

# Baltic Sea Region-wide Research-Business Cooperation: What Benefits For Sparsely Populated Areas and Smart Specialisation?

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*The article elaborates on the findings of smart specialisation in view of how on-going thinking on this Europe-wide innovation experiment should be advanced on a qualitatively new level, especially taking into consideration the role of rural areas and their specific economic growth needs. The example of Kainuu offers an insight into how a sparsely populated area in north east Finland can benefit from EU-funded transnational cooperation programmes, complemented with tailored support from the European Structural and Investment Funds, in its aspirations to tap into the unexplored innovation potential of the regional economy and enhance its links to other parts of Europe. Kainuu testifies to the readiness of regional authorities to adopt state of the art development approaches and tools, often requiring diversification from traditional solutions. Meanwhile, Kainuu's experience and continued engagement in EU-funded transnational and interregional projects suggests that project concepts and actions need to be sufficiently strategic and well-defined in view of making the argument for the introduction of innovative tools in all regions. Among the suggestions for enhanced quality of transnational collaboration, the article argues for joint performance indicators and continuous oversight of the potential geographical compartmentalisation of smart specialisation theoretical thinking.*

## I. Introduction

The Baltic Sea Region is characterised by its close ties between different stakeholders. The establishment of these relationships across the Baltic Sea Region gained prominence in the early 1990s, for example, with the launch of the Baltic Sea Parliamentary Conference in 1991 and the Council of the Baltic Sea States (CBSS) in 1992,<sup>1</sup> as well as – more recently – the first European macro-regional strategy, the European

Union Strategy for the Baltic Sea Region (EUSBSR) in 2009. Highly urbanised areas dominate the multi-lateral initiatives in the Baltic Sea Region. For example, the widely-read 'Baltic Rim Economies', published by the Pan-European Institute of the University of Turku, regularly features headlines with such well-known and extensively networked cities as Helsinki, Tallinn, Turku and St. Petersburg.<sup>2</sup> Furthermore, the Union of Baltic Cities, also founded in 1992,<sup>3</sup> and Turku Process<sup>4</sup> – a joint initiative among

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1 Lassi Heininen, 'The Arctic, Baltic, and North-Atlantic 'cooperative regions' in 'Wider Northern Europe': similarities and differences' [2017] 48(4) Journal of Baltic Studies 438 <10.1080/01629778.2017.1305180> accessed 17 June 2018

2 The latest issues serve as telling examples of these observations: [2018] (1) Baltic Rim Economies <[https://www.utu.fi/en/units/tse/units/PEI/BRE/Documents/BRE\\_1\\_2018.pdf](https://www.utu.fi/en/units/tse/units/PEI/BRE/Documents/BRE_1_2018.pdf)> accessed 17 June 2018;

[2018] (2) Baltic Rim Economies <[https://www.utu.fi/en/units/tse/units/PEI/BRE/Documents/BRE\\_2\\_2018.pdf](https://www.utu.fi/en/units/tse/units/PEI/BRE/Documents/BRE_2_2018.pdf)> accessed 17 June 2018

3 Margit Bussman and Sebastian Nickel, 'Transnational cooperation: a network analysis of town twinning in the Baltic Sea region' [2018] Journal of Baltic Studies 5 <10.1080/01629778.2018.1447977> accessed 17 June 2018; Andrey Makarychev and Alexander Sergunin, 'Russia's role in regional cooperation and the EU Strategy for the Baltic Sea Region' [2017]48(4) Journal of Baltic Studies 466 <10.1080/01629778.2017.1305186> accessed 17 June 2018; Alexander Sergunin and Pertti Joenniemi, 'Does the EU Strategy

three friendship cities (Hamburg, Turku and St. Petersburg) – also often makes headlines, as well as gains academic and policy makers’<sup>5</sup> attention. Likewise, more recently, international attention has been drawn to more complex collaborative initiatives of highly urbanised areas accommodating an important transport corridor, such as the Megaregion of Western Scandinavia.<sup>6</sup>

In line with the overall theme of this special issue of the European Structural and Investment Funds Journal, this paper provides a more nuanced insight in the benefits enjoyed by other areas, which are less known or less frequently highlighted to the wider pool of macro-regional stakeholders, but nevertheless, are actively participating in both Baltic Sea Region-wide and Europe-wide transnational cooperation due to the tangible benefits offered by this type of multilateral engagement. This paper builds on a recently published article titled “Sparsely populated areas benefit from macro-regional research-business cooperation”,<sup>7</sup> which offers an insight into the activities Kainuu Region underwent during recent years to diversify its economic growth areas, and the activities which characterise its approach to internationalisation. Smart specialisation is one of the guiding terms in explaining the promising macro-regional trends which are jointly unravelled by a great diversity of partners committed to exploring what further collaborative initiatives should be taken to ensure enduring sustainability and prosperity of the Baltic Sea Region.

The subsequent chapters of this article elaborate on the value of smart specialisation already delivered in the specific context of sparsely populated areas. Consequently, this outline will be complemented by a listing of the transnational engagements of Kainuu Region. Last but not least, this article corresponds to the most recent encouragement to cultivate a macro-regional mind-set and consider an EUSBSR ambassadorship, meaning implementing not solely the basic requirements or guidelines of the EUSBSR, but also its true spirit and aspirations to present a clear value added to the Baltic Sea Region and foster its visibility.<sup>8</sup> Thus, the thinking on smart specialisation is closely intertwined with the latest suggested potential modalities of the EUSBSR.

## II. Smart Specialisation Structures and Evolution

In light of the European Commission’s recently introduced headlines for Smart Specialisation 2.0,<sup>9</sup> it is worth taking a look at what selected Baltic Sea Region-wide collaborative initiatives have achieved so far in creating a better understanding of smart specialisation – a principle discussed around 2005/2006<sup>10</sup> and coined by the “Knowledge for Growth” Expert Group in 2008<sup>11</sup> – across the diversity of European territories, including such sparsely populated areas as Kainuu.

The adoption of a regional innovation strategy (RIS3) was a precondition for benefitting from the

for the Baltic Sea Region (EUSBSR) mobilize the municipal level? City twinning in Northern Europe’ [2017] 48(4) *Journal of Baltic Studies* 486 <10.1080/01629778.2017.1305183> accessed 17 June 2018;

Stefan Gänzle, ‘The European Union’s Strategy for the Baltic Sea Region (EUSBSR): improving multilevel governance in Baltic Sea cooperation?’ [2017] 48(4) *Journal of Baltic Studies* 414 <10.1080/01629778.2017.1305205> accessed 17 June 2018

4 Stefan Gänzle, ‘The European Union’s Strategy for the Baltic Sea Region (EUSBSR): improving multilevel governance in Baltic Sea cooperation?’ [2017] 48(4) *Journal of Baltic Studies* 414 <10.1080/01629778.2017.1305205> accessed 17 June 2018

5 Sven Beyersdorff and Esben Lanthén, *Baltic 2030: Bumps on the Road* (Nordic Council of Ministers 2018) 21, 23 <[http://www.cbss.org/wp-content/uploads/2018/06/WEB\\_Baltic-2030\\_Bumps-on-the-Road\\_FINAL.pdf](http://www.cbss.org/wp-content/uploads/2018/06/WEB_Baltic-2030_Bumps-on-the-Road_FINAL.pdf)> accessed 19 July 2018

6 OECD, *OECD Territorial Reviews: The Megaregion of Western Scandinavia* (OECD Publishing 2018) <<https://doi.org/10.1787/9789264290679-en>> accessed 17 June 2018

7 Jouni Ponnikas and Zane Šime, ‘Sparsely populated areas benefit from macroregional research-business cooperation’ (Smart Stories) Smart Specialisation Platform <<http://s3platform.jrc.ec.europa.eu/-/sparsely-populated-areas-benefit-from-macroregional>

