

Interreg BSR OSIRIS

PROJECT PERIOD 2

GA 2.4 Organizing transnational peer review seminars

Transnational Peer Review Mechanism REPORT

GA 2.4 Lead Partner: Lithuanian Innovation Centre
Lithuania

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1. INTRODUCTION

Objectives

The aim of the GA 2.4 is a creation of a peer review mechanism (methodology and tools) for OSIRIS project regions and countries. Peer review mechanism will use a thematic review process in order to discuss three following issues related to RIS3 implementation:

- 1) Funding schemes and financing mechanism for supporting innovation and smart specialization projects;
- 2) Models and platforms for joint knowledge management and knowledge transfer;
- 3) Pilot programs for supporting innovation and smart specialization projects.

Involvement of peers and experts from EU performing regions and national stakeholders into thematic reviewing process and specific standardized tools development for each selected issue constitutes particularities of this mechanism.

The output describes mechanism, both methodology and tools and outline the main achievements after implementing mechanism by organizing 6 Transnational peer review seminars. Also the output describes the identified solutions and actions for overcoming the debated issues.

2. WORK PLAN

Summary of the GA 2.4. Methodology

Transnational peer review mechanism was developed for analysing and debating issues related to silver economy selected RIS3 priorities: Peer review mechanism uses a thematic review process in order to discuss following issues in strong correlation with selected sub-sectors of RIS3 priorities that are relevant to silver economy:

1. Pilot programs for supporting innovation and smart specialization projects.

Pilot program for supporting innovation and smart specialization projects is a set of public policy measures (instruments) for supporting innovation and smart specialization used for the first time to achieve measurable objectives within a clearly defined time frame.

2. Models and platforms for joint knowledge management and knowledge transfer.

Platform for joint knowledge management and knowledge transfer is a flexible and responsive platform in which target groups (RIS3 authorities, companies, research organizations, local authorities, national authorities and end-users) can meet, co-work & cooperate for tackling specific challenges (ageing & demographic change) and for exploiting silver economy opportunities can meet, co-work & cooperate for tackling specific challenges and for exploiting silver economy opportunities.

Model for joint knowledge management and knowledge transfer is an instrument for handling the connection between RIS3 approach, industry and knowledge assets. The Model synthesize and integrate knowledge at the regional level for creating a common process for exploiting silver economy growth opportunities.

3. Funding schemes and financial mechanisms for supporting innovation and smart specialisation projects.

Funding scheme and financial mechanism for supporting innovation and smart specialisation projects is a distinct body of rules, supported by one or more institutional units, governing the provision of supporting and financing innovation and smart specialisation projects.

Financial mechanism for supporting innovation and smart specialisation projects is a method or source through which funding of innovation and smart specialisation projects is made available.

Target group of peer review seminar is project partners and stakeholders - politicians, policy makers, representatives from policy implementations institutions (ministries, municipalities, departments),

representatives of higher education institutions and business sector, associations, NGOs active in the field of innovations in correlation with silver economy.

Peer review mechanism is implemented in three stages: a review section, an expert/thematic section and a summary or a recommendation section.

A review section is for sharing the results of previously completed WP2 activities. Two countries per seminar have presented their results and finding from market survey, results and recommendations from EDP process events (co-creation workshops and focus group meetings) and results and findings from PXL workshop. Results are presented together with challenges, problems, opportunities, assets and capabilities identified. All partners have their individual prerequisites and their individual RIS3 priorities – therefore the focus is not the same.

An expert (or thematic) section is for analysing identified challenges, problems, share experience and provide solutions as well as recommendations on each of three abovementioned thematic topics. For this purpose, a working group is created for each of three issue. Each working group has at least one representative per country or region and a moderator. A brain storm technique is used for the thematic issue to be approached, debated and analysed consequently in correlation with selected RIS3 priorities to be tackled in that region or country. Each country representative shall be able to discuss and present best practices and examples from his country or region which could serve as ideas for identified challenges solutions or recommendations for next steps. Hosting country or region invite their stakeholders relevant to each issue to participate in working groups. A list of possible solutions is developed as a result of brain storming session in each of three issue.

A summary (or recommendation) section is for summing up results of the workshop. A moderator of each group presents a list of shortlisting solutions and potential actions as well as recommendations for the next steps. A joint report is produced as an output of the peer review seminar.

A specific tool for each issue related to RIS3 priorities is designed in order to collect data in structured and standardized procedure from each region. Completed tools are used during thematic session of the seminar in order to get overall picture, share experience and best practices and get best solutions.

3. RESULTS – Transnational peer review mechanism

2.1 Finland pilot programs for supporting innovation and smart specialization projects

There are several national and regional programmes, which support innovation and smart specialization projects in Finland Etela Suomi region with a focus on silver economy and correlation with RIS3 regional priority „Living Environments which foster wellbeing”.

1. Smart City is a city-planning concept for integrating many information and communication technologies (ICT), including the Internet of Things (IoT) systems for managing urban infrastructure: transport, education, healthcare, housing and communal services, security, etc. The purpose of creating a “smart city” is to improve the quality of life of citizens and to increase service efficiency. F.e. Uusimaa region: City of humans – the human dimension, participation, open data and applications, the point of view of the human/citizen subthemes: -developing the built environment -inclusion preventing digital marginalization -applications supporting everyday life (Smart city) ; Seniors as AI mentors: seniors were taught the basics of artificial intelligence and basic skills, e.g. programming well-being robots and mentoring, and they distributed information in e.g. libraries and sheltered homes; Digitally smart a study on seniors’ digital service needs; Smart Tampere Ecosystem; Integration of technological solutions used for home and distant care services. The implementation of Smart City leads to improving the quality of services; forming a comfortable environment; developing communication (citizens and the state); enhancing productivity; increase the interactivity of civil services (minimizing time consumption); reducing costs and resource consumption; smart city transport (ITS); smart housing and communal services; advanced public safety system.
2. Smart Energy Programme brings together the services for technical development and exports. The program provides new information e.g. for smart buildings, the focus areas will include IoT, AI digitalization and BIM.
3. Smart Villages is the sub-theme of the broader ENRD thematic work on ‘Smart and Competitive Rural Areas’. Project has created e.g. a website for rural Finland: Rural.fi It features key organisations working in rural development and provides information about work being done to maintain the vitality of the Finnish countryside.

4. HygTech 1 and 2. Satakunta Region are regional projects funded by the Regional Council of Satakunta (+ ESR fund) and they were focused on improving healthy indoors through hygienic and hygiene increasing products and solutions for indoors in buildings.
5. Home and selfcare project (e.g. Ossi project Kompassi project). The main goal of the project was to centralise and organise the service guidance and information systems for the elderly people using standardised methods and criterias. The second important goal was to offer more versatile services for the family carers in such a way that it would support the coping of the carers and the elderly people better •The third target was to create a digital service targeted to the citizens of the region, as well as the professionals, organisations, and the enterprises in the field of social and health care. The aim of the projects was to create customer-oriented service control network and competence centre for family carers of the seniors

Models and platforms for joint knowledge management and knowledge transfer

As an effective models and platform working in the country these entities were identified:

