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Sustainability Plan

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Summary over the SILVER project

SILVER (Supporting Independent LiVing for the Elderly through Robotics) is a development project funded by the European Commission under the Seventh Framework Programme for research and technological development (FP7). The project started in January 2012 and ends in August 2016.

As people get older, they face increasing risk of some severe condition that will affect their ability to continue living independently at home. The SILVER project searches for new technologies to assist elderly people in their everyday lives. By the use of robotics or other related technologies, the elderly can continue independent living at home even if they have physical or cognitive disabilities.

The new technologies and solutions are sought by using a Pre-Commercial Procurement (PCP) process. In Europe, the Pre-Commercial Procurement has so far been an under-utilised tool for promoting innovation. One of the aims of this project is to demonstrate the effectiveness of this approach to address societal and governmental needs.

The SILVER project has partners in Denmark, Finland, the Netherlands, Sweden and United Kingdom. The consortium includes research institutions and public sector organizations. Innovate UK is the Project Coordinator.

For more information on the SILVER project, visit: <http://www.silverpcp.eu/>

Objectives

The first objective of the project is to establish, and execute, an agreed Pre-Commercial Procurement process to run a cross-border Pre-Commercial Procurement call for tender. This generic process should also form a basis for national Pre-Commercial Procurement calls designed outside of the SILVER project. The aim is that in the future public organisations in the participating countries and in the EU be familiar with the Pre-Commercial Procurement process and tools and use them to meet their needs.

The second objective is to use the Pre-Commercial Procurement process developed in the project to identify new technologies and services to support the independent living of the elderly.

By 2020 new solutions implemented in elderly care are expected to make it possible to care for 10 % more care recipients with the same number of care givers. The aim is also to increase the quality of life for the elderly by making them more independent and improving their health.

Methodology

The SILVER project started by developing a generic Pre-Commercial Procurement process and documentation, which was used as a basis for a specific Call for



Independent Living. The actual Pre-Commercial Procurement process was executed in three phases. See below figure 1. for detailed description.

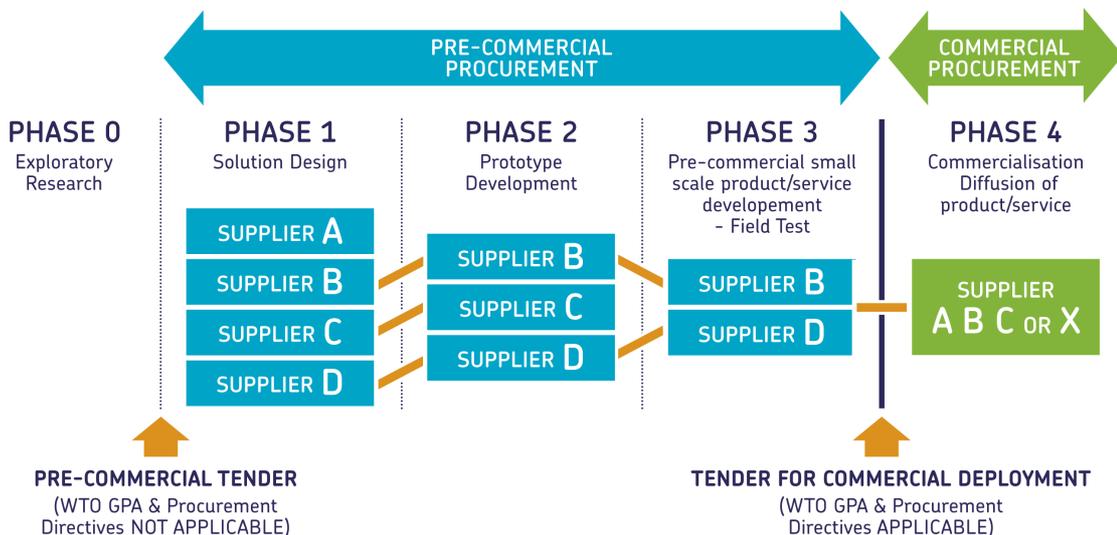


Figure 1: Pre-Commercial Procurement process (Source: ICT for ageing and wellbeing info day, Brussels, 15 October 2010)

The first phase (Solution design) was a feasibility study of the selected technologies and proposals, which verified the technical, economic and organizational feasibility of each company's offer. The expected output from participating companies was a report describing the results of the feasibility study and the conclusions for the start of the development activities in Phase 2. The companies participating in this phase were: Assistobot B.V., Alten Nederland B.V., Bioservo Technologies AB, Robosoft, Lerovis, Bestic AB, Marsi Bionics S.L. The first phase lasted for 6 months ending in March 2014. The total budget for this phase was 350,000 EUR.