-research-business-cooperation?inheritRedirect=true> accessed 17 June 2018

8 Maria Toptsidou and Kai Böhme, *EUSBSR After 2020: Governance Remastered?* (2018) 28 <[http://www.balticsea-region-strategy.eu/attachments/article/591006/EUSBSR-after2020\\_Governance-Remastered\\_FinalReport.pdf](http://www.balticsea-region-strategy.eu/attachments/article/591006/EUSBSR-after2020_Governance-Remastered_FinalReport.pdf)> accessed 17 June 2018

9 Peter Berkowitz, ‘Smart Specialisation 20’ (JRC Seville Newsroom, 6 February 2018) <[http://ec.europa.eu/newsroom/jrcseville/item-detail.cfm?item\\_id=613782&newsletter\\_id=453&utm\\_source=jrcseville\\_newsletter&utm\\_medium=email&utm\\_campaign=S3%20&utm\\_content=Smart%20Specialisation%20&lang=en](http://ec.europa.eu/newsroom/jrcseville/item-detail.cfm?item_id=613782&newsletter_id=453&utm_source=jrcseville_newsletter&utm_medium=email&utm_campaign=S3%20&utm_content=Smart%20Specialisation%20&lang=en)> accessed 17 June 2018

10 Dimitrios Kyriakou, ‘Smart Specialisation Concepts and Significance of Early Positive Signals’ [2017] 5(1) *European Structural and Investment Funds Journal* 5 <[http://www.lexxion.de/images/pdf/Smart\\_Specialisation\\_Concepts\\_and\\_Significance\\_of\\_Early\\_Positive\\_Signals.pdf](http://www.lexxion.de/images/pdf/Smart_Specialisation_Concepts_and_Significance_of_Early_Positive_Signals.pdf)> accessed 17 June 2018

11 Steliana Sandu, ‘Smart Specialization Concept and the Status of Its Implementation in Romania’ [2012] 3 *Procedia Economics and Finance* 237 <[https://doi.org/10.1016/S2212-5671\(12\)00146-3](https://doi.org/10.1016/S2212-5671(12)00146-3)> accessed 17 June 2018;

Slavo Radošević and others, *Advances in the Theory and Practice of Smart Specialization* (Academic Press, an imprint of Elsevier 2017) 19, 250

Structural Funds in the Cohesion Policy period 2014-20. Beyond the introduction of 120 smart specialisation strategies (S3s),<sup>12</sup> the process led to a lot of research resulting in new insights about regional development and policy implications. By and large launched at the same time as the place-based approach promoted by the Barca report,<sup>13</sup> RIS3 did what no other centrally orchestrated policy tool has accomplished. RIS3 succeeded in proposing unified terms of reference for the European Union (EU) for building and implementing a regional innovation strategy, which would serve as a common point of departure for all regions regardless of their location or performance.

Throughout the first wave of RIS3 implementation, a number of weaknesses and open questions were identified and discussed by researchers and policy makers. One example identified in Lithuania was the comparatively limited participation of the business sector in the initial stage of preparing the Lithuanian smart specialisation framework.<sup>14</sup> One of the reasons for this might be related to the business sector's reluctance to sufficiently engage with the concept of smart specialisation, which is a precondition for taking part in more detailed debates. This has been experienced in Poland.<sup>15</sup> Moreover, the initial struggles in several EU Member States are related to setting up the basic institutional frameworks for consultation processes. In many countries, the resistance is due to "long established (and still cherished) traditions of centralized governance".<sup>16</sup>

## 1. Integration and Economic Renewal of a Sparsely Populated Area

In the impressive corpus of available literature since approximately 2011, when the RIS3 process was formally introduced via the launch of the Smart Specialisation Platform and RegioStars awards,<sup>17</sup> the position of sparsely populated regions has attracted considerable attention. Sparsely populated regions are subnational geographic units which, as a result of their very low population density, have problems in establishing economies of scale. Therefore, the argument goes, the regions of this specific type face challenges to develop regional innovation systems and well-functioning systemic approaches. The issue of sparsely populated areas, their access to advanced technologies, and later to regional innovation systems has been addressed since the 1990s.

Undoubtedly, each region is different, i.e. starting points of a well-functioning innovation system might vary from region to region. Nevertheless, thanks to the valuable body of research produced during the last 30 years, there are findings that confirm specific trends and that could be considered guidelines for RIS3 implementation, especially by sparsely populated areas. First, the notion of distributed rather than strictly localised knowledge bases for the excellence and innovation knowledge-inputs is widely accepted.<sup>18</sup> This notion is also part of the RIS3 literature which, from the beginning, foresees the place-based development within the context of sufficient critical

12 Peter Berkowitz, 'Smart Specialisation 20' (JRC Seville Newsroom, 6 February 2018) <[http://ec.europa.eu/newsroom/jrcseville/item-detail.cfm?item\\_id=613782&newsletter\\_id=453&utm\\_source=jrcseville\\_newsletter&utm\\_medium=email&utm\\_campaign=53%20&utm\\_content=Smart%20Specialisation%20&lang=en](http://ec.europa.eu/newsroom/jrcseville/item-detail.cfm?item_id=613782&newsletter_id=453&utm_source=jrcseville_newsletter&utm_medium=email&utm_campaign=53%20&utm_content=Smart%20Specialisation%20&lang=en)> accessed 17 June 2018

13 Fabrizio Barca, *An Agenda For a Reformed Cohesion Policy: A Place-Based Approach to Meeting European Union Challenges and Expectations* (European Parliament 2009) 1 – 218 <[http://www.europarl.europa.eu/meetdocs/2009\\_2014/documents/regi/dv/barca\\_report\\_barca\\_report\\_en.pdf](http://www.europarl.europa.eu/meetdocs/2009_2014/documents/regi/dv/barca_report_barca_report_en.pdf)> accessed 17 June 2018

14 Ramojus Reimeris, 'Preparation of Smart Specialisation Strategy: The Lithuanian Case' [2013] 1(1) *European Structural and Investment Funds Journal* 51

15 Dorota Kamrowska-Zaluska and Jacek Soltys, 'Process of Emergence of Smart Specialisation in Pomeranian Voivodeship in Poland' [2016] 161 *Procedia Engineering* 1994 <<https://doi.org/10.1016/j.proeng.2016.08.791>> accessed 17 June 2018

16 Slavo Radošević and others, *Advances in the Theory and Practice of Smart Specialization* (Academic Press, an imprint of Elsevier 2017) 106

17 European commission, 'Top News from the European Commission: 17 June - 21 July 2011' (European Commission, 17 June 2011) <[http://europa.eu/rapid/press-release\\_AGENDA-11-22\\_en](http://europa.eu/rapid/press-release_AGENDA-11-22_en.pdf)

.pdf> accessed 17 June 2018 and Steliana Sandu, 'Smart Specialization Concept and the Status of Its Implementation in Romania' [2012] 3 *Procedia Economics and Finance* 238 <[https://doi.org/10.1016/S2212-5671\(12\)00146-3](https://doi.org/10.1016/S2212-5671(12)00146-3)> accessed 17 June 2018