1. Kanta Pages. The users of the Kanta services include citizens, pharmacies, healthcare services and social welfare services. Service providers in both public and private health care are using the Kanta services. My Kanta Pages is a citizens' own online service where you can browse your own health records and your medication recorded by healthcare services. The service is accessed through the Kanta Services website. The clearest benefit is the electronic flow of information: there is no need to send patient data from one place to another on paper. The system also improves access to information which promotes the quality of care and ensures the patient's good care and treatment.
2. Smart City is a city-planning concept for integrating many information and communication technologies (ICT), including the Internet of Things (IoT) systems for managing urban infrastructure: transport, education, healthcare, housing and communal services, security, etc. The purpose of creating a "smart city" is to improve the quality of life of citizens and to increase service efficiency.
3. Home and Self-care Project. The main goal of the project was to centralise and organise the service guidance and information systems for the elderly people using standardised methods and criterias. The second important goal was to offer more versatile services for the family carers in such a way that it would support the coping of the carers and the elderly people better. The third target was to create a

digital service targeted to the citizens of the region, as well as the professionals, organisations, and the enterprises in the field of social and health care. The aim of the projects was to create customer-oriented service control network and competence centre for family carers of the seniors Developing mechanisms and competency development services (contribution to the development)

4. TOIMIA Functioning Measures Database is an open access free off charge tool in Finnish designed for experts and professionals interested in how to measure functioning in clinical practise and research. The database contains basic descriptions of functioning measures; assessments of psychometric properties and feasibility of these measurement instruments for different purposes; guidelines and recommendations by experts concerning the measuring of functioning in different situations and contexts. Another aim is to unify the concepts of functioning. The network relies on wide-ranging collaboration with different actors. Some 40 organisations are involved in the network, including rehabilitation and research institutes, universities, polytechnics, ministries, NGOs, among others. Supports identification of the best clinical practices in different situations.
5. Public Service Info directs the citizen to the right public service and offer advice on the use of the services. The service is not intended for taking up official matters with authorities — instead, to guide the citizen to the correct authorities. The service is useful for all the citizens incl. seniors. It helps them to find the right authority to different matters.
6. Alta – regional economic database. The aim of the project was to give real time information about the economic structures in different regions in Finland. (fields of industries and services, employment data etc.) The project provides economic information from different regions and thus helps the private and public sector to plan right actions in those regions.
7. The eHealth Regions Network is an association of stakeholders in the health sector in the Baltic Sea Region. The Network is an incubator for innovative projects in the Baltic Sea Region, it facilitates the transnational cooperation on eHealth and wants to create a common European eHealth Area. The aim is to create a common European eHealth area. The network also functions as an incubator for innovative projects.
8. The Technology for the Elderly Centre is a centre of expertise, which assembles and shares information and experiences related to technology for the elderly. It promotes the collaboration between different operators, and influence the needs of elderly users being taken into consideration in technological development work, and in social discussions. The Technology for the Elderly Centre is a part of the work

of Valli, the Finnish Union for Senior Services. The centre assembles and shares information and experiences related to technology for the elderly.

9. Robocoast Digital Innovation Hub (DIH) is a digital Innovation Hub consisted of 100 enterprises in the field of robotics and automation. Robocoast, a centre of excellence based on open innovation, consists of over a hundred companies as well as international RDI networks and programs. Robocoast operates in close collaboration with Satakunta-based universities and educational institutions. New business and products in the field of e.g. silver economy.
10. “Smart Money for International Growth” project is aiming to identify funding and financing channels and sales channels for the Finnish small companies in the field of health, ICT and cleantech. It was concentrated on CVC funding in the project. The database contains information about 690 companies. Funding is essential for small companies developing products and services e.g. for the purposes of silver economy.
11. TEKNO - Terveys- ja hyvinvointiteknologiaosaaminen sujuvaksi project has developed training and networks to promote the health and welfare technology of the social and health care sector for the benefit of both workers and their clients. The target groups of the project were e.g. start up companies specialized to health care services and products and the seniors that needed new kind of support in order to manage to live home as long as possible.
12. Terveysteknologian Innovaatioekosysteemi (Innovation ecosystem for health technology) project is aiming to create an innovation ecosystem for health technology. Innovation ecosystem would help the companies and public actors in the field of health sector to develop high quality products and services e.g. for senior citizens.

Ways and solutions to support silver economy development:

- To exploit various forms and models for silver economy related knowledge transfer: seminars, workshops, business trips, bench marking, valleys, clusters, digital innovation hubs, incubator network, public institutions, networks, exhibitions, showrooms, databases;
- More actively include various social groups, associations for elderly, for handicapped and their cooperation platforms to silver economy related knowledge management.

Funding schemes and financing mechanism for supporting innovation and smart specialization projects in correlation with silver economy

These financing mechanisms are shortlisted for supporting innovation and smart specialisation in correlation with silver economy.

1. ESIF / Finnvera programme is operating in order to help the companies to get investment loan from the bank or ESIF.
2. COSME aims to make it easier for small and medium-sized enterprises (SMEs) to access finance in all phases of their lifecycle – creation, expansion, or business transfer. Thanks to EU support, businesses have easier access to guarantees, loans and equity capital. EU ‘financial instruments’ are channelled through local financial institutions in EU countries. To find a financial institution in your country, visit the Access to Finance portal.
3. Finnvera programme provides financing for the start, growth and internationalisation of SMEs and big companies for protection against export risks.
4. Business Finland offers funding for research, product development, and many kinds of business development needs, especially for small and medium-sized companies. Large companies and research organizations can receive funding for joint projects with smaller companies.
5. Centre for Economic Development, Transport and the Environment: regional investment funds support new business and internationalisation.
6. Smart Specialization is the response to the wishes of the European Commission and the Finnish Ministry of Employment and the Economy to name the regions competitive fields of research and innovation. The programme will be the basis for directing development funding to the region and creating international partnerships. The objective of smart specialisation is to utilise the region’s competence potential. One target group is the senior entrepreneurs. The programme also supports companies to innovate new products and services to their customers. This programme may motivate companies to develop their smart specialization products and services for the silver economy segment.

Ways and solutions to support silver economy development:

- To exploit various available funding mechanism for silver economy related services and products development - silver Slush, private investors, silver Economy crowd funding, social investment group,

pension trusts, business angels, international fund, regional fund, market and end-user driven solutions, grants, municipalities, fruitful discussions together with financiers, sponsor for the specific need, corporate programs, low-interest rate loans, investments / donations Cross-border funds Business Finland FASIE

- sharing economy is a trending way to support silver economy development.

2.2 Latvia

Funding schemes and financing mechanism for supporting innovation and smart specialization projects in correlation with silver economy

Few financing mechanisms are shortlisted for supporting innovation and smart specialisation in correlation with silver economy: Social Entrepreneurship Programme and Active and Assisted Living programme.

1. Social Entrepreneurship Programme may motivate older people to start businesses and boost entrepreneurship initiatives, diminish the poverty rate among elderly people in Latvia, stimulate the creation of social innovation.
2. AAL Programme (AAL - Active and Assisted Living) programme has the specific aims to: foster the emergence of innovative ICT-based products, services and systems for ageing well at home, in the community, and at work; to create a critical mass of research, development and innovation at EU level in technologies and services for ageing well, including the establishment of a favourable environment for participation of SMEs; to help create the market conditions for the industrial exploitation of healthy ageing products by providing a European framework that supports the development of standardised solutions and facilitates their adaptation to local, regional and national levels to account for varying social preferences and regulatory requirements. Since 2008, AAL Programme has funded over 220 projects. Through projects, AAL Programme is: extending the time people are able to live in their preferred environment by increasing their autonomy, self-confidence and mobility; supporting the preservation of health and functional capabilities of older people; promoting better and healthier lifestyles for individuals at risk; enhancing security, prevent social isolation and create networks of support around

older people; supporting carers, families and care organisations; getting more out of our investment into our ageing society.

