



EUROPEAN
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Innovation Voucher Landscape

Baltic TRAM Briefing Note 1/2018



Baltic TRAM in Brief

The Baltic Transnational Research Access in the Macroregion (TRAM) project offers companies free access to state-of-the-art analytical research facilities across the Baltic Sea Region, providing technical and scientific expertise to help solve challenges associated with developing new products or services.

The overall objective is to boost innovation, secure the implementation of smart specialisation strategies, and encourage entrepreneurship by supporting small and medium-sized enterprises – thus contributing to the regional effort of making the Baltic Sea Region innovative, sustainable and competitive.

To achieve this, Baltic TRAM also feeds into the transnational research and innovation agenda. It performs benchmarking analysis on national roadmaps for research infrastructures and smart specialisation strategies, and provides recommendations to policymakers.

Baltic TRAM builds on the findings of Science Link, an initiative which received EU project funding from 2012-2014. Science Link is currently operated as a network, and its purpose is to encourage innovation and entrepreneurship in the Baltic Sea Region, to strengthen the macroregion's competitiveness in a global context. It supports industrial research with synchrotron radiation and neutrons at research facilities in northern Europe. The aim is to create awareness of the possibilities offered at research facilities in the macroregion and to show how research and development at these sites can contribute to innovation within European industry.

Project budget: 4,157,013.60 EUR

Interreg Vb Baltic Sea Region Programme contribution: 3,207,699.40 EUR

The project runs from March 2016 until the beginning of 2019.

Baltic TRAM website: www.baltic-tram.eu

Month of publishing: April 2018

Output of the Work Package 3: Baltic TRAM Briefing Note 1/2018 (corresponding to the Baltic TRAM Activity 3.3)

Front page photo credit: Pierre Châtel-Innocenti on Unsplash

Output of the Baltic TRAM Work Package 3 led by the Project Partner 14 the CBSS Secretariat. The Baltic TRAM Briefing Note 1/2018 has extensively benefited from the valuable inputs of the whole Baltic TRAM partnership. The responsibility for the whole briefing note, including any possible mistakes, lies with the Baltic TRAM Work Package 3 Leader Zane Šime.

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Introduction

Baltic TRAM began 2018 with a wealth of insights in research-business cooperation, having obtained more than half of business enquiries submitted during the open call. This experience has facilitated further thinking on how to advance and build upon this initial engagement with businesses and further enhance their innovation potential.

Building on the findings of its predecessor **Science Link** (Minniberger & Ibert, 2013, p. 12), one potential solution Baltic TRAM network is considering for maintaining these research-business ties, is a voucher scheme that would be implemented after the closure of the third open call and the overall implementation of the Interreg Vb Baltic Sea Region (BSR) Programme's funded project phase. The briefing note is designed in order to explore the voucher scheme concept in more detail, specifically with a voucher scheme's relevance to the operational phase of the transnational network of Industrial Research Centres in the post-Baltic TRAM project period.

To illustrate how this suggestion fits in a wider set of similar offers, Baltic TRAM has undertaken a preliminary mapping exercise, which serves also as a follow-up activity to the recommendations expressed in relation to Science Link. This primarily comes from the suggestion that national support programmes could be used as complementary funding sources, in case companies would be interested in requesting follow-up activities to the measurements obtained during the Science Link offering neutron studies or synchrotron radiation free of charge (Minniberger & Ibert, 2013, p. 12). The Baltic TRAM partnership does not claim this mapping exercise to be exhaustive; one key reason being that Baltic TRAM network's common denominator can be themed as "material measurements sciences". Thus, its major interest lies in exploring in greater detail innovation vouchers which offer contracting of materials analysis from academic centres or research institutions.

Baltic TRAM bears in mind that its interest is primarily linked to the potential development of an innovation voucher scheme with characteristics of the so-called "first generation" vouchers.¹ This type of vouchers, in such Baltic TRAM countries as Finland, has proven to be a good incentive to introduce participating companies to an outside expertise for their innovation process, which some of businesses had never been acquainted with (OECD Publishing, 2011, p. 252). However, bearing in mind the overall shared smart specialisation areas identified in the BSR Policy Briefing 4/2017 (Mickus et al., 2017, p. 30), Baltic TRAM is interested in learning

¹ Reference to the 1st generation vouchers is tailored for those voucher programmes which support technology co-operation between SMEs and research centres. The 2nd generation vouchers are characterised by a number of variations and a greater focus on service innovation. (Greenovate! Europe, n.d.) The 2nd generation "support schemes allow SMEs to get advice on their innovation and expansion plans, business strategies, on any other innovation initiative". (OECD Publishing, 2011, p. 249)

from the findings crafted in the context of the innovation voucher schemes for health sector with a focus on bio-technologies, digital growth with a focus on information and communications technology (ICT) and sustainable energy.