18 Loet Leydesdorff and Martin Meyer, 'The triple helix of University-Industry-Government Relations: Introduction to the Topical Issue' [2003] 58(2) *Scientometrics* 191-203; Michael Fritsch, 'Cooperation and the Efficiency of Regional R&D Activities' [2004] 28(6) *Cambridge Journal of Economics* <<https://doi.org/10.1093/cje/beh039>> accessed 17 June 2018; Foray Dominique, *The Economics of Knowledge* (Cambridge, MA/ London: MIT Press 2004); Giacomo Becattini and others, *From Industrial Districts to Local Development: An Itinerary of Research* (Edward Elgar 2003); Bjørn T. Asheim, *Flexible Specialisation, Industrial Districts and Small Firms: A Critical Appraisal*. in Huib Erme and Verena Meier (eds), *Regional Development and Contemporary Industrial Response Extending Flexible Specialisation* (Belhaven Press 1992) 45-63; Bjørn T. Asheim and Arne Isaksen, 'Location, agglomeration and innovation: Towards regional innovation systems in Norway?' [2007] 5(3) *European Planning Studies* <[10.1080/09654319708720402](https://doi.org/10.1080/09654319708720402)> accessed 17 June 2018 Michael Storper, *The Regional World: Territorial Development in a Global Economy* (Guilford Press 1997).

mass of the regional economic and knowledge bases.<sup>19</sup>

Second, measuring the functional integration of a region into a globalised context has also been discussed intensely. A very good indicator for this has been proposed by Leydesdorff and Fritsch in 2005.<sup>20</sup> The indicator suggests, as a proxy, to measure the mutual information between and among the (distributed, globalised) triple helix actors. It implies that the frequency, depth, quality of the mutual information might ideally function as a plausible tool towards a “perfect” (or at least highly improved) regional innovation system.

Third, research<sup>21</sup> also confirms the significance of the medium and high-tech sectors for regional economy renewal, especially the medium tech segment as the reference base for high-tech “niche” specialisations of regions. While this finding is supported by the considerable work done on proximities and knowledge spillovers,<sup>22</sup> as well as on related variety,<sup>23</sup> it is, at the same time a valuable rule of thumb towards regions’ industrial renewal. It indicates that the returns to scale<sup>24</sup> will happen through the improved medium-tech sectors and their relevance as a building base for high-tech sectors.

- 19 Dominique Foray and others, 'Smart Specialisation – The Concept' [2009] (9) Knowledge Economists Policy Brief 1-5 <[http://ec.europa.eu/invest-in-research/pdf/download\\_en/kfg\\_policy\\_brief\\_no9.pdf](http://ec.europa.eu/invest-in-research/pdf/download_en/kfg_policy_brief_no9.pdf)> accessed 17 June 2018;  
Dominique Foray and others, Guide to Research and Innovation Strategies for Smart Specialisations (RIS 3) (Publications Office of the European Union 2012) 1-119 <[http://ec.europa.eu/regional\\_policy/sources/docgener/presenta/smart\\_specialisation/smart\\_ris3\\_2012.pdf](http://ec.europa.eu/regional_policy/sources/docgener/presenta/smart_specialisation/smart_ris3_2012.pdf)> accessed 17 June 2018;  
Dominique Foray and Xabier Goenaga, 'The Goals of Smart Specialisation' [2013] (1) S3 Policy Brief Series <[http://s3platform.jrc.ec.europa.eu/documents/20182/115084/JRC82213\\_The\\_Goals\\_of\\_Smart\\_Specialisation.pdf/f5908687-6a34-42d7-bfd1-735e882e3681](http://s3platform.jrc.ec.europa.eu/documents/20182/115084/JRC82213_The_Goals_of_Smart_Specialisation.pdf/f5908687-6a34-42d7-bfd1-735e882e3681)> accessed 17 June 2018
- 20 Loet Leydesdorff and Michael Fritsch, 'Measuring the Knowledge Base of Regional Innovation Systems in Germany in terms of a Triple Helix Dynamics' [2005] 10 Freiberg Working Papers 1-26 <[https://tu-freiberg.de/sites/default/files/media/fakultaet-6-3307/fileadmin/Arbeitspapiere/2005/fritsch\\_10\\_2005.pdf](https://tu-freiberg.de/sites/default/files/media/fakultaet-6-3307/fileadmin/Arbeitspapiere/2005/fritsch_10_2005.pdf)> accessed 17 June 2018;  
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Olav R. Spilling, 'On the Re-Emergence of Small Scale Production: The Norwegian Case in International Comparison' [1998] 10(4) Small Business Economics 401-417 <<https://doi.org/10.1023/A:1007947916625>> accessed 18 June 2018
- 21 Loet Leydesdorff and Michael Fritsch, 'Measuring the Knowledge Base of Regional Innovation Systems in Germany in terms of a Triple Helix Dynamics' [2005] 10 Freiberg Working Papers 1-26 <[https://tu-freiberg.de/sites/default/files/media/fakultaet-6-3307/fileadmin/Arbeitspapiere/2005/fritsch\\_10\\_2005.pdf](https://tu-freiberg.de/sites/default/files/media/fakultaet-6-3307/fileadmin/Arbeitspapiere/2005/fritsch_10_2005.pdf)> accessed 17 June 2018
- 22 Roberto Basile, Roberta Capello, Andrea Caragliu, Interregional Knowledge Spillovers and Economic Growth: The Role of Relational Proximity. in Kourtit and others (eds), Drivers of Innovation, Entrepreneurship and Regional Dynamics (Springer 2011) 1-43 <[10.1007/978-3-642-17940-2\\_2](https://doi.org/10.1007/978-3-642-17940-2_2)> accessed 17 June 2018;  
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Adam B. Jaffe, 'Technological Opportunity and Spillovers of R&D: Evidence From Firm's Patents, Profits and Market Value' [1986] 76(5) The American Academic Review <<https://www.jstor.org/stable/1816464?origin=JSTOR-pdf>> accessed 17 June 2018;  
Donato Iacobucci and Enrico Guzzini, 'Relatedness and Connectivity in Technological Domains: Missing Links in S3 Design and Implementation' [2016] 24(8) European Planning Studies 1511-1526 <[10.1080/09654313.2016.1170108](https://doi.org/10.1080/09654313.2016.1170108)> accessed 17 June 2018;  
Roberta Capello and Henning Kroll, 'From Theory to Practice in Smart Specialization Strategy: Emerging Limits and Possible Future Trajectories' [2016] 24(8) European Planning Studies <[10.1080/09654313.2016.1156058](https://doi.org/10.1080/09654313.2016.1156058)> accessed 17 June 2018;  
Rafaele Paci and Stefano Usai, 'Externalities, Knowledge Spillovers and the Spatial Distribution of Innovation' [1999] 49(4) Geographical Journal <<https://doi.org/10.1023/A:1007192313098>> accessed 17 June 2018.
- 23 Ron Boschma and Simona Iammarino, 'Related Variety and Regional Growth in Italy' [2007] (162) Science and Technology Policy Research Electronic Working Paper Series 1-24 <<http://blog.jinbo.net/attach/6556/1192919511.pdf>> accessed 17 June 2018;  
Ron Boschma and Jan G Lambooy, 'Evolutionary economics and economic geography' [1999] 9(4) Journal of Evolutionary Economics 411-429 <<https://doi.org/10.1007/s001910050089>> accessed 17 June 2018;  
Ron Boschma and Ron Martin, 'The Aims and Scope of Evolutionary Economic Geography' [2010] (1001) Papers in Evolutionary Economic Geography <[https://www.researchgate.net/publication/46454626\\_The\\_Aims\\_and\\_Scope\\_of\\_Evolutionary\\_Economic\\_Geography](https://www.researchgate.net/publication/46454626_The_Aims_and_Scope_of_Evolutionary_Economic_Geography)> accessed 17 June 2018;  
Koen Frenken and others, 'Related Variety, Unrelated Variety and Regional Economic Growth' [2010] 41(5) Regional Studies 685-697 <[10.1080/00343400601120296](https://doi.org/10.1080/00343400601120296)> accessed 17 June 2018;  
Matthias Brachert and others, 'Related Variety, Unrelated Variety and Regional Functions: A Spatial Panel Approach' [2013] (01) Papers in Evolutionary Economic Geography 1-25 <<http://econ.geo.uu.nl/peeg/peeg1301.pdf>> accessed 17 June 2018;  
Maryann Feldman and others, 'Innovation in Cities: Science-based Diversity, Specialization and Localized Competition' [1999] 43(2) European Economic Review 409-429 <[https://doi.org/10.1016/S0014-2921\(98\)00047-6](https://doi.org/10.1016/S0014-2921(98)00047-6)> accessed 17 June 2018;
- 24 Returns to scale is used in this specific case in a figurative sense. The term stands for “the rate by which output changes if all inputs are changed by the same factor. Constant returns to scale: a *k*-fold change in all inputs leads to a *k*-fold change in output. Under increasing returns to scale, the change in output is more than *k*-fold, under decreasing returns to scale, it is less than *k*-fold.” Source: OECD, Measuring Productivity: Measurement of Aggregate and Industry-Level Productivity Growth (OECD 2001) 125 <<https://www.oecd.org/sdd/productivity-stats/2352458.pdf>> accessed 19 July 2018