The purpose of the second phase (Prototype development) was to take the most promising ideas that were shown to be feasible in Phase 1 and develop them into well-defined prototypes. The aim was to verify to what extent the prototype's main features meet the functional and performance requirements. Companies (Alten Nederland B.V., Bioservo Technologies Ab and Robot Care Systems, former Lerovis B.V.) were expected to deliver: prototype specification, lab demonstration, plan for original development of first solutions and field-testing and updated cost/benefit evaluation including a preliminary business plan. Phase 2 lasted for 12 months and the total budget was 720,000 EUR.

The third phase (Pre-Commercial small scale product development/Field test) aimed to verify the full feature set and performance of the solutions in real-life conditions of the targeted public service. Expected output from contractor, Robot care Systems, was: field testing, field test specification, specifications of the final solution and related technical documentations. Therefore, the prototype was tested in each partnering

countries by the procurers to ensure that a comparison can be made of performance. The IPR and prototype remained the property of the contractor. The duration of the last phase of the Pre-Commercial Procurement was 12 months and the total budget was up to 1,080,00 EUR.

The fourth phase (Commercialization diffusion of product/service) falls out of the scope of the SILVER project. At Phase 4 it remains for the public body to decide whether to do a commercial procurement and for companies to commercialize their innovations.

Call for tender

The SILVER call for tender was available for offers until 12th of June 2013 and was open to all European Union members and associated state countries. All interested legal entities were invited to tender for development project contracts in SILVER Pre-Commercial Procurement with the aim to develop new solutions addressing the lack of new innovative robotics solutions to make elderly people more independent from professional homecare, as outlined in Challenge Brief:

“The main goal of the SILVER challenge is to develop new innovative robotic solutions that target assisting the elderly and those caring for them with personal activities of daily living. These solutions are not yet on the market, but can be developed and tested within the SILVER PCP period of 2–3 years. These robotics solutions will be able to take over all or part of the work of care givers. “

In total, 32 tenders were received by the closing of the call. During the summer of 2013 all tenders were evaluated by external assessors, who were experts in either robotics, elderly care or business economics. The tenders were assessed by the following criteria: Impact on challenge (time saving, usability, commercial feasibility etc.), quality of the tender (technical validity, development plan, recourses etc.) and price. The tenders that offered the best solution at an appropriate risk and cost level were favored. In total seven proposals were awarded with contracts in Phase 1. For detailed assessment criteria, see Deliverable D3.1 (Specific Call Documents Phase 1).

In May 2014 all seven contractors were invited to submit a bid for Phase 2. Three tenderers (Helping Hand with Alten Nederland B.V., Iron Arm with Bioservo Technologies AB and LEA with Robot Care Systems) were awarded with contracts and continued their work by developing prototypes. In April 2015, all three prototypes were tested in Health Innovation Centre of Southern Denmark.

During the SILVER assessment panel held in August 2015, Phase 3 tenders were evaluated. From the three Phase 2 prototypes – Helping Hand, Iron Arm and LEA – only the last two were allowed to enter the third phase of the SILVER Pre-Commercial Procurement process. Out of the two, only LEA with Robot Care Systems met the minimum criteria in Phase 3 competition and was invited to sign a contract.

Overview of the Sustainability Plan

The aim of the Sustainability plan is to support the exploitation of the final outcomes of the SILVER project. The Sustainability plan answers the questions, such as, how the SILVER consortium will use the learnings gathered after the project's end and how each partner will share their learnings. The Sustainability plan will also give recommendations for the future Pre-Commercial Procurement exercises.

The Sustainability plan will also evaluate the commercial procurement of the resulting solution for independent living – namely LEA (Lean Elderly Assistant) care robot by Robot Care Systems. Public procures together with associated procurement partners will give a common overview of the evaluation process.

Finally, the plan will address activities to increasing the impact of the SILVER project outside of the consortia partners. This will be done, for example, through events and videos to make the public procures aware of the results of the SILVER project. Consequently, the use of the resulting technologies will be increased thus boosting the impact of the SILVER project.

Impact assessment

Since the SILVER project was the very first transnational Pre-Commercial Procurement exercise within European context, there were high expectations on the European Commission's side as well on the SILVER consortium's side on the impact of the project. The target was not only to explore further the possibilities of the Pre-Commercial Procurement tool but to find new, innovative technologies for elderly care through cross-national co-operation.

