

Interreg Europe ECORIS3 project

Policies & Measures to Support Local & Regional Innovation Ecosystems

ACTION PLAN

PROJECT PARTNER:

Sunrise Valley Science and Technology Park

Lithuania



December, 2019

Project: EcoRIS3: Policies & Measures to Support Local & Regional Innovation Ecosystems

Partner organisation: Sunrise Valley Science and Technology Park

Other partner organisations involved (if relevant):

Country: Lithuania

NUTS2 region: Lithuania

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Part I – General information

The Action Plan aims to impact:

- X Investment for Growth and Jobs programme
- ☐ European Territorial Cooperation programme
- ☐ Other regional development policy instrument

Name of the policy instrument addressed: **Lithuanian Operational Programme (OP) for EU Structural Funds Investments for 2014-2020.**

Part II – Policy context.

External review of innovation support system

The most recent external analysis was performed by Horizon 2020 Policy Support Facility and ended up with report “Specific support for Lithuania: Fit for the Future” (EC, 2017).

The report highlighted several key issues connected to the Lithuanian innovation system and business and science/education cooperation in particular:

- A key critique is the lack of in-house expertise on business and industrial needs.
- The expert group recommended introducing innovation voucher follow-on awards and perhaps an industrial fellowship scheme, as well as possible ‘funding modules’ (earmarked for collaborative projects between industry and research actors). Also group expressed need to encourage firms to go beyond the stage of feasibility studies and to develop further cooperation.
- The expert group recommended undertaking a strategic review of operations and financing of Open Access Centers (OACs) and Technology Transfer Offices (TTOs), as well as developing stronger and more internationally visible cluster initiatives (by

applying stricter criteria and ensuring operational partnerships with STPs and collaborative research infrastructures).

- OACs were expected to play a role as an entry point to HEI/PRO expertise but have been unable to fulfil this role.
- The expert team recommended considering the introduction of an industrial fellowship scheme to help firms recruit specialised R&D and innovation managers for project delivery, and to support the development of academia's translational capacity. Inspiration for such a scheme (linked to 'standard' innovation vouchers) could be drawn from the student placement vouchers administered by Interface Scotland.
- However, group noted, that the limited number of staff in the TTO and the lack of expertise on specific issues, such as IPR or industry sectors, limits the potential effectiveness. The panel emphasises that technology transfer needs to be viewed as a strategic function in all universities, rather than something they feel obliged to do to align with public policy.
- The expert team recommends expanding support activities for cluster organisations beyond the funding programme in order to develop the management and delivery capacity of cluster organisations' services to firms.
- The expert team recommends the implementation of a service contract for creating a national interface structure (staffed by industrially experienced staff) to ensure pro-active engagement with businesses to support them in translating their needs and to act as neutral brokers in securing support from the most appropriate partner institutions.

Project review of the innovation system

In the framework of ecoRIS3 project, there were 12 interviews organized in total with 3 interviews per each group (Government and policy making institutions; Private enterprises; Educational/Research institutions, Civil society organisations) to get better insights on SWOT of Lithuanian innovation system and to help the development of action plan. The following conclusions were made:

- There is a common agreement that regional innovation system (RIS) only partially taking the advantage of innovation ecosystem strengths. Local trust, international networking, focus on higher TRL products, listening to business needs, more experimentation and risk taking, more investments into talents, less but stronger priorities, effective implementation of already existing measures, early dialogue with stakeholders and co-ownership approach, visionary leadership were mentioned as suggestions how to improve the situation.
- Most respondents are continuously engaged in quadruple helix interactions: everybody participates in the local events, most have joint activities, all respondents from research institutions and civil society organizations participate in joint projects. The least engaged are business representatives who are focused mostly on business needs, are participating in business related events and are not proactively looking for interactions with other quadruple helix actors. But they can engage into conversation when somebody invites them.