It is against this background that this article elaborates on challenges and attempted solutions in the specific setting of northern sparsely populated areas with Kainuu,<sup>25</sup> North-Eastern Finland as an example including tailoring RIS3 interventions accordingly.

According to the OECD,<sup>26</sup> Kainuu is a 'predominantly rural region', i.e. more than 50% of its population live in rural communities. This classification is confirmed by Nordregio,<sup>27</sup> according to which, Kainuu is a rural region.

In Finland, rural policy emerged as a policy field in its own right in the 1990s. The rural policy system since then has expanded and is today designed to ensure cross-cutting territorial rural development at all levels. "The key focus here has long been about enabling rural areas, including remote areas, to keep pace with urban areas. In recent years, however, regional policy has, as elsewhere, focused increasingly on competitiveness".<sup>28</sup> Thus, the term 'rural development' here, is taken to mean *measures taken to develop rural communities to keep up their competitiveness with urban areas*.<sup>29</sup>

It is worth pointing out that Kainuu is currently going through an intensive overhaul of its policy and innovation system through a confluence of initiatives, including the revision of RIS3 and systematic efforts

to improve the effectiveness of RIS3 delivery. Two examples of these efforts are represented by the Baltic TRAM,<sup>30</sup> a project funded by the Interreg Vb Baltic Sea Region Programme, and BRIDGES,<sup>31</sup> a project funded by Interreg Europe. They are presented here as examples of rural development for two reasons. First and foremost, they appear to be good examples demonstrating the building up of an improved regional innovation system by investing into a distributed knowledge base and of an economy renewal process. Secondly, in the specific setting of Kainuu, they have a mutually complementary character.

## 2. Baltic TRAM: Improving the Regional Innovation System Through a Europeanised Triple Helix

The Baltic TRAM (Transnational Research Access in the Macroregion) project is funded in the context of the 2<sup>nd</sup> call of the Interreg Vb Baltic Sea Region Programme. It is the third step in an effort to test and establish a distributed knowledge base for the regional innovation system, especially when it comes to synchrotron services for product development and

25 Basic facts about Kainuu – area: 20 197km<sup>2</sup>, population: 74 790 inhabitants, population density approximately 3,7 inhabitants/km<sup>2</sup>. It is one of the regions belonging to Northern Finland, and part of the most sparsely populated areas in Europe.

26 OECD, OECD Rural Policy Reviews: Finland (OECD Publishing 2008) 1-298 <<http://www.oecd.org/gov/oecdrruralpolicyreviewsfinland.htm>> accessed 17 June 2018

27 "The OECD later modified its approach with the updated approach recently used in the production of the Rural Policy Review on Finland 2008. The scheme still operates with three classes namely: predominantly rural, intermediate and predominantly urban. (...) Nordregio has developed a classification system that is more suited to the Nordic context but remains quite simple to understand. It operates with two classes, namely, 'rural' and 'mixed'. Once again, population density below or above 150 inhabitants per square kilometre is used as the main criterion but is supplemented with an additional criterion about whether the biggest city of the NUTS3 region is below or above 25 000 inhabitants". Source: Moa Hedström and Helene Littke, 'Perspectives on Rural Development in the Nordic Countries - Policies, Governance, Development Initiatives Based on Discussions and Presentations at Seminars Held by the Nordic Working Group 1b: Future Rural Areas' [2011] (3) Nordregio Electronic Working Paper 17 <<https://www.diva-portal.org/smash/get/diva2:700365/FULLTEXT01.pdf>> accessed 17 June 2018;

Andrew K. Copus, Continuity or Transformation? Perspective on Rural Development in the Nordic Countries (Nordregio 2007) 11 <[https://www.rha.is/static/files/Rannsoknir/2007/Continuity-transformation\\_Rural-Norden.pdf](https://www.rha.is/static/files/Rannsoknir/2007/Continuity-transformation_Rural-Norden.pdf)> accessed 17 June 2018

28 Moa Hedström and Helene Littke, 'Perspectives on Rural Development in the Nordic Countries - Policies, Governance, Development Initiatives Based on Discussions and Presentations at Semi-

nars Held by the Nordic Working Group 1b: Future Rural Areas' [2011] (3) Nordregio Electronic Working Paper 20 <<https://www.diva-portal.org/smash/get/diva2:700365/FULLTEXT01.pdf>> accessed 17 June 2018;

29 The understanding of rural development is based on the review of the following sources: OECD, The New Rural Paradigm: Policies and Governance (OECD Publishing 2006) <<https://doi.org/10.1787/9789264023918-en>> accessed 19 July 2018;

OECD, OECD Rural Policy Reviews: Finland (OECD Publishing 2008) <<http://www.oecd.org/gov/oecdrruralpolicyreviewsfinland.htm>> accessed 19 July 2018;

OECD, New Rural Policy: Linking Up For Growth (OECD 2017) 23 <<http://www.fao.org/family-farming/detail/en/c/522521/>> accessed 19 July 2018;

Rural Policy Committee, Finnish Rural Policy in a Nutshell (Ministry of Economic Affairs and Employment of Finland n.d.) 7, 10 <<https://tem.fi/documents/1410877/2937056/>

Finnish+Rural+Policy+in+a+Nutshell> accessed 19 July 2018; National Priorities of Regional Development 2016-2019: Competitive Regions and Smooth Everyday Life (Ministry of Economic Affairs and Employment of Finland 2016) 17 <<https://tem.fi/en/regional-development-priorities-2016-2019>> accessed 19 July 2018;

Tiina Hartman, Development of Non-agricultural Enterprises in Rural Areas in the EU (Open Repository Thesusus 2015) <[https://www.thesus.fi/bitstream/handle/10024/97365/Hartman\\_Tiina.pdf?sequence=1](https://www.thesus.fi/bitstream/handle/10024/97365/Hartman_Tiina.pdf?sequence=1)> accessed 19 July 2018;

Agency for Rural Affairs, Rural Development Programme for Mainland Finland 2014-2020 (1.2 edn, Agency for Rural Affairs 2014) <[https://www.maaseutu.fi/globalassets/rural\\_fi/rural-program/rural\\_development\\_programme\\_2014-2020.pdf](https://www.maaseutu.fi/globalassets/rural_fi/rural-program/rural_development_programme_2014-2020.pdf)> accessed 19 July 2018

30 Baltic TRAM project: Interreg V B BSR Baltic TRAM #ROO2.

31 BRIDGES project: Interreg Europe PGI 00040 BRIDGES.

improvement, as well as to access to networks of innovation intermediaries linked to research infrastructures of pan-European interest (by that meaning research infrastructures which are indicated in the Roadmap of the European Strategy Forum for Research Infrastructures<sup>32</sup>). The latter is done by defining and establishing a network of Industrial Research Centres. The objective of such a macro-regional network structure is to liaise regions across the Baltic Sea Region to various types of research infrastructures,<sup>33</sup> including large scale research infrastructures, not available in their own regions and which would not be easily replicated as a result of required investment and operational costs and which still would be needed for the scaling up of regional economies.