All the European countries share the same challenge of population ageing. This means there will be a dramatic increase of people in need of new solutions that help them to live independently at home. The SILVER challenge addressed the goal of taking care for 10 % more care recipients with the same number of care givers by the year 2020. Even though this ambitious goal was not achieved during the SILVER project timespan, the SILVER project has provided valuable hands-on experiences on the barriers and possibilities of the Pre-Commercial Procurement when addressing societal and governmental needs. All these learnings have been applied by the partners within their own organizations and networks hereby boosting the impact of the SILVER project.

First of all, partners have been able to apply the learnings gained in the SILVER project when participating in a related PCP/PPI proposals and projects. For example, SILVER partners have been involved in the following projects: SELECT for Cities, CHARM, THALEA, Preforma and ENIGMA. Secondly, the SILVER project has given the opportunity for better understanding of the innovation process within the healthcare technology field, cross organizational and transnational innovation, user-driven product development as well as practical management of complex and explorative projects. Thirdly, the SILVER project has provided partners with Pre-

Commercial Procurement specific document and reporting templates together with questionnaires for real life testing. Fourthly, the SILVER project has supported the uptake of new technologies and broaden the knowledge in the area of care robotics. And finally, the SILVER project has created a highly professional network within the field of public procurement that open ups new opportunities in both national and international contexts.

The impact assessments by partner can be found in appendix 1 of this document (see page 30).

Evaluation of the procurement

In general, all the SILVER procurers found the involvement in the project useful. Being part of the SILVER procurement process increased SILVER procurers' capability to consider new technologies for home care. Furthermore, the SILVER project raised the level of capability to implement and test new technologies within home care. Especially the testing period during the Phase 3 showed that the elderly people are willing as well as capable of testing technologies which are still in a development phase. Also the staff was motivated to be involved in the testing period and gave valuable feedback for the development process.

Regarding the future markets for LEA, all the SILVER procurers see that the most potential markets lie within the private markers. There are several reasons for this. First of all, in many countries the procurement of the assistive technology is handled centrally by independent organisations, such as Centres for Assistive technologies, and not by municipalities/cities themselves. Secondly, compared to the traditional stroller, LEA has relatively high price point and therefore the traditional stroller is probably preferred due to the budget limitations – unless there are strong arguments for choosing LEA over the traditional stroller that are based on the careful need analysis by the professionals. Nevertheless, even if LEA would be adopted only in private markets, this will contribute to the overall goal of the SILVER project. In other words, it will increase the level of independency at home and will lessen the care burden of the municipalities/cities.

General observations on procurement process

Since the SILVER project was the first transnational Pre-Commercial Procurement case within the EU, it had to solve many basic questions. Furthermore, the process required many meetings and constant dialogue with the European Union in order to ensure mutually beneficial procurement process. With the future Pre-Commercial Procurement projects it is expected that the process will be smoother and less complicated in many respects.

In the SILVER project there were six procuring partners which were located in five countries. All procurers agree that in the future Pre-Commercial Procurement project a smaller consortium should be preferred. This reduces the challenges of reaching agreements within the procures when negotiating with the contractors as well as

makes the over-all procurement process more agile. For example, in the SILVER project the common needs assessment was reached only after long discussions since there were great differences between the partnering countries regarding the scope of their home care services. Eventually, the common needs were categorized and encompassed by the selected personal Activities of Daily Living (p-ADLs) which represented the target areas in which all SILVER partners saw most potential for robotics based solutions. The chosen ADLs are also, across all the participating countries, the most expensive areas in terms of costs for the public procurers.

Due to the challenging procurement process it was very important to have an open communication and cooperation within the SILVER Consortium. This was achieved with regular teleconferences, face-to-face meetings and common platforms, such as SILVER Extranet. Although it was experienced that there were too many levels of decision making. For example, decisions were made between the consortium partners, between the consortium and European Commission as well as between the consortium and contractors. This was very time-consuming and sometimes ineffective. In the future Pre-Commercial Procurement projects the communication as well as decision making model should be more simplified.

Regarding legal issues, it is very important to have in-depth national legal analysis before performing a transnational Pre-Commercial Procurement. This analysis should be done by legal experts and a sufficient time needs to be reserved for this task. In the SILVER project the legal analysis took several months even if each procurer had sufficient legal recourses and Vinnova was supporting the process.

As learned in the SILVER project, in addition to a smooth communication flow a firm and professional project management is a key success factor. It is very important that all phases of the procurement are well-documented and firmly managed. One of the most critical success factors is an external coordinator to work directly with contractors through all phases of the procurement. This allows protected and standardized information flow between the consortium and the contractors.