Ways and solutions to support silver economy development:

- To pay more attention to legislative foundation of financing mechanisms;
- Stronger involvement of other partners - knowledge Institutions, active universities and government – is needed;
- Promote existing digital opportunities;
- Better involvement of end users at the design stages of initiatives, products, services is needed;

2.3 Lithuania Pilot programs for supporting innovation and smart specialization projects

There are two national programmes, which support innovation and smart specialization projects in Lithuania with a focus on silver economy and correlation with RIS3 priorities „Health technologies and Biotechnologies“ and „Inclusive and Creative Society “.

1. National Research Programme “Healthy ageing” has a purpose to obtain the new scientific knowledge required to extend the duration of a healthy and quality life in Lithuania. It is pointed out, that the development, improvement and investigation of methods of treatment, health rehabilitation, long-term monitoring of health conditions that influence healthy and quality life expectancy and technologies that reduce social exclusion of the elderly in Lithuania should be the priorities for investigations.
2. Action Plan for Healthy aging protection in Lithuania 2014-2023 is a broad health policy set of measures that includes not only cardiovascular disease, stroke and diabetes but also physical activity, injuries, cancer and others. Among other issues, such topics where active steps need to be taken are identified:
 - Awareness raising about healthy living of elderly people, improving their health literacy, change their health behaviors.
 - Increasing the availability and quality of preventive health care for elderly people;
 - Reduce the number of people aged over 60 fallings and related injuries;
 - Improve the mental health and psychological well-being of people over the age of 45, thus improving their quality of life;

- Improve the accessibility of occupational health services to older people by reforming the system of occupational health services delivery and organization;
- Improving the functioning of the occupational health and safety system for police and other internal staff, taking into account the specific nature of work activities;
- Improve and developing availability of geriatric services;
- Preparing medical personnel for newly established geriatric units and ensure their continuing professional development;
- Providing practical knowledge of geriatric care for non-medical staff, NGO volunteers, family members, relatives and guardians of geriatric patients;
- Improving the availability and quality of comprehensive rheumatology healthcare and ensure specialized long-term patient monitoring.

Ways and solutions to support silver economy development:

- More attention should be paid to elders at work place with the focus on re-skilling;
- It is necessary to strengthen informal education especially in suburb regions.

Models and platforms for joint knowledge management and knowledge transfer

As an effective model for knowledge transfer clusters are operating in Lithuania. Wellness Cluster “Ivita” is identified as an active player within silver economy ecosystem with correlation with RIS3 priority „Health technologies and Biotechnologies “. The cluster is oriented towards high quality and high value-added health technology products and services creation that can improve human security, add efficiency to their activities, contribute to prevention and public education and promote healthy lifestyle habits.

As a platform for joint knowledge management and knowledge transfer Santara Valley is identified. Santara Valley has five research directions: biotechnologies, innovative medicine technologies, molecular medicine and bio pharmacy, ecosystems and sustainable growth, IT and communication technologies. Santara Valley platform is a breakthrough in research development and research commercialization.

Ways and solutions to support silver economy development:

- To exploit other available models and platform for silver economy development, f.e. exhibitions, innovation forums, etc.
- To use traditional models for knowledge transfer (f.e. seminars, workshops) for silver economy related knowledge development.

Funding schemes and financing mechanism for supporting innovation and smart specialization projects in correlation with silver economy

Three financing mechanisms are shortlisted for supporting innovation and smart specialisation in correlation with silver economy: Intellect, 54+, and Innovouchers. Nevertheless, it was stated, that there is no concrete financial measure oriented to finance creation of products for silver economy market neither direct criteria in any other financial measures to get additional points if products which are planned to be created is oriented to solve problems of elderly people.

Financial measure “Intellect” is aiming encourage companies to invest in R&D for innovative products, services or processes and encourage business development by investing in R&D and innovation infrastructure design and development.

Financial measure “54+” is aiming to create favorable conditions for older people of working age to participate actively in social and civic issues and to increase their opportunities to participate in the labor market.

Financial measure “Innovouchers” is aiming to encourage business and science to establish initial contacts, to continue the research and / or experimental development activities already undertaken in the framework of science and business cooperation, to encourage enterprises to innovate more actively and to take advantage of business and science cooperation opportunities.

Ways and solutions to support silver economy development:

- It is necessary to pay more attention to self-employment programs for seniors;
- More attention to be paid for social enterprises as a potential senior economy market player.

2.4 Russia

Pilot programs for supporting innovation and smart specialization projects

There are several programmes, which support innovation and smart specialization projects in Russia, city of St. Petersburg with a focus on silver economy and correlation with RIS3 priority „ICT & wellbeing “.

1. Smart City is a city-planning concept for integrating many information and communication technologies (ICT), including the Internet of Things (IoT) systems for managing urban infrastructure: transport, education, healthcare, housing and communal services, security, etc. The purpose of creating a “smart city” is to improve the quality of life of citizens and to increase service efficiency. The implementation of Smart City leads to improving the quality of services, forming a comfortable environment, developing communication (citizens and the state), enhancing productivity, increased the interactivity of civil services (minimizing time consumption); reducing costs and resource consumption, smart city transport (ITS), smart housing and communal services, advanced public safety system. Smart city system allows the government to interact with communities and urban infrastructure directly. Through the use of sensors integrated in real-time, the accumulated data from citizens and devices are processed and analysed. This process allows the government to monitor the real-time situation in the city, to control its development, and examine methods for improvement of the quality of life. The collected information is the key to solving the problems of inefficiency.
2. HealthNet National Technology Initiative (NTI) is the market of personalized medical services and medicines that provide increased life expectancy, as well as obtaining new effective means of prevention and treatment of various diseases. The HealthNet market includes an open ecosystem that supports and develops companies that create, produce and provide biotechnological and medical products and services that lead to a significant improvement in human health and quality of life. The implementation of HealthNet leads to improving the quality and accessibility of medical care; introducing into the clinical practice of medical organizations products and technologies developed by domestic companies operating within the HealthNet market, increasing the duration and quality of life of citizens, organising more comprehensive and faster implementation of effective methods and technologies for the treatment and prevention of diseases, increasing the investment attractiveness of the Russian

Federation, optimizing the regulatory environment in the field of healthcare and health-saving technologies, strengthening the competitiveness of Russian products (in the field of healthcare, sports, health-saving technologies).

3. Digital Health system is providing a unified digital circuit in the field of healthcare. The platform will be interacting with the state information systems, data systems of medical organizations, and with the digital government services portal. Citizens are provided with timely, necessary and high-quality medical care using digital medical services by doctors, patients, health managers of all levels and forms of ownership; the online health care platform "My health" was launched, where people can take an online health test, get recommendations, and book an appointment at the free clinic. Affordable, convenient, effective, and high-quality medical services contribute to increasing the average life expectancy of the population of the Russian Federation to 76 years, increasing the active and working-age of citizens approx. to 5-6 years after reaching retirement age. The productivity and efficiency of the use of material, human, information, and other resources and data in the provision of medical services will be increased while maintaining the quality of medical care for all patients. The ecosystem of digital healthcare will be created through the transfer of innovative solutions to medical organizations and the support of domestic start-up companies in this area.

Ways and solutions to support silver economy development:

- To pay more attention to legislative foundation of financing mechanisms;
- Stronger involvement of other partners - knowledge Institutions, active universities and government – is needed;
- Promote existing digital opportunities;
- Better involvement of end users at the design stages of initiatives, products, services is needed;

Models and platforms for joint knowledge management and knowledge transfer

As an effectively working these models and platforms are shortlisted.