Baltic TRAM Briefing Note 1/2018 offers wider audiences a more nuanced insight in the partnership's thinking on keeping up the strong momentum of science-business cooperation generated by the Baltic TRAM open calls and – as outlined also by the European Commission – further assist interested businesses to enhance their competitiveness through assistance in development of innovative products or services in their final stages of commercialisation (Baltic Science Network, 2017a, p. 4, 2017b). The subsequent paragraphs of the Baltic TRAM Briefing Note 1/2018 are structured according to the basic multi-level governance pattern elaborated in the Baltic TRAM report “Multi-Level Governance of Innovation and Smart Specialisation” (Šime, 2017). It highlights some of the national, transnational and European schemes which have been mapped or even implemented by the Baltic TRAM project partners. As such, the Baltic TRAM Briefing Note 1/2018 builds on pure desktop findings about the voucher landscape and also offers a more nuanced insight in some of the schemes from a perspective of an implementer.

It should be made clear that Baltic TRAM's reasoning for suggesting such a scheme is based on the fact that, after the conclusion of the Science Link project phase² there were no additional nuanced or concrete suggestions on the initially-suggested multi-step financial model³ elaborated or implemented. Likewise, after the Science Link project closure there was no systematic monitoring done in terms of obtaining reliable and concise data on how many companies (in receipt of the Science Link measurements) followed up on this initial engagement with a subsequent enquiry for measurements (in one of the network's assembled facilities) being ready to partly or fully cover the costs associated with the measurement.

Therefore this Baltic TRAM Briefing Note 1/2018 should not be viewed solely in the context of the Baltic TRAM project's developments, but also as an example of how a wider set goals of such overarching focus on the so-called “emerging industries” (Ketels & Protsiv, 2016; Vezzani et al., 2017) and initiatives as the Communication “Investing in a smart, innovative and sustainable Industry: A Renewed EU Industrial Policy Strategy” (European Commission, 2017) are acknowledged by the macroregional networks with a special focus on facilitating the uptake of promising innovation, to promote the development of smart and sustainable businesses.

² This Science Link project status should not be confused with the Baltic Science Link flagship status established under the Policy Area Innovation of the EU Strategy for the Baltic Sea Region. Earlier Baltic TRAM elaboration on this matter is outlined in “Multi-Level Governance of Innovation and Smart Specialisation”. (Šime, 2017, pp. 7, 16)

³ To find out more details about the suggested model, please consult “Smart Specialisation in Science”. (Minniberger & Ibert, 2013, p. 12)

National Voucher Programmes

Since they were first applied in the region of Limburg (OECD Publishing, 2011, p. 249) and tested by the Dutch innovation agency Senter Novem (Greenovate! Europe, n.d.), transnational, national and regional level innovation voucher schemes have become a widespread support measure.

This approach has been adopted throughout the EU for over a decade in order to change the overall trend or perception that “SMEs tend to have limited exposure to public knowledge providers such as universities and research organisations as they may see such institutions as irrelevant to their business activities or be unwilling to invest in the search costs necessary to identify relevant providers” (OECD, 2010, p. 1). Such notions have been witnessed in the EU setting where “the lack of the R&D agenda is a common problem in many small companies in Poland. The owners of these companies are generally engaged into the day-to-day operational activities and lack time and resources for the design of the R&D activities” (European Commission, n.d.-b).

However, such findings should not be seen as necessarily country-specific, since the generalisations of this trend among SMEs⁴ have been already identified in studies dedicated to the ICT innovations’ uptake by the term “myopia”; in other words, the tendency showcased by the SMEs “to opt for short-term gains at the expense of long-term strategic decisions” (Valbonesi & Biagi, 2016, p. 11). Last but not least, the Science Link support also serves as a proof that SMEs interested in research-intensive solutions greatly appreciate tailored services and support measures. Otherwise, in the absence of Science Link support, the enterprises would (for organisational reasons) find the overall process of approaching research infrastructures too complicated and financially too burdensome (Minniberger & Ibert, 2013, p. 15).

Until now, the Baltic TRAM open call has offered more than 30 companies a divergence from the above elaborated unfavourable trend (Wise, 2018, p. 4). Baltic TRAM open call has allowed to take a step on the innovation path by allowing SMEs across the EU to explore Research & Development-related solutions through extensive consultations offered by the Industrial Research Centres regarding the analytical services matching their specific development’s needs.

The national and regional voucher scheme designs vary among countries of the Baltic Sea Region, in terms of the needs of the business sector addressed, amount of funding offered, requirements of own contribution, along with other variable aspects. These nuances are discussed in greater detail in the subsequent paragraphs with country or region specific illustrative examples.

⁴ Baltic TRAM understanding of a small and medium-sized enterprise (SMEs) follows the [EU classification](#). (European Commission, n.d.)

A general trait seen in many cases, the voucher schemes are tailored to be applied with a focus on services offered within the boundaries of a specific country, or to procure the services from analytical facilities in a specific country. In terms of the focus on supporting companies based in a specific countries, Business Finland offers funding for companies registered in Finland (Business Finland, n.d.-b). Enterprise Estonia does the same for businesses registered in Estonia.