The impact of Baltic TRAM project in Kainuu would not have been possible without two preceding projects, the Science Link project (funded by the 1<sup>st</sup> call Interreg Vb Baltic Sea Region Programme 2014-20), a RegioStars 2017 finalist,<sup>34</sup> and the Network of Regional Contact Points (NRCPs). The NRCPs was a small Finnish project funded by the Kainuu Structural Funds 2014-20<sup>35</sup> and coordinated by Kainuun Etu Ltd. (the Kainuu regional development entity). The University of Turku was also part of the project. Its contribution of NRCP was the enhanced understanding of the type of interactions needed by regional development companies / innovation agencies and research infrastructures.

The Science Link project (2011-13) documented the need of all regions to receive services from large research infrastructures. Kainuu was one of the partners that benefitted and had also a multiplier effect from the synchrotron experiments. Science Link involved two Finnish regions, West Finland (University of Turku) and Kainuu (Kainuun Etu Ltd.). The intra-regional cooperation proved beneficial on both sides. Therefore, in 2014, Kainuun Etu Ltd., with the active support of the Regional Council of Kainuu, set up a follow-up eight-month-long project called NRCPs that supported further exchanges on material science between Turku and Kainuu.

The result of these coordinated and above all, coherent, constructive, and long-term efforts have culminated in the Baltic TRAM project, whereby material science measurement services have been mainstreamed as a requirement for product improvement and product development. The indication of the mainstreaming comes from the uptake of such services by a new local project in Kainuu to serve a large

range of businesses. The project is planned to be coordinated by Kainuun Etu Ltd.

At this stage the next envisaged steps are to seek feasible solutions to ensure a prolonged operation of the network of Industrial Research Centres, meaning, beyond the Baltic TRAM timeframe or beyond February 2019, and to train innovation intermediaries for synchrotron services linked to the concrete RIS3 industries. Eventually, this on-going work and preparatory stages will result in setting up a sufficient and explicit common reference framework for more permanent cooperation with analytical facilities of various size and scope of offered services.

Baltic TRAM and its predecessor Science Link, both being part of the flagship Baltic Science Link under the Policy Area Innovation of the EUSBSR,<sup>36</sup> help address Kainuu's research needs, enhancing its economic base, and leading to better valorisation of regional research resources. Thus, it comes as no surprise that Science Link has been coined an "eye-opener" by some of the business entities that benefited from the services offered during the project implementation.<sup>37</sup>

32 ESFRI, Strategy Report on Research Infrastructures: Roadmap 2016 (European Commission 2016) <[http://www.esfri.eu/sites/default/files/20160308\\_ROADMAP\\_single\\_page\\_LIGHT.pdf](http://www.esfri.eu/sites/default/files/20160308_ROADMAP_single_page_LIGHT.pdf)> accessed 16 July 2018

33 For more information about the structure and basic operational principles of the network of Industrial Research Centres, please consult the Baltic TRAM section of the earlier published article by Zane Šime and Mārtiņš Legzdīņš, 'Research and Higher Education Cooperation in the Baltic Sea Region' [2018] 24(1) *Latvijas intereses Eiropas Savienībā* 58 – 62 <[http://www.mfa.gov.lv/images/ES/Sabiedribas\\_Informesana\\_ES\\_jaut/ES\\_2018\\_1\\_netam.pdf](http://www.mfa.gov.lv/images/ES/Sabiedribas_Informesana_ES_jaut/ES_2018_1_netam.pdf)> accessed 17 June 2018

34 Baltic TRAM, 'Baltic TRAM predecessor among finalists for RegioStars Awards 2017' (Baltic TRAM) <[https://www.baltic-tram.eu/newsroom/press\\_releases/baltic\\_tram\\_predecessor\\_among\\_finalists\\_for\\_regiostars\\_awards\\_2017/index\\_eng.html](https://www.baltic-tram.eu/newsroom/press_releases/baltic_tram_predecessor_among_finalists_for_regiostars_awards_2017/index_eng.html)> accessed 17 June 2018

35 It is part of Sustainable growth and jobs 2014-2020 - Structural Funds Programme of Finland.

36 For more information on the consecutive role of both projects in building the macroregional or Baltic Sea Region-wide collaboration in innovation, please consult earlier elaborations: Zane Šime, Baltic TRAM Briefing Note 1/2018 'Innovation Voucher Landscape' (Baltic TRAM, April 2018) 5 <[https://www.baltic-tram.eu/sites/sites\\_custom/site\\_baltic-tram/content/e24058/e24059/e66559/e66562/TRAM\\_innovation\\_voucher\\_landscape\\_eng.pdf](https://www.baltic-tram.eu/sites/sites_custom/site_baltic-tram/content/e24058/e24059/e66559/e66562/TRAM_innovation_voucher_landscape_eng.pdf)> accessed 17 June 2018; Zane Šime, 'Multi-Level Governance of Innovation and Smart Specialisation' (Baltic TRAM, October 2017) 7, 16 <[http://s3platform.jrc.ec.europa.eu/documents/20182/198909/Multi-Level+Governance\\_ok/cfaac19d-d8d0-4aab-9638-296053b8d4b3](http://s3platform.jrc.ec.europa.eu/documents/20182/198909/Multi-Level+Governance_ok/cfaac19d-d8d0-4aab-9638-296053b8d4b3)> accessed 17 June 2018.

37 DG REGIO, RegioStars Awards 2017: Presentation of the Finalists (Publications Office of the European Union 2017) 17 <[http://ec.europa.eu/regional\\_policy/sources/projects/regiostars/doc/regiostars/2017/regio\\_stars\\_brochure\\_2017.pdf](http://ec.europa.eu/regional_policy/sources/projects/regiostars/doc/regiostars/2017/regio_stars_brochure_2017.pdf)> accessed 16 July 2018

In addition, the engagement of the CBSS Secretariat in Baltic TRAM has facilitated the policy mapping, as well as overall awareness raising efforts on opportunities offered by research infrastructures to a broader set of audiences, for example, policy makers, including beyond the notable high-level discussions which took place in 2016 during the 1<sup>st</sup> CBSS Science Ministerial held under the CBSS Polish Presidency, as well as the general public. Thus, Baltic TRAM partnership has a multifaceted role, since it addresses also the need to explain the broader role of research infrastructures and their added value in the context of society's prosperity, as raised by such notable expert forums as the European Strategy Forum on Research Infrastructures Innovation Working Group.<sup>38</sup> This is one of the forums or thematic venues which help to highlight the value of smart specialisation.<sup>39</sup> Namely, smart specialisation provides a common conceptual framework and set of terminology for transnational partnerships, which are fully aware of the role smart specialisation brings to the European Research Area.<sup>40</sup> This article, elaborating on the role of research infrastructures, as well as their ties to smart specialisation in the specific setting of sparsely populated areas, is one of the most vivid proofs how the Baltic TRAM partnership extends its outreach beyond its traditional set of stakeholders.

### 3. BRIDGES: Industry Renewal Through Good Practice Transfer and Comprehensive Development of the Strengths of the Medium Tech Sector

The BRIDGES (Bridging competence infrastructure gaps and speeding up growth and jobs delivery in regions) project is an Interreg Europe project approved under the 1st call (10 April 2016). The project

has been conceived as an effort to improve the effectiveness of the delivery of RIS3, by strictly focusing on research-to-business approaches and improvement of regional innovation systems. In the BRIDGES project, Kainuu region is represented both by the Regional Council of Kainuu and Kainuun Etu Ltd.