1. Digital Government. The purpose of the national program "Digital government" is to bring government closer to citizens and businesses and to provide services more efficiently. Besides, the goal is to create a transparent and innovative government. The implementation of Digital government leads to reduction

in the number of duplicated government functions, improving the quality of government services, reducing the time for servicing applicants, reducing administrative barriers, expanding the range of public services, improving the efficiency of government agencies, assuring customer satisfaction and upgrading public governance in general. Digitalisation of the government shouldn't be only seen by providers as a possibility to reduce costs, but also as a great prospect to offer higher quality services for all citizens.

2. Leader ID National Technology Initiative (NTI) LEADER-ID is the information support platform for development, and promotion of young leaders, making it possible to increase the capitalization of national human resources through the maximally efficient use of the potential and capabilities of the most active and dynamic part of society. The implementation of LEADER-ID leads to: enhancing professional and personal development, developing economy, finding and building young leaders (new entrepreneurs), creating a vast data base (Data about active participants), increasing the capitalization of national human resources, developing mechanisms and competency development services (contribution to the development). LEADER-ID allows its participants to create their own history of professional and personal development, to show their competencies development in various fields, to share this information with potential partners and employers, to build individual career paths through competency assessment mechanisms and competency development services, to develop personally and to contribute to the development of the other people and Russia as a whole.
3. Boiling Points National Technology Initiative (NTI) is a network of coworking centers, which was made as a platform for discussions between entrepreneurs, engineers, scientists, teachers, students, as well as representatives of the government. In such centres, they can share experience, results of activities, jointly develop new implementation models. The implementation of Boiling Point leads to: sharing knowledge and experience (best intellectual resources of the region on one platform), connecting people and creating community, developing new implementation models, creating new business ideas and roadmaps for their implementation, enhancing professional and personal development, promoting innovation, developing economy, finding and building young leaders (new entrepreneurs), creating a vast data base.

Ways and solutions to support silver economy development:

- Expansion expansion into low-paid part-time workforce management could be potential used for silver economy needs;
- More clear regulatory rules are needed for successful knowledge transfer and management
- To exploit quadruple helix partners and foreign companies, development agencies, export support agencies, business associations, universities info effective way of cooperation towards silver economy development.

Funding schemes and financing mechanism for supporting innovation and smart specialization projects in correlation with silver economy

There al lot of financing mechanism and schemes available:

1. Presidential grant. The Fund has been the single operator of grants by the President of the Russian Federation for the development of civil society. NGOs play a significant role in today's society, typically picking up the government's deficits in services, especially by improving the social protection system for citizens. However, NGOs' activities could also be environmental, educational, social, and human rights work, etc. NGOs play a critical part in developing society, improving communities, and promoting citizen participation. Supporting the development of such organizations will lead to the improvement of social structure, growth of the economy, improvement of quality of many products and services.
2. «Start» program (State Innovation Promotion Fund) is supporting existing small innovative enterprises aiming to develop and master the production of new products, technologies, or services using the results of their own scientific, technical, and technological research. The supporting, therefore development of small and medium-sized enterprises will have a significant impact on economic situation in Russia. It will be solving the issues of employment, GDP growth, and will be filling the market with new goods and innovative services. Therefore, it will have a positive influence on the silver economy particularly through implementing new products and services for senior people, improving the medical and social services, etc.
3. «Cooperation» program (State Innovation Promotion Fund) is aimed to develop partnerships between small innovative enterprises and Industrial partners. The aim of the Program is to use the potential of the small science-intensive business sector to develop product lines of medium and large technology enterprises, create new and upgrade existing industries based on innovative technologies. The

supporting, therefore development of small and medium-sized enterprises will have a significant impact on economic situation in Russia. It will be solving the issues of employment, GDP growth, and will be filling the market with new goods and innovative services.. Therefore, it will have a positive influence on the silver economy particularly through implementing new products and services for senior people, improving the medical and social services, etc.

4. «Commercialization» program (State Innovation Promotion Fund) aims to support companies that have completed the R&D stage and plan to create or expand production of innovative products. The supporting, therefore development of small and medium-sized enterprises will have a significant impact on economic situation in Russia. It will be solving the issues of employment, GDP growth, and will be filling the market with new goods and innovative services. Therefore, it will have a positive influence on the silver economy particularly through implementing new products and services for senior people, improving the medical and social services, etc.
5. «Internalisation» program (State Innovation Promotion Fund) is aimed at supporting companies implementing joint projects for the development of new types of products with the participation of foreign partners, as well as supporting companies developing products designed for sale in foreign markets. The supporting, therefore development of small and medium-sized enterprises will have a significant impact on economic situation in Russia. It will be solving the issues of employment, GDP growth, and will be filling the market with new goods and innovative services. Therefore, it will have a positive influence on the silver economy particularly through implementing new products and services for senior people, improving the medical and social services, etc.
6. «Development» program (State Innovation Promotion Fund) is aimed at supporting companies that already have experience in developing and selling their own high-tech products and are planning to develop new types of products. The supporting, therefore development of small and medium-sized enterprises will have a significant impact on economic situation in Russia. It will be solving the issues of employment, GDP growth, and will be filling the market with new goods and innovative services. Therefore, it will have a positive influence on the silver economy particularly through implementing new products and services for senior people, improving the medical and social services, etc.
7. «IMPULSE OF GOOD» (Fund «Our Future») Annual award for contribution to the development and promotion of social entrepreneurship in Russia. Beyond business and profit, social enterprises generate

a broader positive social and environmental impact in areas such as employment, health care, wellbeing, poverty, city development, etc. The developing and promoting social economy is essential in effectively tackling the social challenges facing Russia. Unfortunately, senior people are often considered as a poor socially protected group of people, so to improve this situation, the government needs to support businesses that will provide effective services and innovative goods for the "silver" market.

8. «SOCIAL ENTREPRENEUR» (Fund «Our future) program for small and medium business that solves problems in the social sphere, which needs funds to launch or develop a project. An interest-free loan of up to 565.000 EUR is provided. Beyond business and profit, social enterprises generate a broader positive social and environmental impact in areas such as employment, health care, wellbeing, poverty, city development, etc. The developing and promoting social economy is essential in effectively tackling the social challenges facing Russia. Unfortunately, senior people are often considered as a poor socially protected group of people, so to improve this situation, the government needs to support businesses that will provide effective services and innovative goods for the "silver" market.
9. «SAP UP» is an international competition for the best social entrepreneurs. Beyond business and profit, social enterprises generate a broader positive social and environmental impact in areas such as employment, health care, wellbeing, poverty, city development, etc. The developing and promoting social economy is essential in effectively tackling the social challenges facing Russia. Unfortunately, senior people are often considered as a poor socially protected group of people, so to improve this situation, the government needs to support businesses that will provide effective services and innovative goods for the "silver" market.
10. «Creating Opportunity» («KAF» Foundation) is a program to support projects aimed at creating and developing opportunities for realizing the potential of socially vulnerable groups of the population: elderly people, adults with hearing impairment and vision impairment; Support is provided for projects aimed at improving the accessibility of the environment. NGOs play a significant role in today's society, typically picking up the government's deficits in services, especially by improving the social protection system for citizens. However, NGOs' activities could be environmental, educational, social, and human rights work, etc. NGOs play a critical part in developing society, improving communities, and promoting citizen participation. Supporting the development of such organizations will lead to the improvement of social structure, growth of the economy, improvement of quality of many products and services.