- The report has showed that Lithuania has good capacity to make a breakthrough in innovation, because of existing strong elements in innovation ecosystem:
 - Educated people who are not afraid to take on new challenges
 - Growing entrepreneurial community
 - Growing attention of business for R&D and innovation
 - Good and improved research infrastructure
 - Good examples for cooperation in several sectors (lasers/biotech) which can be followed by others.
- Major challenge lays in Lithuania's ability to govern and grow this ecosystem in a way that those strengths are further explored, the same vision is shared between different actors, implemented through common actions, strong linkages between elements of ecosystem are created.

Finalized Lithuania's RIS3 **SWOT table** is presented below:

<p>Strengths</p> <ul style="list-style-type: none"> • FUNDING: Current funding schemes cover a wide spectrum of business needs • PEOPLE: People (especially young) are not afraid to take on new challenges • BUSINESS: Growing attention for development of innovation and investments into R&D, growing number of innovations in manufacture • RESEARCH: Good and improved infrastructure • LINKAGES: Improved environment for cooperation: vibrant entrepreneurial community, small ecosystem with tight links between actors, good examples for cooperation in several sectors (lasers/biotech) 	<p>Weaknesses</p> <ul style="list-style-type: none"> • POLICY: Lack of shared vision, systematic and holistic approach in policy making • POLICY: Sophisticated and defragmented innovation support system (many players, duplicating functions, difficult access to finance, no institutional leadership) • BUSINESS: Small hi-tech sector is not able to generate enough demand for research • BUSINESS: Traditional industry has low absorption capacity for innovation and is not motivated enough to cooperate with research • RESEARCH: General focus of research system is on publications (not on the results suitable for commercialization)
<p>Opportunities</p> <ul style="list-style-type: none"> • FUNDING: Available EU funding for business R&D and applied research and growing focus to address Industry 4.0 in digital technologies. • BUSINESS: global pressure and competition is forcing companies to innovate and to invest into R&D • PEOPLE: reform of the education system has already many measures which are addressing the weaknesses of our innovation ecosystem (i.e. informal education, attraction of talents, concentration of resources, career development from early childhood, creation of STEAM centres, etc.) 	<p>Threats</p> <ul style="list-style-type: none"> • POLICY: Risk that education reform will fail or will be only partially implemented because lack of implementation capacity and big number of actors focusing only on their own interests • FUNDING: Decreasing level of success and increasing competition in international programmes (i.e. Horizon2020) • PEOPLE: Brain drain failure to adopt to global changes and to switch to global mindset • RESEARCH: Failure to commercialize knowledge

Policy instrument and its relation to the project partner

Policy instrument Lithuanian Operational Programme (OP) for EU Structural Funds Investments for 2014-2020 brings together several key EU investment funds aimed at helping Lithuania's economic development. It has clear emphasis on:

- boosting research and innovation (priority axis 1, where OP contribution is expected to foster RDI commercialisation and knowledge transfer as well as to effectively stimulate private RDI investments),
- SME competitiveness (priority axis 3, where OP contribution is expected to increase SME competitiveness and innovation).

The need for a more targeted approach to supporting business growth, innovation and cooperation in Lithuania is indicated in OECD report. The number of firms currently conducting formal R&D in Lithuania is limited so the challenge is to increase the number of innovators. Business support agencies seek to identify an enterprise's ambition and readiness for change before embarking on a process of targeted advice to selected companies, helping them to make best use of the various instruments and to climb the ladder (see OECD 2016, page 15 for an example). A key critique is the lack of in-house expertise on business and industrial needs.

The Science & technology parks (STPs) act as '*innovation enablers*' for the implementation of Lithuanian Operational Programme (OP) for EU Structural Funds Investments for 2014-2020. Their detailed role is described in supporting document - concept for the development of science and technology parks (approved by Government in 2015). Its' focus is on delivery of higher added value services by STPs: knowledge transfer and technology transfer, promotion of cluster creation processes, commercialization of ideas, promotion of innovative entrepreneurship, and the implementation of innovative and technological audits.