Likewise, the regional innovation voucher programmes administered in Poland are an illustrative example of the geographical restrictions of the currently implemented models. For a more extensive insight please consult an example of Małopolska region outlined in Annex 1 of this Baltic TRAM Briefing Note 1/2018. In addition, the Innovative Startups programme (*Innovativa Startups*), managed by the Sweden's innovation agency Vinnova, is tailored for businesses based in Sweden or companies which have a branch in Sweden. The financed project activities must take place in Sweden (Vinnova, 2017, p. 5).

Regarding the previously-mentioned national innovation voucher schemes' restrictions towards a procurement of services offered by the analytical facilities based in a specific country, a good example of this can be found in the Lithuanian national innovation voucher scheme. It is aimed at offering support to the early stage research and development and technical feasibility studies. The Lithuanian innovation voucher programme, managed by the Agency of Science, Innovation and Technology (MITA), is offered to companies interested in procuring one out of almost 2500 listed research and development services. The applicants to the innovation voucher may receive up to 5,682 EUR. The defined maximum sum must entail not more than 70% of the total eligible costs associated with the procured services. (MITA, 2017)

Furthermore, lump sum-wise, certain commonalities and differences can be identified among various innovation voucher programmes managed by the national authorities. Starting from small-scale preferences, the insights of the innovation voucher managed by the Investment and Development Agency of Latvia (LIAA), testify that not all SMEs are keen on applying for the full voucher totalling up to 25,000 EUR (with a required 40% own contribution).⁵ Instead, SMEs have shown readiness to benefit from comparatively smaller vouchers of 3,000 EUR with lower co-financing requirements and a faster testing pace, as it would offer quicker and much more affordable results. In addition, it should be pointed out that Business Finland offered innovation voucher for start-ups revolves around similar support offer well below 10,000 EUR. Namely, the Finnish offered innovation voucher is

⁵ The voucher is given for three main types of activities:

- research (feasibility studies, applied research, experimental development),
- testing and certification,
- securing intellectual property rights.

tailored for expenses up to 5,000 EUR + value added tax (VAT), totalling 6,200 EUR without the requirement of own contribution (Business Finland, n.d.-a).

Whereas in Denmark, the innovation support measures span a range starting from a similar base (as earlier indicated in the case of the innovation voucher for start-ups managed by Business Finland) and scales up to a significantly higher financial ceiling. Namely, “under InnoBooster Innovation Fund Denmark can co-finance up to 33% of the company’s relevant expenses in connection with the InnoBooster project between DKK 50,000⁶ and 5 million⁷” (Innovation Fund Denmark, 2018, p. 7).

Some national innovation voucher schemes can only be awarded once for each business, but with a tailored two-step offer. For example, such is the case of innovation vouchers (with a maximum of 4,000 EUR and 20% own contribution, the total volume of the program is 4 million EUR in the multiannual financial framework 2014-2020) offered by Enterprise Estonia (Enterprise Estonia, n.d.-b). The innovation voucher, once proven its value, can be followed by the next grant scheme: the development voucher. It is provided to the SMEs whose development ideas need advanced professional know-how from specialists in order to be implemented.

The Enterprise Estonia-managed development voucher provides up to 20,000 EUR with 30% self-financing rate for the applicant. It is essentially a supporting measure for preliminary research. The results of the development voucher should enable the entrepreneur to gain comprehensive knowledge on whether their development idea has the potential necessary for continuing the development process in other stages (Enterprise Estonia, n.d.-a).

In the case of both Estonia’s innovation and development vouchers a company may apply once for each of the support measures, which entails also the requirement for compliance with de minimis aid regulations. From the viewpoint of clients – entrepreneurs and service providers like universities – the voucher scheme is not demanding in terms of paperwork and is characterised by a quick response (processing time is up to ten and 20 days respectively). Therefore, quite a number of SMEs opt for the innovation voucher support for their first encounter with service providers.

Similarly, other national voucher schemes, such as the Innovative Startups Programme (*Innovativa Startups*) managed by Vinnova in Sweden offers a two-step support, where the first voucher scales up to a maximum of 300,000 SEK⁸ (without

⁶ 6715 EUR according to the Currency Converter of the European Central Bank ([as of 28 February 2018](#))

⁷ 671 456 EUR according to the Currency Converter of the European Central Bank ([as of 28 February 2018](#))

⁸ 29 515 EUR according to the Currency Converter of the European Central Bank ([as of 2 March 2018](#))

own contribution requirement) and the potential consecutive one – up to a maximum of 900,000 SEK⁹ (Vinnova, n.d.).

In comparison to the restrictive approach of offering a certain type of innovation voucher to the same business entity only once, Business Finland has a more flexible precondition making this national innovation support measure more accessible since it is not offered strictly on one-off basis.

Instead, the restrictions are set in place in order to avoid simultaneous accumulation of various support measures. The Finnish innovation voucher cannot be obtained by the businesses or a company within the same group which have already obtained an innovation voucher administered by Business Finland or Tekes during the current or previous year, or an innovation project already funded by Business Finland or Tekes is being implemented, or another application for Business Finland or Tekes' administrated funding has been filed (Business Finland, n.d.-a).