The project strategy is as follows. As an Interreg Europe project, BRIDGES relies strongly on the identification and transfer of good practices. To enhance the multiplier effect, BRIDGES embedded the good practice transfer effort into more comprehensive options linked, for example, to improving innovation infrastructures, business investments, research-to-business projects and multi-level synergies (multi-region, multi-country, etc). Then, project partners may select one or more of these options to form the focus of their regional action plans. As for all Interreg Europe projects, regional action plans, based on the lessons learnt from the project, are the key channel for achieving results.

For the case of Kainuu, the project strategy and the good practices identified facilitated a methodological overhauling of the RIS3 implementation approaches and opened a range of new opportunities, including economic base reinforcement and renewal, RIS3 ecosystem improvement and policy update. The Kainuu region action plan has been recently formulated (May -June 2018). Figure 1 summarises the action plan concept, consisting of three Actions: Action 1 Lignin production as an emerging industry; Action 2 Berry industry renewal, and Action 3 Policy impact. The policy impact (Action 3) relates to ensuring the required enabling conditions for implementing Actions 1 + 2.

The fields for focusing Actions 1 & 2 are aligned with RIS3 priorities (forest industry side flows for Action 1, and valorisation of raw materials for Action 2). To decide the concrete activities for Actions 1 & 2, Kainuu invested in two feasibility studies. On the one hand, the feasibility studies addressed the integration of selected good practices into the action plan. On the other hand, these studies identified optimal regional resources for proposing concrete development projects (by that meaning, activities). The overall approach was very similar to any Structural Funds programming exercise.

Action 1 focuses on the improvement of the wood processing industry and building on regional medium tech strengths. This is done by testing applica-

38 ESFRI Innovation Working Group, ESFRI Scripta (3rd edn, Dipartimento di Fisica - Università degli Studi di Milano 2018) 126 <[http://www.esfri.eu/sites/default/files/u4/ESFRI\\_SCRIPTA\\_VOL3\\_INNO\\_single\\_page\\_0.pdf](http://www.esfri.eu/sites/default/files/u4/ESFRI_SCRIPTA_VOL3_INNO_single_page_0.pdf)> accessed 17 June 2018

39 ESFRI Innovation Working Group, ESFRI Scripta (3rd edn, Dipartimento di Fisica - Università degli Studi di Milano 2018) 35 <[http://www.esfri.eu/sites/default/files/u4/ESFRI\\_SCRIPTA\\_VOL3\\_INNO\\_single\\_page\\_0.pdf](http://www.esfri.eu/sites/default/files/u4/ESFRI_SCRIPTA_VOL3_INNO_single_page_0.pdf)> accessed 17 June 2018

40 Zane Šime, 'Multi-Level Governance of Innovation and Smart Specialisation' (Baltic TRAM, October 2017) 14 <[http://s3platform.jrc.ec.europa.eu/documents/20182/198909/Multi-Level+Governance\\_ok/cfaac19d-d8d0-4aab-9638-296053b8d4b3](http://s3platform.jrc.ec.europa.eu/documents/20182/198909/Multi-Level+Governance_ok/cfaac19d-d8d0-4aab-9638-296053b8d4b3)> accessed 17 June 2018

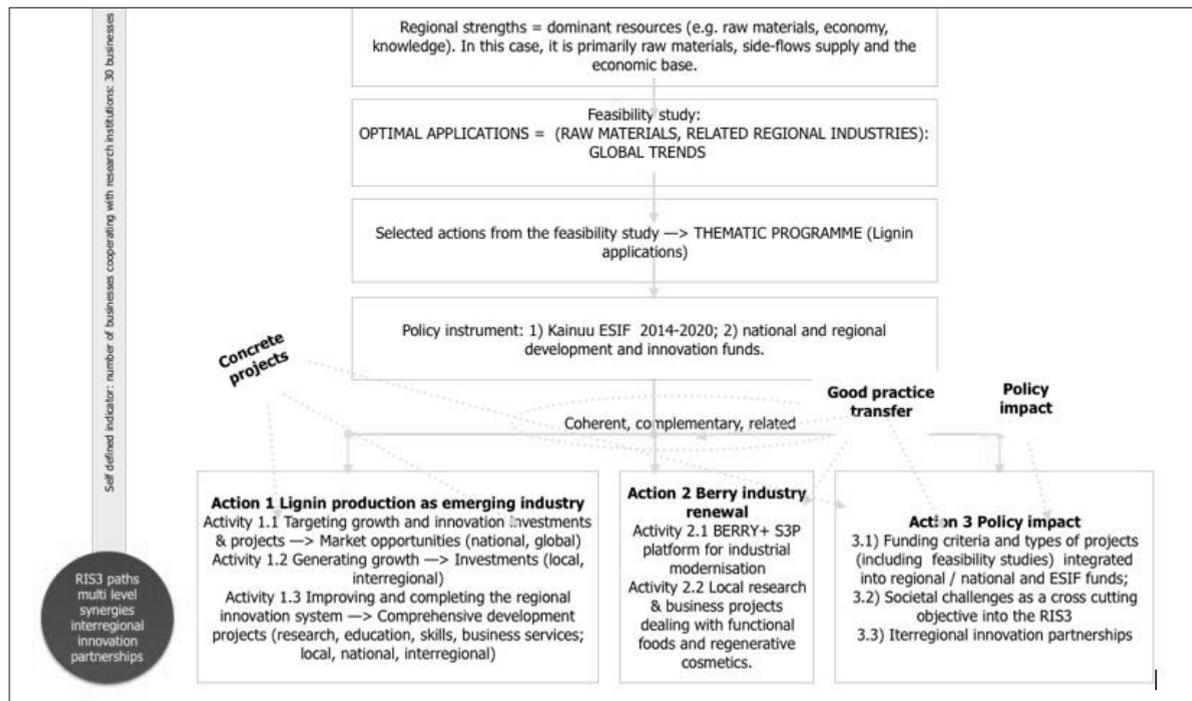


Figure 1: Summary of the Kainuu action plan.

Source: Jouni Ponnikas, Ninetta Chaniotou (2018). BRIDGES project, Kainuu Region Action Plan.

tions of new types of lignin side flows processing. Lignin is a side product (side flow) of the chemical wood processing industry. Valorisation of side flows are among the spearheads of the Kainuu development. The Kainuu wood processing regional stakeholder group proposed the development of a new industry, based on the valorisation of lignin side flows. The selection of concrete initiatives was made on the basis of documented global demand, regional supply potential and inputs by the relevant regional stakeholders. The good practices selected to be adopted (and adapted) demonstrate transferable and affordable methodologies for economic renewal through coherent and complementary activities. The feasibility study was conducted during the period January – April 2018. It identified optimal types of lignin applications aligned with the supply and quality potential of (primarily) Kainuu lignin suppliers and Finnish users (i.e. large businesses operating in Finland and utilising lignin). All these considerations resulted in a programme type of development, introducing the establishment of an emerging (to the region) industry.

Action 2 invests in regional raw materials and research strengths and, in parallel, aims at addressing

critical mass challenges. The result was the decision to set-up a thematic Smart Specialisation Platform (S3P) for industrial modernisation. S3Ps are “instruments to support bottom-up collaboration between businesses and researchers along value chains across EU”.<sup>41</sup> The thematic S3P called BERRY+ has been established to support the renewal of the berry industry. The BERRY+ S3P is led by the Regional Council of Kainuu. A feasibility study is currently (June-July 2018) being implemented to identify concrete strengths and niches for research and excellence-based development. The involvement of research infrastructures is an important feature of BERRY+, in addition to the required membership of regional authorities. This criterion is of strategic importance to the realisation of the Kainuu RIS3. Its selection has been strongly supported by the confluence of several critical inputs, some of which are directly linked to the Science Link and Baltic TRAM projects, others

41 Rafael Ortiz Cebolla and Carlos Navas, 'Supporting Hydrogen Technologies Deployment in EU Regions and Member States: The Smart Specialisation Platform on Energy (S3PEnergy)' [2018] International Journal of Hydrogen Energy 5 <<https://doi.org/10.1016/j.ijhydene.2018.05.041>> accessed 17 June 2018

to Interreg Europe projects, and yet others to the overall enabling framework provided by the European Commission and national institutions.