Sunrise Valley Science and Technology Park, which is also acting as a national Digital Innovation Hub (DIH), is facing viability challenges to implement the selected policy instrument and to deliver higher value-added services which will foster research and innovation in SMEs.

Key conclusion: *external and internal analysis have showed that innovation ecosystem has all the necessary elements for proper functioning, funding schemes are available, a lot of public institutions are focused on business and science/education cooperation promotion, but the results are not always visible.*

With this key conclusion in mind two hypotheses were made:

1. that cooperation culture is more localized issue than generalized approach and it is better addressed within some proximity area where major stakeholders exist;
2. that effectiveness of cooperation promotion relies on specific know-how which can be acquired from other countries.

Based on this, Sunrise Valley Science and Technology Park is an ideal candidate to test some pilot action, which can increase local business and science/education cooperation with the help of transnational learning from the Interreg project. This learning experience together with pilot experimental activities can give feedback to policy makers how to improve their measures.

Part III – Details of the actions envisaged

Sunrise Valley intends to improve policy instrument with the implementation of new projects supporting the delivery of DIH/STP services in the area of university/research institute and business cooperation and creation of new cooperation model based on the good practices established in the project.

Based on identified value propositions DIH/STP will create and test pilot model of service delivery and cooperation in those service areas:

- Cooperative research;
- Education and skills development;
- Co-creation of new initiatives/projects/products.

The choice of thematic areas for the delivery of the services will be aligned with current S3 review process, focusing on promotion of newly reformulated priorities (i.e. artificial intelligence, big data, robotics and automation, fin-tech, etc.), thus helping to support the smooth transition of S3 and implement Industry digitalization roadmap 2019-2030.

This will allow increasing motivation of universities/research institutes and business companies to better engage into implementation of the policy instrument. This also can facilitate new funding opportunities (for DIH/STP, for engaged universities/research institutions and companies) and have impact on improvement of governance of the policy instrument (by providing feedback on the piloted cooperation models to the Ministry of Economy and/or Ministry of Science and Education).

Action I. Increase cooperation in business and science.

The background

During the project common weaknesses were identified. Firstly, very poor communication with stakeholders and failure of making clear what the potential benefits are and how they are going to be achieved. Secondly, lack of connectivity between research centres, and between those and the enterprises, including that interdisciplinary or inter-institutional cooperation between manufacturing and knowledge transfer centres is not systematic, traditional industry has low absorption capacity for innovation and is not motivated enough to cooperate with research.

Key reasons were identified as well:

- Lack of investments from Municipality / Government to support delivery of higher value-added services (which are usually cannot be paid by SMEs themselves);
- Low motivation of universities and research institutes to outsource technology transfer services or to engage into cooperation on education programmes with the intermediate body (which is outside of direct university/institute influence);
- Low motivation and engagement of SMEs and big companies into university-business relationship (mainly because of disbelief in value added for business and also because lack of good examples which can be followed).

Analysis of good practices in various countries has shown three areas where improvement can be made:

- Area dedicated to **cooperative research**, where through efforts of ecosystem players, business companies are engaged into cooperative research with University or Research institute. Examples of those good practices identified in the project can be:
 - Tyndal Institute industry focused research (<https://www.interregeurope.eu/ecoris3/news/news-article/2160/tyndall-institute-industry-focused-research/>)
 - The Intoa! Lean Business -Program GP (<https://www.interregeurope.eu/ecoris3/news/news-article/2201/the-intoa-lean-business-program/>)
- Area dedicated to **cooperation in the field of higher education**, where through efforts of ecosystem players, business companies are engaged in improving education programmes at HEI (Higher Education Institutions) or simply open up in sharing their educational needs which can be taken into account by formal or informal educators. Example of good practice identified in the project can be:
 - Extended Campus connecting CIT with industry GP (<https://www.interregeurope.eu/ecoris3/news/news-article/4228/extended-campus-connecting-cit-with-industry/>) and is based on the identified weakness in Lithuanian ecosystem, such as “Gaps in the education system”, meaning that most innovative enterprises found it difficult to find highly qualified human capital that can add real value.
- Area dedicated to **informal general cooperation**, where through efforts of ecosystem players, business companies can be engaged in light, informal cooperation activities, which bring “co-creation” element to the relationships between various ecosystem players and can become an “entry point” for further cooperation in research or education areas in the future. Inspiration from good practice identified in the project can be taken from:
 - Co-creation initiatives promotion pilot service was inspired by RII, co-creation & Smart Labs (<https://www.interregeurope.eu/ecoris3/news/news-article/2202/rii-co-creation-smart-labs/>)