Similarly, the simultaneous accumulation of support measures is also restricted by the Danish InnoBooster's pre-condition that a company or a specific contact person can only apply for InnoBooster support with one application at a time. If the submitted application is rejected, then the same entity is allowed to submit a new application (Innovation Fund Denmark, 2018, p. 5). In addition, the Swedish regional innovation vouchers (*innovationscheckar*) and vouchers for intellectual property development (*IP-checkar*) offered by ALMI and IUC SYD (in Region Skåne) in a range of up to 100,000 SEK¹⁰ have the accumulation restriction which is formulated as the eligibility pre-condition that grants received by Vinnova over the last five years must not exceed 50 000 SEK¹¹ (Almi Skåne, 2015).

To counterbalance these two examples, the Polish national and regional (e.g. Małopolska example elaborated in the annex 1) examples testify to the opportunity in some of the countries of the Baltic Sea Region to acquire national innovation vouchers multiple times.¹²

As elaborated in previous paragraphs, some nationally and regionally offered innovation vouchers allow procurement of services within the range of the specific service menu, region or country.

However, three exceptions in this regard – Denmark, Estonia and Latvia – should be mentioned.

⁹ 88 545 EUR according to the Currency Converter of the European Central Bank ([as of 2 March 2018](#))

¹⁰ 9838 EUR according to the Currency Converter of the European Central Bank ([as of 12 March 2018](#))

¹¹ 4919 EUR according to the Currency Converter of the European Central Bank ([as of 12 March 2018](#))

¹² The Polish Agency for Enterprise Development (PARP) offers innovation vouchers to a business with headquarters in Poland multiple times. There is no limitation either with regard to the number of applications an enterprise can submit per round (four rounds per year in 2018) or the number of applications an enterprise can submit per year. The only limitations that apply are the de minimis rule and the prohibition of double financing.

Denmark's InnoBooster allows to contract knowledge supplier from any country. Nevertheless, the relevance of the choice and the relations between the applicant and the supplier will be checked and evaluated. In Estonia, the business entity can use the awarded grant to contract not only the approved service provider based in Estonia, but also corresponding institutions in other EU Member States, which are listed on the website of the European co-operation for Accreditation (Enterprise Estonia, n.d.-b). The innovation voucher offered by the Investment and Development Agency of Latvia (LIAA) can be spent to cover the costs of specific services which are not offered by the analytical facilities based in Latvia. In other words, the public research organisations based in other EU Member States are eligible service providers. Thus, these three examples demonstrate a certain level of support for the procurement of the transnationally leading expertise.

Transnational and European Voucher Programmes

Transnational voucher schemes come to the fore as support measures which ensure greater availability of services in several countries. One of the well-known initiatives across the Baltic Sea Region is **BSR Bioeconomy Innovation Vouchers** which are offered by the Interreg Vb Baltic Sea Region Programme supported **BSR Stars S3**¹³ project, with co-financing from the Nordic Council of Ministers.

While Baltic TRAM has a considerably wide thematic coverage in terms of support offered to different smart specialisation strands, the indicated transnational BSR Stars S3 voucher is aimed at "strengthening smart specialisation in the field of bio-/circular economy", to allow businesses operating in Denmark, Finland, Lithuania, Norway and Sweden to explore the unique test excellence of VTT Technical Research Centre of Finland, Danish Technological Institute, Paper and Fiber Research Institute of Norway as well as RISE Research Institute of Sweden (BSR Stars, 2017). The BSR Bioeconomy Innovation Voucher is also of notable importance, since it tallies with Baltic TRAM's mapped high topicality of bio technologies in relation to the health sector (Mickus et al., 2017, p. 30).

Last but not least, Baltic TRAM's interest in BSR Stars S3 is also related to the project's "focus [...] on monitoring the status and analysing variables that influence innovations. In more practical terms, regional authorities would with this tool be able to verify whether funds allocated to Research & Development (R&D) lead to the creation of new companies in the region or determine the factors that increase a company's potential to go beyond a regional reach" (Interreg Baltic Sea Region, 2017). Baltic TRAM bears in mind that this is a work in progress and looks forward

¹³ BSR Stars S3 section on the BSR Stars website: <http://www.bsr-stars.eu/bsr-stars-s3/>

to getting acquainted with the BSR Starts S3-proposed monitoring model, due to be presented during the first half of 2019.

Centrope voucher scheme supported by the Interreg Central European 2007-2013 Transnational Cooperation Programme (Centrope, n.d.), has been highlighted by the Interreg Europe as a transnational good practice. The implementation of the voucher scheme concluded with a recommendation to establish a voucher scheme which offers differentiated amount of allocated financial resources so as to process business enquiries requiring varied amount of research performance (in terms of allocated hours and service range). Unfortunately, this general conclusion was not developed with further insights in the suggested financial scale of the vouchers, thus there is no further practical guidance that Baltic TRAM can obtain from the overall conclusions of the Centrope voucher scheme's implementation. Nevertheless, taking stock of the national insights in the innovation voucher offer and demand, Baltic TRAM is well placed to suggest its scaling.

