industrial Areas – this is a foundation that operates five industrial parks across the region. It is founded and financed by the Ministry of Economic Affairs and Communications together with the municipalities. In addition to providing basic infrastructure, they offer investor reception, networking, meetings with key persons and business incubator support services. Despite these various options, the communication between regional stakeholders/beneficiaries could be much more intense. The effectiveness of the platforms is hindered by the lack of workforce. In addition, the concept of smart specialisation is not well known within the people of these organisations meaning that there is a need for the "helicopter view" and understanding the role of different elements of RIS3. However, in addition to more staff, there is always a need for innovative ways how to bring people together.

Regional higher education institutions as the **knowledge partners** form the second layer and play a crucial role in the design and implementation of RIS3. They are among the few institutions that act as 'boundary spanners', bridging all three elements of the 'Knowledge Triangle' (Research, Education and Innovation)[4]. The R&D capacity in Ida-Viru region is limited to two university colleges and the Tallinn University of Technology Oil Shale Competence Centre. Virumaa College of Tallinn Technical University contributes to high-level engineering education. The curricula are adjusted towards the needs of existing regional manufacturing enterprises in the areas of chemical industry and mining. Established as a structural unit of Virumaa College, the Oil Shale Competence Centre is a research and development centre that provides services to companies and the public sector mainly in oil shale and chemistry. Narva College is a regional faculty of University of Tartu is primarily focused on social sciences, more

[3] http://openlivinglabs.eu
[4] http://s3platform.jrc.ec.europa.eu/hess

specifically in preparation of teachers. Despite prioritising knowledge transfer between academia and industry (e.g. ongoing ERDF funded project in Virumaa College for knowledge transfer and creation of new businesses and jobs), there is still a gap between research results and its usability for enterprises. In addition, neither university colleges nor the competence centre is working with Blue Growth themes so far.

Regional enterprises are the key stakeholders in the RIS3 process. The county has long-standing traditions of manufacturing industries. The distinctive feature of the business structure of Ida-Viru region is the dominance of a few large-scale companies in oil shale mining, oil extracting, energy production and other heavy industries. Whilst being located in the region, the development and resource allocation of these large companies is mostly determined outside the region (headquarters located in Tallinn or abroad). Therefore, this makes a big challenge to incorporate them into the implementation of RIS. Besides the small number of large companies, the vast majority of enterprises (over 90%) are micro enterprises with less than 10 employees. The difficulty with the micro enterprises is mostly the lack of capacity (and sometimes a motivation) for development and cooperation. Therefore, the work of cluster organisations and other platforms for collaboration is crucial in order to make them engaged. In brief, the business structure of Ida-Viru region is a challenge in terms of securing stakeholder engagement.

Regional administration creates another layer in the regional innovation system. In case of Ida-Viru region, this comprises of eight local authorities (4 cities and 4 municipalities) and the Association of Local Authorities of Ida-Viru County that coordinates the joint activities of local authorities. However, the contribution of regional administration to fuel the entrepreneurial discovery process has been rather minor in Ida-Viru region. This might be partly because of the business structure described above, but also because of lack of experience. However, over the past years, some steps have been taken, including organising working groups and cluster-like collaboration to better engage regional stakeholders. One of the significant limitation in that regard is that local authorities are understaffed. The recently implemented territorial administrative reform that aimed to amalgamate municipalities and dismisses county governments created further confusion. Hence, the administrative structure on the county level has changed and new practices for county level cooperation have to be refined.

Conclusion

Transferring the national RIS3 into practice has not been very smooth in Estonia, including the challenges in stakeholder engagement, unused/unpopular support measures and the closure of the organisation initially responsible for preparing and monitoring the strategy. Some bottlenecks seems to be directly related to the absence of previous experience with RIS3. During the process, a general awareness of innovation and RIS3 has increased. A few years ago, innovation and smart specialisation was understood as something related to high tech

and science, but by now, a much more pragmatic approach prevails. In addition, when designing the regional development plan, the development priorities for IV were chosen through a wide participation process that also included a critical number of enterprises and educational institutions. During the implementation, however, the stakeholder engagement has been less successful.

However, the implementation of national RIS3 still lacks the coordination – both between the different levels of the multi-level implementation scheme (between regional and national policy makers) as well as horizontally between ministerial silos. This results that programmes that consist of reasonable activities are not always implemented reasonably. At the regional level, local authorities of Ida-Viru region have low administrative and development capacity and are often not able to contribute and support the entrepreneurial discovery process, mostly because of the lack of labour. The business structure of the region is also making building trust and commitment more difficult. Ensuring clear and credible division of labour in the regional governance of RIS3 might help to be more effective in implementation of the strategy. However, innovation is not only a question of investments and top-down strategies, but has to do with motivation of the actors engaged. In this regard, it is important to highlighted the changing ways of doing things in the public sector and in engaging in a more collaborative and cooperative process of policy making. Another future progression should be putting in place an effective feedback mechanism between the RIS3 actors and the regional vision to foster entrepreneurial discoveries.