Actions to be taken:

- Map local ecosystem of stakeholders willing to cooperate. This will be based on availability of local competences and business within close proximity to Sunrise Valley. It will elaborate on the areas currently selected and undergoing change under S3 smart specialization strategy.
- Divide stakeholders to groups, according to their maturity levels for cooperation: a) mature stakeholders, who know how they want to cooperate in research/education area; b) immature, but highly motivated stakeholders, who express willingness to learn and engage, but have little experience in cooperation; c) other stakeholders, who show motivation, but do not know where to start.

Working with mature stakeholders:

- Select pilot cases suitable for collaborative research projects or some shared initiatives (i.e. *digitalisation*) in the field of industry where the Sunrise Valley DIH/STP can act as intermediate facilitator (i.e. “*gluing element*”). This will be based on potential value added how Sunrise Valley can support and facilitate that process.
- Assist in implementation of the pilot, monitor the activities and disseminate the final results.

Working with immature motivated stakeholders:

- Engage local business companies into the dialogue on current interactions and cooperation in STEM / IT skills development area.
- Transform outcomes of the debates and collected data into codified knowledge about the needs of business and mismatch on delivery of service and facilitate collective learning.
- Select pilot cases for some initiatives in the field of research and training.
- Assist in implementation of the pilot, monitor the activities and disseminate final results.

Working with other stakeholders:

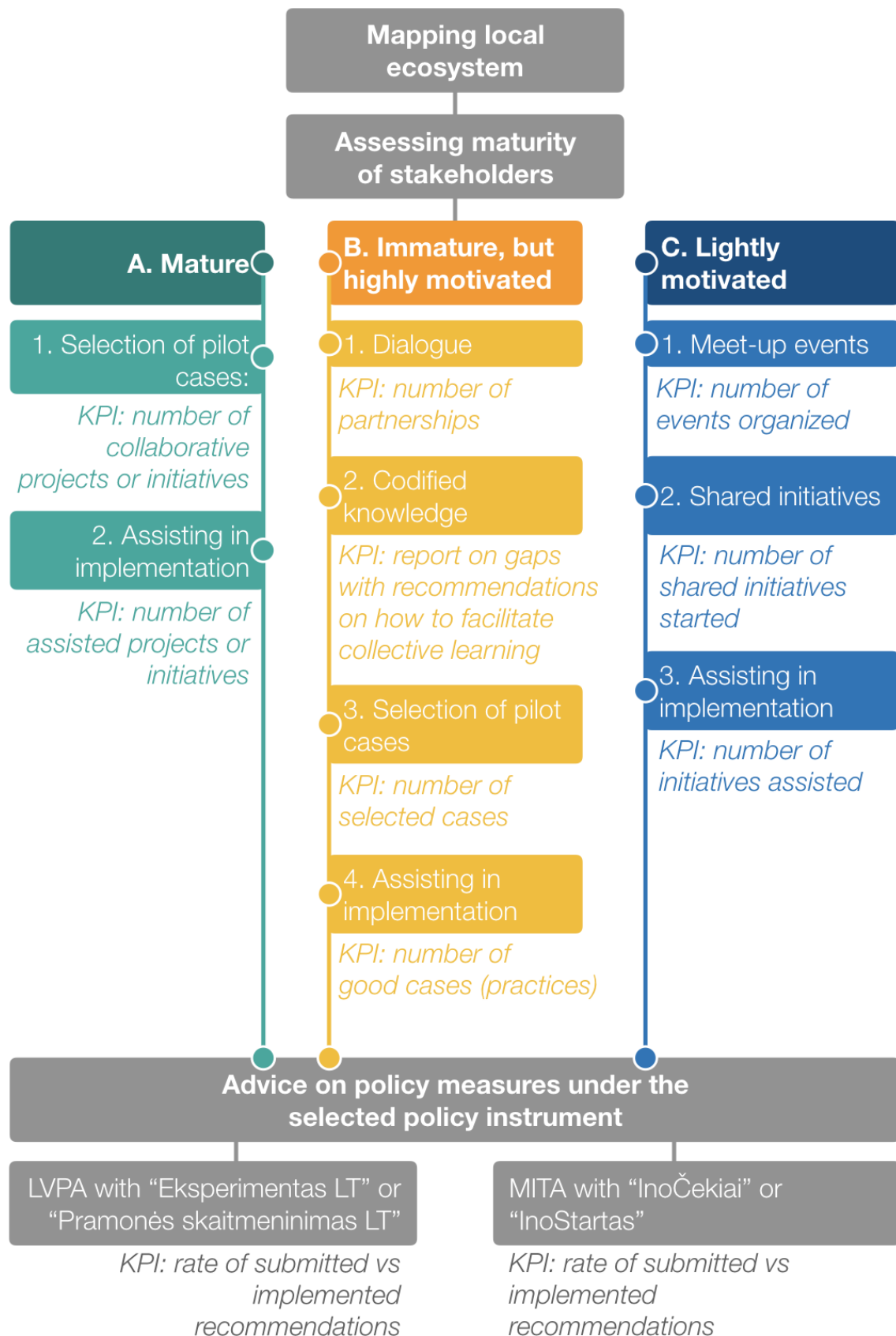
- Run a series of team-up events aimed at increase the trust and cooperation between stakeholders from the universities and research institutes on one side and business companies on other side and will help to increase the mutual understanding of their common interests.
- The outcome of these facilitated interactions shall be started initiatives (or in case of ongoing activities – improved) by the university or research institute (-s) and a business company (-ies) which they will decide to implement together in 1 year. There will be no strict framework or selection of topics and methods. This shaed

activity tries to promote creativity and design thinking, thus enabling a wide range of potential cooperative activities (from shared events to common projects).

- Assist in implementation of the pilot, monitor the activities and disseminate final results.

Working with stakeholders, responsible policy measures related to this kind of business-science-training related activities (i.e. MITA measure “InoČekiai” or “InoStartas”, LVPA measure “Eksperimentas LT” or “Pramonės skaitmeninimas LT”) give them feedback on the needs, problems, gaps and recommendations during different stages of cooperation and based on different maturity levels of stakeholders. This feedback can help to improve policy and funding measures and can help to see the gaps not carefully addressed by selected policy instrument.

Monitoring of these actions is going to be by key performance indexes shown in the mapping diagram below:



Action II. The follow-up activities after the Lithuanian OP change (“InoStartas LT” scheme of technology vouchers).

Background:

During the ecoRIS3 project workshop no.2 in Cork, Ireland on 28th & 29th November, 2017 the “Technology voucher” scheme and its good practise was presented from Fomento San Sebastian (FSS). The technology voucher project set by FSS have had to promote and develop projects with a technological component to launch new products, processes or services, or solve technical problems. The FSS "Technology voucher" had proved to strengthen partnerships between local companies and research centres. It has also encouraged research centres to increase their understanding of, and orient their work towards the needs of SMEs and to promote SME innovations. That enabled SMEs to launch new products, processes or services, solve technical problems, and develop innovation strategies and partnerships.