Horizon 2020 funded **INCluSilver**¹⁴ (Innovation in personalised Nutrition through Cluster cooperation in the Silver economy) which offers five types of vouchers to SMEs, including a **Demonstration Voucher** of 60,000 EUR. This is of primary interest to the Baltic TRAM focus, as well as the Scalability and Internationalisation Voucher of 20,000 EUR, Technology Transfer Voucher of 20,000 EUR, Economic Feasibility Analysis Voucher of 10,000 EUR and the International Property Rights Innovation Voucher of 5,000 EUR. All stated vouchers are managed under the second type of voucher titled "**Proposal Innovation Voucher**". The Demonstration Voucher allows to showcase "technology readiness in an operational environment in collaboration with living labs and large scale demonstrators" (INCluSilver, n.d.). The project will be concluded by February 2020 (CORDIS, n.d.). Most of INCluSilver projects (products, combinations of services, systemic solutions) are rather close to the implementation or introduction in the market, which according to the Technical Readiness Level (TRL) classification adopted by Horizon 2020 programme would qualify as starting from the Level 5 ("technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)") up to the Level 9 ("actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)").

Baltic TRAM bears in mind that despite the fact that over several years a number of EU-financed or co-financed innovation voucher schemes have been implemented. It also notes the earlier findings that there is a rather limited body of literature and analysis available "on how innovation vouchers can be used to stimulate the adoption of new technologies, which can generate opportunities for process, product, organisational and marketing innovation" (Valbonesi & Biagi, 2016, p. 8).

¹⁴ INCluSilver website: <https://www.inclusilver.eu/>

Thus, Baltic TRAM sees great value not only in proposing a potential voucher scheme solution, but also taking stock of the existing observations, conclusions and suggestions dedicated to the voucher implementation in the EU. In addition, Baltic TRAM sees its open call results as a notable source of future insight in the potential relevance of a subsequent operational phase of the Industrial Research Centres with a support of a tailored transnational innovation voucher scheme.

The stated analytical endeavour will be showcased in more nuanced terms in the forthcoming Baltic TRAM analysis of smart specialisation trends.

Going up the governance scale, Baltic TRAM also pays attention to the latest thinking on the establishment of a unified European innovation voucher scheme being developed in the framework of the Horizon 2020 funded project **Innovoucher**.¹⁵ The project is implemented in view of creating a single market of innovation services in Europe (Innovoucher, 2016, p. 10). Since the overall feasibility of this suggested European Innovoucher model (envisaged to be overseen by a European Managing Authority) is still under thorough consideration and evolving discussions to be concluded by April 2018, the Baltic TRAM Briefing Note 1/2018 revolves around the findings of transnational voucher schemes.

Baltic TRAM Proposed Transnational Innovation Voucher

On the basis of earlier findings of Centrope, where one of the Baltic TRAM project partners has taken part, Baltic TRAM aims at providing analysis of its open calls' results.

As such, it is considering an option of proposing a transnational voucher scheme-supported model of future operational management of the network of Industrial Research Centres (established during the Baltic TRAM project) with three categories of voucher sums offered to the EU-based businesses without specific requirements of compliance with a certain Technology Readiness Level (classification adopted by Horizon 2020 programme). The elaboration on the initial details of the transnational innovation voucher scheme's categories, offered services and general restrictions is displayed in Annex 2.

Baltic TRAM partnership sees the value of tailoring its voucher scheme with three general financial categories which allow offering diverse certification services associated with product development. Namely, the suggested voucher programme would help to improve varied levels of productivity and innovation performance. The offered three categories do not entail a two-step or three-step consecutive approach. Instead the categories are tailored for the specific research intensity needs and scope of each applicant.

¹⁵ Innovoucher website: <https://www.innovoucher.eu/main/index.php>

By the closure of Baltic TRAM project, a more nuanced discussion clarifying the scale and cost of different types of measurement services requested by various types of clients will be organised. From this, a more elaborate outline will be produced which will cover the range of services offered within each of the three categories and the associated beneficiaries.

Conclusion

Due to the earlier noted absence of a significant body of literature dedicated to the impact assessment of innovation vouchers, Baltic TRAM sees the value of informing Innovoucher project partners about its transnational achievements and exploratory work captured in this briefing note in order to ensure the richness of evidence-based findings of the project and subsequent discussions on the project's findings.

When compared to the innovation voucher programmes, Baltic TRAM open call is a different research-business facilitating mechanism. However, the underlying logic of offering publicly funded analytical services also serve to make the Baltic TRAM open call results a relevant source of insight for the European discussions on the most optimal modalities of the future innovation voucher.

While Innovoucher – along the lines of the **Riga Declaration 2010 “Realising the full potential of innovation voucher programs”** (European Commission, 2010; Innovoucher, n.d., p. 3) – elaborates the most optimal policy coordination model between the different governance levels, the transnationally launched innovation vouchers remain the pivotal test-beds. They offer a source of greater insight into how a transnational coordination of a supranational scheme might be adjusted in order to avoid risks associated with the innovation voucher scheme implementation,¹⁶ and what challenges such a set-up might encounter.