11. «Silver Age» (Raiffeisenbank JSC, «Good Stories» Charitable Fund) The task of the competition is to identify and support local community initiatives aimed at professional adaptation of the older generation, reducing social exclusion and reducing the risks of violence and fraud against older people. NGOs play a significant role in today's society, typically picking up the government's deficits in services, especially by improving the social protection system for citizens. However, NGOs' activities could be environmental, educational, social, and human rights work, etc. NGOs play a critical part in developing society, improving communities, and promoting citizen participation. Supporting the development of such organizations will lead to the improvement of social structure, growth of the economy, improvement of quality of many products and services.
12. Public Private Partnership (PPP) is often defined as a long-term contract between a private party and a government agency for providing a public asset or service, in which the private party bears significant risk and management responsibility. It is likely that a private-public partnership increases net investment in a specific industry and leads to more significant project growth in a specific sector. From the entrepreneur side, The PPP effects on business value and reputation. Moreover, businesses gain intangible benefits, such as network development and knowledge, rather than revenue.
13. Employment centre subsidies are payments provided by the state or local budget, as well as payments from special funds for legal entities and individuals, local authorities, and other states. The government implements subsidies to encourage production and consumption in specific industries. On the supply side, subsidies help the industry to produce more goods and services. It leads to an increase in the product's supply and demand; therefore, it reduces the price of the product. The decline in the cost of goods and services has a high impact on the quality of people's life. It engages, motivates, and improves public-government relations.
14. Entrepreneurship Development Committee and consumer market of St. Petersburg. Subsidies are payments provided by the state or local budget, as well as payments from special funds for legal entities and individuals, local authorities, and other states. The government implements subsidies to encourage production and consumption in specific industries. On the supply side, subsidies help the industry to produce more goods and services. It leads to an increase in the product's supply and demand; therefore, it reduces the price of the product. The decline in the cost of goods and services has a high impact on the quality of people's life. It engages, motivates, and improves public-government relations. Moreover, supporting and development of small and medium-sized enterprises will have a significant impact on

economic situation in Russia. It will be solving the issues of employment, GDP growth, and will be filling the market with new goods and innovative services.

15. Trust funds is a special form of property management organization in which property is alienated from one person (the founder of the fund) in favour of another person (the fund manager). All profit from the management of this property is transferred to the accounts of the Beneficiary, which is called the trust fund. This financial mechanism is not well developed in Russia due to the narrow circle of interested parties. There is a demand for hereditary instruments in Russia, but, in the absence of adequate analogs at home, many business people have long been using the services of managers in foreign trusts. So, as financial mechanisms, trust funds don't have that much impact yet.
16. Private donations is a financial donation made by an individual or an organization to a non-profit organization, charity, or private foundation. NGOs play a significant role in today's society, typically picking up the government's deficits in services, especially by improving the social protection system for citizens. However, NGOs' activities could be environmental, educational, social, and human rights work, etc. NGOs play a critical part in developing society, improving communities, and promoting citizen participation. Supporting the development of such organizations will lead to the improvement of social structure, growth of the economy, improvement of quality of many products and services.
17. Crowdfunding. Debt crowdfunding - the newest type of crowdfunding, in which a person invests a sum of money in any business, subject to its subsequent return or receipt of a share in the company. Equity crowdfunding - this is crowdfunding, where the recipient sells part of his business to the donor, without any obligations. A long-term lease of part of the company is also possible here, during which the donor receives his dividends. Reward crowdfunding - a form of crowdfunding, where the donor invests a sum of money in the idea of the recipient, who, in return, gives some valuable gifts or prizes.
18. Credits is a money loan issued to a legal entity for a specified period on the terms of repayment and payment of credit interest. Any support for small or medium businesses always leads to development. By minimizing loan interest rates and creating more beneficial programs for social impact business, we will create a healthy ecosystem and develop many industries, including «silver» sector.
19. Investments is the act of allocating funds to an asset or committing capital to an endeavor (a business, project, real estate, etc.), with the expectation of generating an income or profit. Investments lead to economic growth, strengthening of the financial viability of entities, reduction of unemployment, improvement of the welfare of the population, etc. However, the state should promote the development

of investment activity, creating attractive conditions. Investors should receive government support in such areas as: tax incentives for investments, the formation of financial mechanisms to support and attract investment from the state, providing a favorable administrative environment for investments (without risks), creating infrastructure prepared for investment, stimulation of demand for products manufactured by investors.

20. Reinvestment is the practice of using dividends, interest, or any other form of the income distribution earned in investment to purchase additional shares or contribute to another business. Reinvestments could be useful for businesses, but it is always risky — That's why reinvestment should be only made from capital expenditure and not from expenses. The right reinvestment could lead to business growth, opening new lines of production or services, an expansion that will eventually create more jobs and create more profit.
21. Tax breaks are the advantage provided by the state or local government to a specific category of taxpayers, putting them in a more favourable position in comparison with other taxpayers. The implementation of the beneficial tax breaks policy for businesses will lead to business development, increase of profit, raise of production, etc. Such programs help small businesses to survive and grow in the vast and competitive market. Tax reduction motivates people to do their own business; it forces innovation and develops the economy.
22. State support for export. Governmental Provision of financing and financial services (lending, insurance, bank guarantees), subsidiaries. The governmental support for export is the most effective mechanism of state policy to business and one of the main stimulating elements of foreign trade. Export support is an integral factor in sustainable economic growth, and its expansion allows diversifying the structure of the economy.
23. Endowment Fund. Endowment is a trust fund intended for use for non-commercial purposes. The endowment is more applicable to solve long term issues. By contributing the target capital, the donor allows the organization to realize its mission for a long time. Moreover, since endowment funds can only be directed to the organization for which it was created to support, it cannot be used to minimize taxation. The appearance and development of endowment funds will lead to an increased quality of life, better medical services, wellbeing, advanced science, innovation, etc.
24. Bootstrapping. The method of founding and running a business that excludes or almost excludes financing from external sources. The main advantages of the method are the quick start of

entrepreneurial activity itself, independence and the ability to close a business without significant losses for the entrepreneur. This method applies only to individuals with money savings who are ready to risk it all to open their businesses. The impact of the silver economy of this measure is tiniest; the positive results happen only if the company succeeds.

25. Insurance programs. Business Insurance refers to a contractual arrangement in which one party, i.e. insurance company or the insurer, agrees to compensate the loss or damage sustained to another party, i.e. the insured, by paying a definite amount, in exchange for an adequate consideration. (Protection against financial losses and bankruptcy; Real estate protection; Personnel insurance). The insurance for a business can reduce many risks, but it will raise the company's expenses. The implementation and promotion of better insurance policies for SMEs could attract more entrepreneurs and develop various market sectors.

Ways and solutions to support silver economy development:

- To pay more attention to legislative foundation of financing mechanisms;
- Stronger involvement of other partners - knowledge Institutions, active universities and government – is needed;
- Promote existing digital opportunities;
- Better involvement of end users at the design stages of initiatives, products, services is needed;

2.5 Denmark

Pilot programs for supporting innovation and smart specialization projects

There are several national and regional programmes, which support innovation and smart specialization projects in Denmark with a focus on silver economy and correlation with RIS3 priorities „Grow Drives“ and „Smart Industry “.