The Lithuanian OP “Innovation vouchers” scheme was designed in 2015 as for technology feasibility studies only from SMEs for R&D (up to TRL3). This support policy scheme has lacked ability to promote the further on innovation development after success of technology feasibility from R&D institute. The “Technology voucher” approach was presented to Ministry of Economy by Mr. Edgaras Leichteris (project stakeholder) from ‘Knowledge Economy Forum’ to prove the good working examples in Europe (lessons learned). EU Structural funds policy finance scheme of “Innovation voucher” has been improvement with 2 extra funding steps (in total it has 3 funding opportunities now). Instead of having only the support for “technical feasibility study” (up to TRL3), the ‘Innovation scheme’ has now support for mature SMEs to build the products from TRL3 up to TRL6, and for TRL7 up to TRL9. The support budget for innovations has been expanded from 7.305 Eur per feasibility study, up to 26.722 Eur for reaching TRL6 level, up to 76.252 Eur for reaching TRL9 level. Basically the logic within the innovation voucher funding scheme has been dramatically improved in the area of good practice of technology innovation voucher which has only the different in terms of branding (in Lithuania it is now called – “InoStartas LT” support measure instead of “Technology voucher”).

To sum up, it has been the successful influence of ecoRIS3 project within „Technology voucher“ financial measure presented by partner FSS. As of 30th of April, 2018, Lithuanian OP for investing European Structural and Investment funds for 2014-2020 has been updated with extra investment scheme „InoStartas LT“, dedicated for only for R&D start-ups. The base of this new scheme is to implement the same OP objective no. 1.2.1 “Increasing the intensiveness of RDI activities in the private sector” aiming for creation of commercialized R&D products, growth of business investment in R&D which is essential to promote business enterprises to collaborate with science institutions.

The ecoRIS3 project has given us strategic partnership with regional partners and Sunrise valley has benefited from FSS experience. The FSS "Technology voucher" scheme has given us a good working example of a functional scheme. So this strong cooperation and partnership in ecoRIS3 gave us a good background to start implementing the new measure "InoStartas LT".

Actions to be taken:

It has been projected to support 2/5 of start-ups that used the “Innovation vouchers” measure. The “InoStartas LT” support measure has been budgeted to support at least 840 companies at average project support allowance with 23,765.65 Euro grant.

During the Phase 2 we will be monitoring the success rate of the “InoStartas LT” applications, signed contracts, and delivered prototypes (models), and final innovative products in the market.

We will be also checking the performance indicator - a number of SMEs from Science Technology Parks (STP) cooperating in new projects with universities, research and science centres.

Players involved in actions:

As part of DIH/STP ecosystem building service, **the Action plan** will engage all Sunrise Valley stakeholders into value proposition building and testing activities, what will improve the better understanding and communication of common goals in the region of open innovation through smart specialisation.

It will also engage funding agencies such as MITA (which funds early stage cooperation projects) or even LVPA (mature big cooperation projects) helping them to align and improve their measures based on the results of pilot experimentation.

Timeframe of the actions:

Year 2019 (*approval*), 2020 –2022 implementation.

Costs of the actions:

It have been calculated that the need of the costs would consist of 1 part-time job placement (Facilitation manager) with a round of 10.000 Euro yearly budgets.

Funding sources of the actions:

Sunrise Valley STP is committed to initiate a small scale pilots based on internal resources, but external funding opportunities are explored to initiate bigger scale pilots.

ENDORSEMENT OF THE ACTION PLAN

Sunrise valley Science & Technology Park and Agency for Science, Innovation and Technology (MITA) hereby agree to support and promote the implementation of the actions detailed for the Policies & Measures to Support Local & Regional Innovation Ecosystems (ecoRIS3) project.

The undersigned confirm that they have the required authority of their organisations to do so and that the required authorisation process in each organisation has been duly carried out.

Name and Job Title: Mr. Kęstutis Šetkus, Advisor to the Minister of the Economy and Innovation

Signature:

Date: 26/06/2020

Stamp of the Organisation

Name and Job Title: Dr. Laima Kauspadiene, Director of Sunrise valley Science & Technology Park

Signature (and stamp if used):

Date: 26/06/2020

Stamp of the Organisation