One of the guiding logics behind the analytical endeavour of modelling the most optimal scope of the transnational innovation voucher's financial scales, is the acknowledgement not only by Centrope but also researchers interested in ICT (domain-specific) voucher schemes that “the greatest limitation of a one-size-fits-all voucher is its lack of flexibility in adjusting to the possible needs of different SMEs” (Valbonesi & Biagi, 2016, p. 18).

Likewise, Baltic TRAM references the earlier Science Link findings on the suggested variants of co-financing rate¹⁷ offered by the companies for receiving the innovation voucher. As outlined in Annex 2, Baltic TRAM has decided to suggest opting for 50%

¹⁶ Both Science Link experience and the existing findings on voucher implementation outline such a risk as the business support scheme serving as a one-off encounter between the business entity and analytical facility, thus failing to spur continuous cooperation between the two actors for the benefit of business innovation and increased competitiveness in the market. (OECD, 2010, p. 5)

¹⁷ The suggested rates were either 25% or 50% own contribution. (Minniberger & Ibert, 2013, p. 12)

own contribution (for the two upper scale voucher categories), in those scenarios where we do not request compliance from the applicants in line with a certain Technology Readiness Level (following the Horizon 2020 methodology).

Moreover, Baltic TRAM's line of thinking towards suggesting a voucher scheme with three categories (where two categories are tailored for the SMEs) is based also on the pure statistical terms that "SMEs represent 99% of all businesses in Europe and are important for ensuring economic growth, innovation, job creation and social integration" (Böhme, Toptsidou, Holstein, Martin, & Spatial Foresight, 2017, p. 44). Bearing in mind that on certain cases the national voucher schemes can be obtained on a one-off basis, there is still room for transnational support to the EU-based enterprises committed to grow in an innovative approach with the help of analytical services offered by the facilities assembled by the Baltic TRAM network.

Since not all regionally and nationally administered innovation voucher schemes in the Baltic Sea Region have a transnational component (allowing the required analytical services to be procured outside the jurisdiction of the managing authority of the voucher scheme), an innovation voucher tailored for the procurement of analytical services offered by the Industrial Research Centres with three different financial support scales and differentiated service volumes would serve as a key mitigatory measure for this limitation. Thus, in the terminology of the OECD, it would support the economies of scope and complementarities across innovation assets housed by the Baltic Sea Region (OECD Publishing, 2013, p. 41).

Taking into account that innovation vouchers are classified as part of state aid, these support measures are also part of the *de minimis* accounting obligations of the beneficiary businesses. To ensure the long-term benefits and relevance of innovation vouchers, Baltic TRAM highlights the value of regular updating of the *de minimis* state aid ceilings in order to reflect on the evolution of advanced research and innovation service costs.

To conclude, Baltic TRAM has identified the overall topicality of offering further support for the development of research supported solutions aimed at increasing the economic growth and overall competitiveness of enterprises housed by the macroregion and Europe as a whole. Therefore, the Baltic TRAM partnership sees the value of proposing an innovation voucher scheme to be implemented in the extended operational phase of the network. The suggested innovation voucher scheme is structured in three general financial categories which allow offering diverse certification services related to innovation and associated product development both to SMEs as well as large businesses.

Annex 1: Małopolska Innovation Voucher Programme

Małopolska region “is characterised by a relatively high R&D expenditure; however, according to the diagnosis presented in the Regional Operational Programme for Małopolska for 2014-2020, one can observe a low propensity of new innovative projects development by regional companies, and a limited access to the capital” (European Commission, n.d.-a).

The **Małopolska innovation voucher scheme** is an example of a scheme that targets micro-, small- and medium-sized enterprises headquartered in the Małopolska region in an effort to facilitate taking advantage of research and/or innovation services offered by research service providers in Poland. The Małopolska scheme makes it possible for a company to be a beneficiary more than once, whereby the funding level falls incrementally by 10% for each new approved application.¹⁸ The voucher scheme is divided up into:

- a) a small voucher - where the maximum budget amount cannot exceed 50,000 PLN¹⁹ (including own contribution);
- b) a large voucher - where the maximum budget (co-funding plus own funding) cannot exceed 100,000 PLN²⁰.

An annual announcement of the call for proposals is issued with several (monthly) cut-off dates. The submitted applications are processed on first-come, first-serve basis. The current range of qualified contracted services covered under the scheme is:

- applied and experimental R&D services;
- industrial design services;
- feasibility studies for R&D projects;
- market studies / pre-commercialisation studies;
- norm compliance/certification services;
- intellectual property rights-related services.

One of the evaluation criteria is whether the subject matter of the project proposal is in line with the smart specialisation areas defined in the Regional Innovation Strategy of the Małopolska Region. Without a clear indication of the adherence to the smart specialisation area, the application is not eligible for the innovation voucher. As of September 2017, a total of 170 applications have been approved since the scheme began, the majority of which are related to the applied and experimental R&D services.