1. The Danish Business Promotion Board has an annual budget of DKK 345 million DKK for decentralized business promotion efforts and funds from the EU's structural funds. In the current Structural Fund period (2014-2020), a framework of approx. 400 million DKK, which has not been implemented. In addition, any additional Structural Fund funds may come from the profit reserve and repayments from existing Structural Fund projects and programs. This entity must contribute to strengthening the development of the Danish business community. This is done by promoting a coherent, demand-driven and locally based business promotion and tourism effort for companies across Denmark. The Danish Business Promotion Board must initiate and finance decentralized business promotion efforts that take into account differences in regional and local business challenges, opportunities and priorities.
2. Vækstfonden fund through co-financing contributes to the growth of economically viable yet uncertain small and medium-sized enterprises. It is an important piloting program as it takes action when the financial market hesitates; has a focus on innovation, entrepreneurship and business development, invests in funds and companies, grant loans and guarantees, collaborates with private investors where possible. As part of the Danish growth and innovation ecosystem they cooperate with other investment funds, private investors, institutional investors and other financial institutions, innovation incubators, regional innovation offices, accelerators and CONNECT Denmark. The strategy is reflected in the following three focus areas:
 - *Fund investments*. Investing in private funds who then invest capital in companies. Fund investments always occur in close cooperation with private investors, so Vækstfondens capital contributions act as a gearing factor. Every time Vækstfonden invests DKK 1 via a fund, the companies who receive funding will ultimately receive more than DKK 10.
 - *Investments in start-ups*. They invest equity in start-ups that have significant growth potential yet have trouble raising sufficient venture capital. These investments are carried out in cooperation with other

public operators such as innovation incubators. Their initial investment usually takes place in the early stages.

- *Loans and guarantees for established small and medium-sized enterprises.* They grant loans directly to small and medium-sized enterprises that have sound growth plans, but have insufficient collateral or insufficient equity to be granted a bank loan. They also grant guarantees for small and medium-sized enterprises' loans, guarantees and overdraft facilities granted by other financial institutions in connection with business development. In this manner They ease access to financing for these companies and entrepreneurs, which they otherwise would not be able to.

3. Innovationsfonden (Innovation Fund) with Grand Solutions wants through the Grand Solutions calls to invest in ambitious innovation projects with excellent science and strategic research that contributes to create new and tangible solutions to important societal challenges and creates value for Denmark. The FORSK2025 catalogue is the basis and guide for the thematic call. Innovation Fund Denmark (IFD) invests in ambitious and targeted strategic research and innovation projects that creates new solutions, technologies and valuable new knowledge.
4. Innovation Fund Denmark Innobooster is a grant to companies that wish to develop and make a new product or service ready for the market or to improve a process that increases the company's competitiveness and creates growth. The grant may help reduce the company's project-related risks.
5. The Innovation Fund Denmark Innofounder is a programme that lasts 12 months with the aim to accelerate the development of your innovative business idea from early stages to the stage where you are ready to go to market or gain investment. The programme is open to any field of expertise as long as the idea is innovative and has potential to become a sustainable business.
6. Danish Research and Technology Organisations (GTS instituter) core function is to deliver technological knowhow and expertise to private businesses and to public institutions, thereby increasing the innovation and competitive power of both business and society through the accelerated adoption of technology. The GTS institutes range in size from fewer than thirty to over one thousand employees. In 2017, the total number of employees was 3,805. The institutes also vary in the scope of their international focus, with some institutes focusing primarily on disseminating new knowledge and technology within Denmark, while others are very international in their service offering and market orientation. To support the maintenance and especially the renewal of the GTS infrastructure, the Ministry of Higher Education and Science invests more than € 40 million annually in the institutes'

development of technological knowledge. This investment takes the form of performance contract activities which allow the institutes to develop new technological services ahead of market demand and in areas where the market itself cannot or does not meet the need. Seen in overview, the GTS institutes perform three vital functions within the Danish innovation system:

- Building and supporting R&D competence

The GTS institutes participate in both Danish and international R&D projects with the objective of developing new technological knowledge in close collaboration with businesses, universities, and research institutions.

- Developing and maintaining a technological infrastructure

The GTS institutes' technological infrastructure comprises laboratories and test facilities run and operated by specialists. This infrastructure enables businesses to develop, test and certify products easily and promptly. To sustain this infrastructure, the institutes keep track of emerging trends and tendencies to bring technologies relevant to Danish businesses home to the Danish market and to develop new technological services targeted particularly at SMEs.

- Knowledge transfer

The GTS institutes work proactively to transfer and apply the technological knowledge obtained. Their focus is on the application of technology as broadly and widely as possible to build and support levels of innovation in as many Danish businesses as possible.

The seven Danish government-approved Research and Technology Organisation (RTO) the GTS institutes play a key role in the Danish innovation system as the link between technology and business. They seek to make new technological methods applicable to businesses and promote businesses uptake of new technology. For many businesses, keeping up with accelerating technological development and implementing new technologies in products and processes can be a major challenge. Investing in new technologies can be both expensive and uncertain an uncertainty that is particularly difficult for small and medium-sized enterprises (SMEs) to handle.

7. Business Hub Central Denmark (and also in 6 other regions in DK) create suitable tools and services to generate operations, development and growth in entrepreneurial businesses and SMEs. They offer business counselling free of charge to both national and foreign entrepreneurs and business owners. Roughly 30 consultants can help start up your new business, optimize your operations or further develop

your business by activating their large network of consultants and experts and assisting you financially in acquiring guidance from private counsellors.

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8. Medtech Innovation Consortium (MTIC) a cluster is oriented towards high quality and high value-added health technology products and services. They build a bridge between the private businesses, municipalities, the hospitals and the knowledge institutions. The Cluster aims to promote development of products, solutions and services that create growth in businesses, better quality in the treatment of citizens and patients.
9. TUCV – test and development centre promote more mature solutions on the market. TUCV helps the start-ups and companies – asking the right questions, coaching and helps open doors to i.e. the Central Jutland Regional Hospital. This centre could directly contribute to the development, trials and test of assisted living technology.
10. PreSeed Ventures are an early investor and offer expertise in Team and skill building, support function, Business development and strategy, networking. PreSeed Ventures is Denmark's largest and most successful early stage investor. PreSeed Ventures is financing and assisting talented and hungry entrepreneurs and promising startups.
11. Startvækst Aarhus. Offers free guidance and sparring for entrepreneurs and development of established companies in and around Aarhus. Startvækst Aarhus also offers courses and theme meetings. The organization offer free guidance and arrange courses for entrepreneurs (0-3years old) in early stage of establishing or companies +3 years old.

Ways and solutions to support silver economy development:

More attention should be paid to elders at work place with the focus on re-skilling;

It is necessary to strengthen informal education especially in suburb regions.

Models and platforms for joint knowledge management and knowledge transfer

As effectively operating platforms for knowledge management and knowledge transfer these entities are identified:

1. Medtech Innovation Consortium (MTIC) cluster is created to promote development of products, solutions and services that creates growth in businesses, better quality in the treatment of citizens and patients. The cluster is oriented towards high quality and high value-added health technology products and services. They build a bridge between the private businesses, municipalities, the hospitals and the knowledge institutions.
2. Welfare Tech is a cluster for health and assisted living technology is oriented to develop business and innovate through cooperation between private companies and public parties. Welfare Tech is a Danish national cluster and hub for innovation and business development in healthcare, homecare and social services. They are a membership organisation with members from private industry, public organisations, and research and education institutions. Welfare Tech has a broad knowledge about the Danish market through our members and operates as a national entry point for international companies who want to enter the Danish market.
3. TUCV – test and development centre as a platform is working in order to strengthen co-operation between enterprises, research and educational institutions, and local as well as regional authorities and institutions throughout Denmark and the Nordic countries.
4. Care Ware is part of a strategy that the City of Aarhus uses to further technological advances within health care and assisted living. CareWare focuses on new technologies targeted at the fields of health care and assisted living. Technologies or methodologies for the physical or cognitive rehabilitation of citizens, as well as solutions that contribute to a better work environment of the care staff. CareWare is directed at decision makers and professionals who are working with or for the elderly and people with disabilities or chronic diseases. They are also inviting businesses, entrepreneurs, research & development institutions, as well as educational and training environments with an interest in health and welfare technology.
5. Network for healthy growth (SundVækst netværket) contributes to better use of assisted living technology, to a better implementation and practical problem solving.