Action 3 “policy impact”, as already mentioned earlier, is planned to ensure the required enabling conditions for implementing Actions 1 & 2, but in a forward looking manner, since it is also integrating new tools for improving the RIS3 delivery. For example, Action 3 Activities include the (anticipated) references to project criteria & funding provisions for implementing Actions 1 & 2. However, it also proposes including societal challenges or circular economy (lesson learnt from one of the BRIDGES good practices) and interregional innovation partnerships as strategic tools of the RIS3 delivery (lesson learnt from the recent initiatives of the European Commission’s Joint Research Centre).

The Kainuu action plan – as all the BRIDGES regions action plans – will evolve further, following the peer review planned for early September 2018. It is expected to be finalised and endorsed during the first quarter of 2019. It goes into implementation as of April 2019.

#### 4. Complementarity Between Baltic TRAM and BRIDGES: Strategic Coherence and On-the-Ground Added Value.

The establishment of the network of Industrial Research Centres during the Baltic TRAM project, as a tool for linking businesses to research infrastructures of various scales, will serve Kainuu (and Kainuu RIS3) in two ways. On the one hand, it will provide to the region access to needed but lacking research infrastructures and will market the services of existing research infrastructures outside the region, including beyond the borders of Finland. Thus, it will support the integration of Kainuu in a globalised triple helix both on the demand and the supply sides.

On the other hand, the implementation of Kainuu RIS3 will create, from here on, additional, regu-

lar demand for advanced research services in three ways:

- as applications to businesses and products,
- as research-to-research projects,
- as scaling up and regularly updating business innovation and support services.

It follows that the integration of the region into a global (or European) space will be enhanced through intensified mutual information (the earlier noted Leydesdorff & Fritsch indicator). A constructed regional advantage will result from the RIS3 specialisation efforts. Following this reasoning, returns to capital should be expected to be enhanced through increased turnover resulting from more competitive products.

The two project-based case studies presented, indicate above all the value of transnational and interregional cooperation as enabling agents (not only frameworks) for regional scaled-up development. This is possible thanks to the programming provisions and objectives of such initiatives in the first place. It would be important to eventually encourage, in parallel, stronger coherence of the objectives prioritised in national and regional development priorities with those of the territorial cooperation programmes.

Last but not least, this elaboration should be viewed also in light of the recently suggested potential solution of Macro-regional Integrated Territorial Investment,<sup>42</sup> where Baltic TRAM developments might serve as one of the insights on the strengths and existing challenges faced in the EUSBSR flagship development.

Both Baltic TRAM and BRIDGES projects offer further insights which should be taken into consideration, once further elaboration on the potential setting up of Thematic Partnerships is considered in the EUSBSR setting.<sup>43</sup> Thematic Partnerships might to a certain extent be a useful suggestion for the macro-regional setting, if the insights from the of interregional thematic platforms established by the S3P would be taken into consideration. Thus, in further discussions on this suggested measure for better engagement of regional and local authorities, some insights, bringing together experiences, policies, needs and well-defined concepts might help to ensure that this potential macro-regional new form of collaboration would be characterised by a clear functional distinction and thus obvious value-added.

42 Maria Toptsidou and Kai Böhme, EUSBSR After 2020: Governance Remastered? (2018) 41 <[http://www.balticsea-region-strategy.eu/attachments/article/591006/EUSBSR-after2020\\_Governance-Remastered\\_FinalReport.pdf](http://www.balticsea-region-strategy.eu/attachments/article/591006/EUSBSR-after2020_Governance-Remastered_FinalReport.pdf)> accessed 17 June 2018

43 Ibid, 37-39

Namely, this is an invitation to work towards distinguishing this suggested engagement form from such existing options of multilateral engagement as Interreg Baltic Sea Region Programme's launched capitalisation process via project platforms,<sup>44</sup> the CBSS Baltic 2030 Action Plan's<sup>45</sup> activation processes, the European S3Ps, as well as existing macro-regional flagships or projects which have clear thematic focus, e.g., Baltic TRAM adherence to materials science.

Therefore, this article should be viewed as further food for thought for the overall thinking among policy-makers on the potential upcoming modalities of macro-regional governance, encouraging exploration of the full spectrum of existing engagements, so that new suggestions are based on thorough recognition of their unique value. This would avoid the potential pitfall of replicating existing facilitative tools adopted by other actors or implemented on other governance levels. More of the same is not needed. Genuine novelty in designing preconditions for the creation of (preferably, intellectually versatile) value networks might be worth exploring through a thorough examination of the multi-faceted value added brought by existing initiatives.

### III. Conclusions: Smart Specialisation as an Anchor of Closer Transnational Ties

Kainuu's recently undertaken overhaul of its research and development governance and implementation framework comes as a no surprise, since "it is at the core of" smart specialisation "to encourage regions and countries to re-examine their approach to R&D and innovation".<sup>46</sup> Thus, this article is published at an important time, when the region placed in the limelight by the article undergoes an extensive policy-learning, evaluation and redrafting process to upgrade the governing preconditions of its innovation ecosystem and economic growth. The value of this article lies within it being a testimony or a typical smart specialisation text book example of practical developments.

Looking forward, a note on the report "EUSBSR After 2020: Governance Remastered?", produced for the most recent Annual Forum of the EUSBSR held in Tallinn, might offer further ideas where smart specialisation debates might gain further fertile ground

in the Baltic Sea Region setting, ahead of the EUSBSR 10<sup>th</sup> anniversary debates to be held on 12-13 June 2019 in Gdańsk.<sup>47</sup> The most recent report dedicated to the EUSBSR suggests the establishment of Thematic Partnerships to, among other goals, strengthen the interaction between different governance levels present in the Baltic Sea Region, especially putting emphasis on the engagement of local and regional government.<sup>48</sup> Thus, it is a good timing to point out that such aspirations are well rooted in several existing macro-regional initiatives, where Kainuu is also engaged. The examples discussed in this article might serve as valuable reference points once the details of the potential new macro-regional engagement modalities are honed.

Such vibrant collaboration projects as Baltic TRAM and other initiatives help address a number of constraints faced by the regional authorities. First of all, as it was argued in relation to the distributed helix actors, it helps to shift the mindset from pure regional administrative borders to extended ties across Europe.