¹⁸ E.g. for the first voucher, the company - regardless of whether it is micro, small or medium - has up to a 90% funding rate; for the 2nd voucher - up to an 80% funding rate; for the 3rd voucher - up to a 70% funding rate; etc.

¹⁹ 11967 EUR according to the Currency Converter of the European Central Bank ([as of 12 March 2018](#))

²⁰ 23934 EUR according to the Currency Converter of the European Central Bank ([as of 12 March 2018](#))

Annex 2: Baltic TRAM Suggested Transnational Innovation Voucher Programme

	Offered financial support	Own contribution requirement	Range of business entities eligible to apply for the voucher	Services
First category	No baseline but scaling up to 5,000 EUR	No requirement	SMEs	Experiments and agile product and service development
Second category	5,000 – 10,000 EUR	50%	SMEs	Measurement and testing services relating to innovation
Third category	10,000 – 23,000 EUR	50%	Large businesses ²¹	Research & interdisciplinary platforms, for services to research communities, large businesses, and collaborative research of larger teams

²¹ Following the EU classification, the Baltic TRAM understanding of a large enterprise is a business which exceeds the EU definition of an SME. (European Commission, n.d.)

Bibliography

- Almi Skåne. (2015). Innovationscheckar à 100.000kr. Retrieved March 5, 2018, from <https://www.almi.se/Skane/Aktuellt/InnovationsochIPcheckar/>
- Baltic Science Network. (2017a). Baltic Science Network Transnational Seminar New Tools for Spreading Excellence and Widening Participation in Research and Innovation Programmes Conclusions. Baltic Science Network. Retrieved from <http://www.baltic-science.org/index.php/downloads/public/programs-forms-flyers-etc/204-new-tools-for-spreading-excellence-and-widening-participation>
- Baltic Science Network. (2017b). BSN Rests Committed to Spreading Excellence. Retrieved January 15, 2018, from <http://www.baltic-science.org/index.php/news-and-press-releases/bsn-press-releases/67-baltic-science-network-rests-committed-to-spreading-excellence>
- Böhme, K., Toptsidou, M., Holstein, F., Martin, D., & Spatial Foresight. (2017). *Territorial Cooperation for the Future of Europe: ESPON Contribution to the Debate on Cohesion Policy post-2020*. Luxembourg. Retrieved from <https://www.espon.eu/european-territorial-review>
- BSR Stars. (2017). Call for applications on BSR Bioeconomy Innovation Vouchers. Retrieved January 15, 2018, from <http://www.bsr-stars.eu/news/call-for-applications-on-bsr-bioeconomy-innovation-vouchers/>
- Business Finland. (n.d.-a). Innovation voucher for startups. Retrieved January 15, 2018, from <https://www.businessfinland.fi/en/for-finnish-customers/services/funding/startup/innovation-voucher/>
- Business Finland. (n.d.-b). Research, development and piloting for SMEs and midcaps. Retrieved January 15, 2018, from <https://www.businessfinland.fi/en/for-finnish-customers/services/funding/sme/research-development-and-piloting/>
- Centrope. (n.d.). CENTROPE innovation voucher. Retrieved January 15, 2018, from <https://www.interregeurope.eu/policylearning/good-practices/item/11/centrope-innovation-voucher/>
- CORDIS. (n.d.). Innovation in personalised Nutrition through Cluster cooperation in the Silver economy. Retrieved January 31, 2018, from http://cordis.europa.eu/project/rcn/209163_en.html
- Enterprise Estonia. (n.d.-a). Development voucher. Retrieved July 24, 2017, from <https://www.eas.ee/service/development-voucher/?lang=en>
- Enterprise Estonia. (n.d.-b). Innovation voucher. Retrieved July 24, 2017, from <https://www.eas.ee/service/innovation-voucher/?lang=en>