6. Danish Health Tech is a national cluster and hub for innovation and business development in healthcare, homecare and social services. It has a broad knowledge about the Danish market through the members and operates as a national entry point for international companies who want to enter the Danish market. Welfare tech and MTIC is a part of this cluster together with other clusters.
7. Care Net/Danish Care network consists of companies specializing in the areas of care-giving, nursing and service. The purpose of the network is to create interaction and synergy between the players in the field, and to increase the focus on the technological possibilities it implies for the welfare sector. The network is a platform for the development of technological interventions that can meet the challenges faced by suppliers and welfare clients. A network with access to knowledge and potential partners is crucial for the continuing technological development and use of welfare-technology in various municipalities, organizations, regions and public authorities.
8. CareNet consist of participants who actively participate and raise the network jointly. Simultaneously, the network is a platform for meetings between municipalities, public authorities and private organizations who develop and produce welfare and assistive technology.
9. DokkX centre is a strategic focus across the five magistrates and is based on the vision of Aarhus Municipality of being among the leaders in the application of welfare technology by presenting and demonstrating a wide range of technological solutions, seeking to promote curiosity and knowledge about the technologies. By sensing, touching and playing with the technologies, citizens of all ages will develop better competences in the use of these technologies of freedom in their daily lives. The centre intends to demystify welfare technologies and illustrate how assistive technology is a part of the everyday lives of many people, and is not only applied for elderly citizens. At the same time, DokkX will create the framework for an innovative environment for development, with unique opportunities for co-operation between companies, educational and research organisations, the Municipality of Aarhus and its citizens. By bringing together different groups and individuals with different skills, an innovative environment will be formed, combining user feedback with product development.
10. Central Denmark Region „VækstForum“ (not active since 1/1 2019) contributed to regional growth and development helping start-ups and SMVS in the region.
11. The Trade Council is the part of the Ministry of Foreign Affairs that assists companies in realising their ambitions within export, innovation and growth. Each year, The Trade Council helps around 3,000 companies to expand their export activities and enter new markets. Denmark's international trade

agreements and the rising prosperity of the world's developing economies create good conditions for the Danish business community. Combined with developments within areas such as climate technology, fintech and welfare technology, there is a huge potential for Danish solutions abroad. The Trade Council is present in more than 70 countries, where they work closely with the business community and possess in-depth knowledge of the local markets, and where the staff offer business advice and support. The export advisers comprise a mixture of local staff with good contacts in local companies and trade organisations as well as posted staff with roots in the Danish business sector. This ensures the right balance, enabling your company to get the best value-adding advice. They also have expertise within international trade policy and can assist with, for example, market analyses, business set-up counselling and business plans, advise about customs and export rules and regulations, and mediate contact to business partners and new sales channels.

12. Aarhus University's Incubator's aim is to offer a professional environment with relevant counselling and interdisciplinary networks to students at Aarhus University who have a business idea or an established business. If one has an idea for a start-up or business Aarhus University Incubator will help to develop the idea and to move your business idea forward see <https://studentervæksthus.au.dk/en/>. The start-up hub is only for students at Aarhus University.
13. VIA Student incubator is to help students to think entrepreneurial and innovative and help students with their business idea. VIA student incubator helps students to develop their business models, products and start their own business.
14. Virksomhedsguiden (Guide for businesses) is a public digital platform for business promoting. Knowledge and tools about start up, operation and development. The company guide is a digital tool that gives you access to guidance and information about business start-up, operation and development. The company guide is mainly aimed at entrepreneurs and small and medium-sized businesses. The company guide provides insight into the most relevant company-specific laws and regulations and guides on business development. At the same time, the Business Guide gives you an overview of the offers that are offered across public business promotion efforts - from local business services to state schemes. The Danish Business Authority is responsible for the Corporate Guide, which is operated as a common public platform. The development of the Business Guide is therefore carried out in close cooperation with municipalities, authorities, companies and the projects and programs that are in the business promotion system. The company guide is constantly updated and further developed to the benefit of both

companies and players in the business promotion system - all in order to provide companies with relevant, high-quality guidance.

15. Unions for patients are the unions of hospitals and health professionals operating in order to inform patients and relatives about the disease. Their role is to influence political decisions concerning the disease and fight for the rights of their members. There is a lot of these unions in Denmark and they play an important role in the dissemination of knowledge to the public.

Ways and solutions to support silver economy development:

- To exploit other available models and platform for silver economy development, f.e. exhibitions, innovation forums, etc.
- To use traditional models for knowledge transfer (f.e. seminars, workshops) for silver economy related knowledge development.

Funding schemes and financing mechanism for supporting innovation and smart specialization projects in correlation with silver economy

There are lot of financing mechanisms effectively working in Denmark. Various financing mechanisms makes it possible for start-ups to have financing without a lot of project work and documentation in the field.

1. Business Angels and Crowdfunding makes it possible for start-ups to have financing without a lot of project work and documentation and are open for all but especially start-ups.
2. Vækstfonden is the Danish state's investment fund. The act concerning Vaekstfonden stipulates that the fund must promote growth and renewal for small and medium-sized enterprises in order to achieve a greater socio-economic return. We contribute to the creation of new companies by providing capital and expertise. Since 1992, Vaekstfonden has together with private investors co-financed growth in more than 7,900 Danish companies with a total commitment of more than DKK 24.9 billion. Vaekstfonden invests equity and provides loans and guarantees for small as well as medium-sized enterprises in collaboration with private partners and Danish financial institutions. In 2018 these companies had over 65,500 employees in total.
3. Innovation Fund Denmark creates a framework for entrepreneurs, researchers and businesses so they can develop innovative and viable solutions to society's challenges. For example new climate mitigating

solutions, healthier food, a more effective health care, cleaner environment, green transport, start-up journeys – and much more. Compared to other investors Innovation Fund Denmark's results do not necessarily need to be seen in share prices or end of year financial results. Innovation Fund Denmark's results must also be evaluated on social welfare improvements, increased societal wealth, jobs, reduction of CO2 emissions, cleaner environment etc. Innovation Fund Denmark is ready to take a chance in a project, even though others may not be able to see the possibilities in it. Innovation Fund Denmark was created to invest in projects with high risk – and also high potential. And we do this in an easy, simple and transparent way – with as little bureaucracy as possible.