An engagement in the European debates revolving around smart specialisation helps to gain better awareness and contextual understanding about the potential growth areas and international competitiveness potential of the region,<sup>49</sup> thus departing

44 Interreg Baltic Sea Region Programme, 'Project Platforms Approved for the First Time in Interreg Baltic Sea Region' (Interreg Baltic Sea Region Programme, 7 June 2018) <<https://www.interreg-baltic.eu/news-detail/news/project-platforms-approved-for-the-first-time-in-interreg-baltic-sea-region.html>> accessed 17 June 2018

45 CBSS, 'Endorsement of the Baltic 2030 Action Plan: Realising the Vision' (Council of the Baltic Sea States, 27 June 2017) <<http://www.cbss.org/endorsement-baltic-2030-action-plan-realising-vision/>> accessed 17 June 2018

46 Slavo Radošević and others, *Advances in the Theory and Practice of Smart Specialization* (Academic Press, an imprint of Elsevier 2017) 348

47 Lina Marcinkutė, 'European Union Strategy for the Baltic Sea Region (EUSBSR)' (Østlandssamarbeidet - Eastern Norway County Network, 25 April 2018) 11 <<http://www.ostsam.no/wp-content/uploads/2018/04/DG-Regio-Lina-Marcinkute.pdf>> accessed 17 June 2018

48 Maria Toptsidou and Kai Böhme, *EUSBSR After 2020: Governance Remastered?* (2018) 39 <[http://www.balticsea-region-strategy.eu/attachments/article/591006/EUSBSR-after2020\\_Governance-Remastered\\_FinalReport.pdf](http://www.balticsea-region-strategy.eu/attachments/article/591006/EUSBSR-after2020_Governance-Remastered_FinalReport.pdf)> accessed 17 June 2018

49 Peter Wostner, 'From Projects to Transformations: Why Do Only Some Countries and Regions Advance? The Case of the Slovenian S4' [2017] 5(1) *European Structural and Investment Funds Journal* 86 <<https://estif.lexxion.eu/article/estif/2017/1/11>> accessed 17 June 2018

from the earlier identified trend of research strategies being characterised by “excessive inward orientation or domestic-led modernization”.<sup>50</sup>

Secondly, the Kainuu experience testifies that concepts such as place-based development sound rather simple in terms of the guiding principles, but turn out to be complex and challenging when it comes to implementing them with the goal of achieving harmonious development and supporting cohesion throughout Europe. Therefore, transnational partnerships have an important role to play in advancing the thinking of such engaged regions as Kainuu on what are its competitive strengths and unique expertise, which should be supported with further investments to sustain the economic growth and overall prosperity of the region. It is also a learning in practice for other actors, therefore the value of diversity in establishing partnerships should also be highlighted in terms of involving representatives of various governance levels.<sup>51</sup>

Thirdly, among the contextual challenges faced by sparsely populated regions, is the small critical mass of the regional economy, coupled with extensive needs for scaling up and diversification of the economic base. Active engagement in macro-regional and European consortiums facilitates identification of potential ways of integrating in well-performing economic contexts. Baltic TRAM partnership’s on-going work towards honing its proposed research voucher scheme<sup>52</sup> and the on-going work of the net-

work of Industrial Research Centres established in the Baltic Sea Region are some of the practical solutions to extend the mutually beneficial ties established during the Baltic TRAM project implementation.

Fourthly, as indicated earlier in the article, the Baltic Sea Region benefits from project partnerships which assemble very diverse institutional perspectives, originating from the public and private sectors, different innovation ecosystems, national governance systems and traditions. In such considerable diversity, having a common language, namely, being well versed and able to express oneself in the smart specialisation terminology, is a great advantage which should not be underestimated. Thus, smart specialisation might not be the *lingua franca* of the business sector housed by the EU, but it is an established set of patterns structuring the economic growth discourse and practical cooperation across the Baltic Sea Region and other parts of the EU, well known and favoured by a variety of stakeholders.

While to some such an acknowledgement of maintaining mutually understandable general units of expression might seem banal or self-evident, the exponential growth of terminology and various names and concepts in the macro-regional governance setting should serve as a warning that the explicitness of smart specialisation should not be taken for granted. The so-called macro-regional “lingo jungle” has been already met with a suggestion to introduce more coherence among four sister strategies as a potential means to facilitate interaction between them.<sup>53</sup> Thus, the macro-regional strand of Cohesion Policy should serve as a warning to avoid geographic compartmentalisation of smart specialisation terminology. Of course, to a certain extent it is unavoidable, bearing in mind some basic national needs to name the units established to support smart specialisation implementation, such as the Strategic Research and Innovation Partnerships<sup>54</sup> established in Slovenia. However, such geographic diversity of terminology should ideally be kept to a minimum. One of the factors which might serve to reduce such risks in the smart specialisation field is the fact that the experimentalist character is much more pronounced in the macro-regional setting than in the RIS3 one. Namely, smart specialisation “as it has been applied so far has reduced experimentation only to the initial selection process, while implementation is run as a conventional public funding program”.<sup>55</sup> The

50 Slavo Radošević and others, *Advances in the Theory and Practice of Smart Specialization* (Academic Press, an imprint of Elsevier 2017) 250

51 Reference to the earlier expressed encouragement in section 4 to establish intellectually versatile value networks.

52 First outline of this suggestion is accessible in: Zane Šime, *Baltic TRAM Briefing Note 1/2018 'Innovation Voucher Landscape'* (Baltic TRAM, April 2018) <[https://www.baltic-tram.eu/sites/sites\\_custom/site\\_baltic-tram/content/e24058/e24059/e66559/e66562/TRAM\\_innovation\\_voucher\\_landscape\\_eng.pdf](https://www.baltic-tram.eu/sites/sites_custom/site_baltic-tram/content/e24058/e24059/e66559/e66562/TRAM_innovation_voucher_landscape_eng.pdf)> accessed 17 June 2018

53 Maria Toptsidou and Kai Böhme, *EUSBSR After 2020: Governance Remastered?* (2018) 36 <[http://www.balticsea-region-strategy.eu/attachments/article/591006/EUSBSR-after2020\\_Governance-Remastered\\_FinalReport.pdf](http://www.balticsea-region-strategy.eu/attachments/article/591006/EUSBSR-after2020_Governance-Remastered_FinalReport.pdf)> accessed 17 June 2018

54 Peter Wostner, 'From Projects to Transformations: Why Do Only Some Countries and Regions Advance? The Case of the Slovenian S4' [2017] 5(1) *European Structural and Investment Funds Journal* 87 <<https://estif.lexxion.eu/article/estif/2017/1/11>> accessed 17 June 2018

55 Slavo Radošević and others, *Advances in the Theory and Practice of Smart Specialization* (Academic Press, an imprint of Elsevier 2017) 347

macro-regional framework is highly experimentalist, with a programmed approach, e.g., in such forms as Macro-Regional Integrated Territorial Investment<sup>10</sup> being at a rather nascent phase of public debates.

To sum up, a lesson learnt from the macro-regional area is that there is a great value in being understandable EU-wide, especially in the light of the EU smart specialisation approach being “the biggest ongoing innovation policy experiment in the EU, if not the world”,<sup>56</sup> which is attracting interest from across the globe<sup>57</sup> and where a certain proportion of entities are taking part “in an “all in” style, i.e. experimenting with virtually all the available resources”.<sup>58</sup> A lion’s share of the credit for the maintenance of an overall well-understood terminology goes to the Smart Specialisation Platform and its holder the European Commission’s Joint Research Centre. The Centre serves well the overall European interests by ensuring regular dissemination of insightful and con-

tent-rich, yet easily understandable, reports and working documents on smart specialisation, which have been widely cited in various previous Baltic TRAM-related publications. Publications of the Smart Specialisation Platform serve as important enablers for understanding the economic growth factors and innovation trends unleashed by various European Commission initiatives, as well as EU regulatory and governance frameworks.

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- 56 Slavo Radošević and others, *Advances in the Theory and Practice of Smart Specialization* (Academic Press, an imprint of Elsevier 2017) 30
- 57 Dimitrios Kyriakou, 'Smart Specialisation Concepts and Significance of Early Positive Signals' [2017] 5(1) *European Structural and Investment Funds Journal* 4 <[http://www.lexxion.de/images/pdf/Smart\\_Specialisation\\_Concepts\\_and\\_Significance\\_of\\_Early\\_Positive\\_Signals.pdf](http://www.lexxion.de/images/pdf/Smart_Specialisation_Concepts_and_Significance_of_Early_Positive_Signals.pdf)> accessed 17 June 2018
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