- European Commission. (n.d.). What is an SME? Retrieved March 5, 2018, from http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en
- European Commission. (n.d.-a). Innovation vouchers: Małopolska. Retrieved January 31, 2018, from <https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/support-measure/innovation-vouchers-1>
- European Commission. (n.d.-b). Innovation vouchers: Podkarpackie. Retrieved January 15, 2018, from <https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/support-measure/innovation-vouchers-9>
- European Commission. The Riga-Declaration: Realising the full potential of innovation voucher programs (2010). Riga. Retrieved from http://hyetra.eu/d/news/Riga_declaration.pdf
- European Commission. Investing in a smart, innovative and sustainable Industry - A renewed EU Industrial Policy Strategy (2017). Brussels. Retrieved from <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2017:479:FIN>
- Greenovate! Europe. (n.d.). Green Innovation Vouchers. Retrieved January 31, 2018, from <https://www.greenovate-europe.eu/services/green-innovation-vouchers>
- INCluSilver. (n.d.). Innovation Vouchers. Retrieved January 31, 2018, from <https://www.inclusilver.eu/innovation-vouchers/>
- Innovation Fund Denmark. (2018). Guidelines for InnoBooster. Innovation Fund Denmark. Retrieved from <https://innovationsfonden.dk/sites/default/files/innobooster20.02.2018.pdf>
- Innovoucher. (n.d.). *Innovoucher Project: Pilot Project Call Text*. Retrieved from https://www.innovoucher.eu/_uploaded/Innovoucher Project - Pilot Project Call Text.pdf?&wtok=c708f11acf4ea48baf0180971ce067048a5e955&wtkps=XY/NCsIwEITfjWetu0mbxu3RsyL4ABKbKsGYalMVFN/dpP6A3oZvdmZTYTYrugQpi137vAqssIUqjVSBBLFjDkppGG+3lpPay7YPsNffladvIDsZYBO/
- Innovoucher. (2016). *Guideline of European Label for Innovation Voucher Programmes awarding procedures and identification of the certification body*. Retrieved from <https://www.ec.europa.eu/research/participants/documents/downloadPublic?documentIds=080166e5aa8bd873&appId=PPGMS>
- Interreg Baltic Sea Region. (2017). How to stimulate bio- & circular economy in the Baltic Sea region. Retrieved January 15, 2018, from <https://www.interreg-baltic.eu/news-detail/news/how-to-stimulate-bio-circular-economy-in-the-baltic-sea-region.html>
- Ketels, C., & Protsiv, S. (2016). *European Cluster Panorama 2016. European Cluster*

Observatory Report. Retrieved from <http://ec.europa.eu/DocsRoom/documents/20381>

- Mickus, A., Jēkabsons, I., Muižniece, L., Chaniotou, N., Szmigielski, P., Stenvall-Virtanen, S., ... Šime, Z. (2017). *National innovation and smart specialisation governance in the Baltic Sea region: Laying grounds for an enhanced macro-regional science-business cooperation* (4/2017). (Z. Šime, Ed.). Centrum Balticum Foundation. Retrieved from <http://s3platform.jrc.ec.europa.eu/-/data-infrastructures-in-support-of-macro-regional-development?inheritRedirect=true>
- Minniberger, C., & Ibert, O. (2013). *"Smart Specialisation" in Science: A Qualitative Network Analysis of the Structures and the Effects of Research Infrastructure Cooperation in the Baltic Sea*. Erkner. Retrieved from https://www.science-link.eu/sites/sites_custom/site_science-link/content/e215/e946/e319/science_link_study_final_1404_eng.pdf
- MITA. (2017). Innovation Vouchers. Retrieved February 16, 2018, from <http://mita.lrv.lt/en/national-r-d-programmes/innovation-vouchers>
- OECD. (2010). *Innovation Vouchers*. Retrieved from <http://www.oecd.org/innovation/policyplatform/48135973.pdf>
- OECD Publishing. (2011). *OECD Reviews of Regional Innovation Regions and Innovation Policy*. OECD Publishing. Retrieved from http://www.keepeek.com/Digital-Asset-Management/oecd/urban-rural-and-regional-development/regions-and-innovation-policy_9789264097803-en#page1
- OECD Publishing. (2013). *Regions and Innovation: Collaborating across Borders* (OECD Reviews of Regional Innovation). OECD Publishing. Retrieved from http://www.oecd-ilibrary.org/urban-rural-and-regional-development/regions-and-innovation-collaborating-across-borders_9789264205307-en
- Šime, Z. (2017). *Multi-Level Governance of Innovation and Smart Specialisation*. Retrieved from <http://s3platform.jrc.ec.europa.eu/-/multi-level-governance-of-innovation-and-smart-specialisation?inheritRedirect=true&redirect=%2Fs3-in-baltic-sea-region>
- Valbonesi, P., & Biagi, F. (2016). *Incentivising Innovation and Adoption of ICT: ICT Innovation Voucher Programmes*. Retrieved from <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/incentivising-innovation-and-adoption-ict-ict-innovation-voucher-programmes>
- Vezzani, A., Baccan, M., Candu, A., Castelli, A., Dosso, M., & Gkotsis, P. (2017). *Smart Specialisation, seizing new industrial opportunities*. JRC Technical Report. Seville: European Commission. Retrieved from <https://ec.europa.eu/jrc/en/publication/smart-specialisation-seizing-new-industrial-opportunities>

Vinnova. (n.d.). Innovativa startups steg 1 våren 2018. Retrieved March 12, 2018, from <https://www.vinnova.se/en/e/innovativa-startups/innovativa-startups-steg-1-varen-2018/>

Vinnova. (2017). Innovativa Startups - steg 1. Vinnova. Retrieved from <https://www.vinnova.se/globalassets/utlysningar/2016-04714/omgangar/utlysningstext-innovativa-startups-steg-1-vt-18-slutgiltig-m-korr.pdf849454.pdf>

Wise, E. (2018). Alignment of financial instruments to address common challenges in the Baltic Sea Region – insights from experience. European Commission's Joint Research Centre. Retrieved from http://s3platform.jrc.ec.europa.eu/documents/20182/253825/25012018-innovationweek-wise_en.pdf/67a5dfe4-4014-4c7d-bb9a-8320590ae0e9