4. VTU-puljen ("Welfare Tech Applikation Fund") funding is used for pilot projects within welfare technology in Aarhus Municipality. The Fund can support projects with funding, financial advice and project management. Supports the development and implementation.
5. Danish Foundation for Entrepreneurship was established in 2010 by an inter-ministerial partnership between four ministries and on the basis of the then government's overall strategy for entrepreneurship education. In 2012 the strategy was replaced by a new innovation strategy 'Denmark - a nation of solutions' which has a set goal for the innovation capacity of educations – a goal which the Foundation contributes to reaching. The Danish Foundation for Entrepreneurship was established in 2010 by an inter-ministerial partnership between four ministries and on the basis of the then government's overall strategy for entrepreneurship education.
6. EGV fonden supports Research conducted on loneliness, communities, social purposes and disseminates knowledge and ideas that can improve the lives of older people.
7. Velux fonden. "We are particularly keen to fund activities in which senior citizens seek specifically to engage in initiatives that bring their resourcefulness into play and that empower them – for the benefit of the cohesion and sustainability of their local community,"
8. Nordea Fonden supports activities which promote good living in Denmark.
9. Ways and solutions to support silver economy development:
 - It is necessary to pay more attention to self-employment programs for seniors;
 - More attention to be paid for social enterprises as a potential senior economy market player.

2.6 Estonia

Pilot programs for supporting innovation and smart specialization projects

There are two national programmes, which support innovation and smart specialization projects in Estonia with a focus on silver economy and correlation with RIS3 priorities „ICT“ and „Biotechnology“.

1. Welfare Development Plan 2016–2023 focuses on the strategic objectives of labour market, social protection, gender equality, and equal treatment policies for 2016–2023. The Development Plan was compiled due to the need to establish a unitary strategic basis for the policymaking of the aforementioned spheres, which would, at the same time, take into account the needs of people, society, and economy, the challenges arising from demographic and socio-economic trends, international commitments, and the capability of the state.
2. Gene project for the development of personalised medicine in Estonia is a national ambitious programme citizens will have their genetic profiles integrated into the digital health system with individual risk scores and pharmacogenomic information, so when they go to the doctor, they will get fully personalized, genetic risk-based diagnosis, medication, and preventive measures. The programme was started to build a digital health system 20 years ago, and within the next years, the Baltic country will start to reap the benefits of a transparent, blockchain-based, digital health system hooked on genetic data. The first fully digitized republic certainly sets the direction for other countries to follow. In 2018 more than 100 000 new participants have joined the genome project. The state has allocated another 2.3 million euros for 2019 to enable at least 50 000 more people to join the Estonian Biobank. In the next phase of the project during the years 2019-2022 the plan is to integrate genetic data as a part of the everyday medicine, to give people feedback about their personal genetic risks. Collecting genetic data is an important step towards preventive medicine, transforming modern health care and enabling people to receive better and timely treatment in the future. This digital health care system will increase the availability and quality of preventive health care for elderly people; improve the functioning of the occupational health and safety system for police and other internal staff, taking into account the specific nature of work activities; improve and developing availability of geriatric services; prepare medical personnel for newly established geriatric units and ensure their continuing professional development

Models and platforms for joint knowledge management and knowledge transfer

All Estonian programmes have clear ICT support and implementations.

1. Estonian Research and Development and Innovation Strategy 2014-2020 “Knowledge-based Estonia” has one of the goal “The share of knowledge-intensive entrepreneurship in the economy and the added value of exports will increase significantly. The selected growth areas are: information and communication technology (ICT), horizontally through other sectors; health technologies and services; more effective use of resources. As can be seen in the aim of the project, the strategy is directly linked to the challenges of an ageing society in Estonia.
2. E-estonia. The Estonian government has decided to boost the paperless society and make sure all public services involve as little repetitive bureaucracy as possible. This model or platform contribute to silver economy in various ways: in healthcare up to 97% of patients have countrywide-accessible digital records, 99% of prescriptions are digital, 500,000 queries by doctors and 300,000 queries by patients every year. In X-Road data exchange platform up to 99% of public services online with 24/7 access, 500 million queries annually via X-Road, no system downtime since 2001. In public safety: Police work has become 50 times more effective thanks to IT solutions. e-Police system available in police cars unites over 15 databases, including those of Schengen and Interpol. Estonia was the first country in the EU to legalise testing self-driving vehicles on public roads. In Cyber security - locked Shields is the world’s largest and most advanced international technical live-^re cyber defence exercise. It takes place annually in Estonia concurrent with the CYCON conference. Estonian government started live tests with KSI Blockchain technology in 2008. Today, KSI Blockchain service is available globally in more than 180 countries.
3. Ways and solutions to support silver economy development:
 - To exploit various forms and models for silver economy related knowledge transfer: seminars, workshops, business trips, bench marking, valleys, clusters, digital innovation hubs, incubator network, public institutions, networks, exhibitions, showrooms, databases;
 - More actively include various social groups, associations for elderly, for handicapped and their cooperation platforms to silver economy related knowledge management.

Funding schemes and financing mechanism for supporting innovation and smart specialization projects in correlation with silver economy

Several financing mechanisms are shortlisted for supporting innovation and smart specialisation in correlation with silver economy: Estonian Research Council funding and Innovation vouchers.

1. Estonian Research Council funding. All basic research funding happens over Estonian Research Council. The ageing of the population and their involvement is one of the basic focuses, especially in the case of fundamental research.
2. Innovation voucher supports such activities as : consultations regarding product or service development; consultation regarding production or technology; conducting product tests and industrial experiments; carrying out feasibility and cost-benefit research; legal protection consultation, tests and registration regarding patents, utility models or industrial design; consultations regarding metrology, standardisation and certification; development and implementation of technological solutions.
3. Ways and solutions to support silver economy development:
 - To exploit various available funding mechanism for silver economy related services and products development - silver Slush, private investors, silver Economy crowd funding, social investment group, pension trusts, business angels, international fund, regional fund, market and end-user driven solutions, grants, municipalities, fruitful discussions together with financiers, sponsor for the specific need, corporate programs, low-interest rate loans, investments / donations Cross-border funds Business Finland FASIE
 - sharing economy is a trending way to support silver economy development.

4. CONCLUSION

Summary

Implementation of WP 2.2. activities of OSIRIS Interreg BSR project consisted of two main activities:

1. Development of tools for analysing and debating issues related to silver economy in selected RIS3 priorities. The issues to be discussed were as follows: a) pilot programs for supporting innovation and smart specialization projects; b) models and platforms for joint knowledge management and knowledge transfer; c) funding schemes and financial mechanisms for supporting innovation and smart specialization projects.
2. Organizing of peer review seminars in three different project regions for developed tools validation and knowledge sharing among partners. These seminars took place in Vilnius on 20th September, St. Petersburg on 13th November and Hameenlinna on 26th November with more that 60 participants in total, representing project partners and their stakeholders.

According to the methodology of the peer review seminar in order to get the best results completed tools were used. Two project regions/countries per seminar have presented their results and finding from market survey, results and recommendations from EDP process events (co-creation workshops and focus group meetings) and results and findings from PXL workshop. Results were presented together with challenges, problems, opportunities, assets and capabilities. In the second part of the seminar, working groups were created for each of three issue. Each working group had at least one representative per country or region and a moderator. A brain storm technique was used for the thematic issue to be approached, debated and analysed consequently in correlation with selected RIS3 priorities to be tackled in that region or country. A list of possible solutions and recommendations was developed as a result of brain storming session in each of three issue. For summing up results of the workshop, a moderator of each group presented a list of shortlisting solutions and potential actions as well as recommendations for the next steps.

Peer review mechanism was validated during peer review seminars. It's very important to pay partners' attention and to submit all available data from the region and fully complete tools while preparing for the seminar. Besides, to have fruitful discussions and positive results, all project partners are responsible to invite experts relevant to the topic, who could bring added value to project results and recommendations development.