Regarding procurement budget, SILVER Consortium experienced that the time and monetary budget was too small for the contractors. This caused challenges to finalize the deliverables in a given timeline and budget. Also extra funding was required to finalize the needed prototypes in Phase 3. In the SILVER project, contractor was awarded with several innovation awards which made it possible to deliver all the needed prototypes for Phase 3 testing. To conclude, in order to have successful procurements in the future, budget should be carefully planned and possibilities for extra funding considered.

Phase 0: Exploratory research

Within the SILVER project the consortium learned that the needs assessment and market consultation are a vital part of preparing the Pre-Commercial Procurement and the tender material. Therefore in the future procurements these activities need to be carefully planned and organised in order to achieve the desired outcome.



The SILVER project worked with a broad challenge definition within the complex field of elderly care. This resulted in a fairly broad functional requirements, which made the process challenging. However, the SILVER project did experience that the tenderers responded well to the broad challenge description and functional requirements. The received proposals did at this early stage show a high level of innovation. Although regarding the future Pre-Commercial Procurements, it might be less risky to use a bit more narrow challenge description.

A large panel of external experts was used for assessment of the proposals. These assessors had a significant impact on the final ranking of proposals and therefore the selection of assessors should be done carefully. Furthermore, it is vitally important that the experts chosen for the assessment panel have a firm motivation as well as the relevant competence and knowledge.

All the procurers in the SILVER Consortium agree, that in the future Pre-Commercial Procurement exercises it is essential to ensure that contractors are involved with the end-users already in the solution design phase and/or are even members of the assessment board. Only this way it can be assured that the end-product will meet the needs of the target audience(s).

In the SILVER project it was proven that inviting the market to address the major challenges within the health care sector is an excellent way to boost more needs driven innovation. Therefore, it is very important to organize this process well and reserve enough time for the dialogue with the market.

Phase 1: Solution design

The first phase of the SILVER Pre-Commercial Procurement process was a feasibility study of the selected technologies and proposals. The aim of this phase was to verify the technical, economic and organizational feasibility of the offers. The output of this phase was a report describing the results of the feasibility study and the conclusions for the start of the development activities for the Prototype Development Phase. In total seven companies were invited for this phase.

A sufficient dialogue between contractors and procurers needs to be ensured in all phases of the Pre-Commercial Procurement process starting from phase 1. For example, interviewing the contractors before assessment of bids for Phase 2 would be a good way to enhance the communication within the upcoming Pre-Commercial Procurement projects.

Phase 2: Prototype development

The purpose of this phase was to take the most promising ideas from Phase 1 and develop them into well-defined prototypes. The aim was to verify to what extent the prototype's main features meet the functional and performance requirements set in the SILVER challenge. The three participating companies delivered a prototype specification and lab demonstration, as well as a plan for original development of a limited volume of first solutions and field-testing, and an updated cost/benefits evaluation including a preliminary business plan.



In the future Pre-Commercial Procurement projects all procurers should agree on the expectations for Phase 2 testing (purpose, criteria etc.) before launching Phase 2. A detailed testing description should be included in contracts and it should contain a detailed descriptions of objectives, evaluation criteria, scope, timeline, test user descriptions, test tasks, risk analysis, data privacy, ethics etc. Furthermore, expectations in regards to level of prototypes in Phases 2 and 3 should be aligned.

If one criteria (such as time-savings in SILVER) has a higher weighting than the other criteria this can have a big impact on the final scores of the bids. The learning from the SILVER project is that in the future Pre-Commercial Procurement projects it needs to be considered if the questions with a measurable impact are useful.

If the same assessment of bids method is used in the future Pre-Commercial Procurement projects than in the SILVER project, the time of the discussions in the Decision Panel should be reduced. This should be done by arranging a pre-meeting between the procurers before the Assessment Panel meeting to form an idea of the procurers' scores and "level of feeling" regarding the solutions. Secondly, one-to-one meetings between Project Management and procurers should be scheduled before the Assessment Panel meeting to discuss "level of feeling".

All the SILVER procurers agree that in the future Pre-Commercial procurement exercises a longer tender period should be used in order to allow sufficient time for the contractors to finalize their bids for Phase 3. In the SILVER project a shortened timeframe was used between the three phases of the Pre-Commercial Procurement in order to minimize the expenses of the contractors but this was not ideal for the contracts since they had to start writing their bids before the call was opened for Phase 3.

Phase 3: Pre-Commercial small scale product/service development

The aim of Phase 3 was to verify and compare the full feature set and performance of solution in real-life operational conditions of the targeted public service. Expected output from participating companies included field testing, field test specification, specification of the final solution and other related technical documentation, and an updated cost/benefit evaluation. The LEA Care robot was tested in all sites by procurers to ensure that a comparison can be made of performance across sites.

Especially when planning Phase 3 tests, the meetings between the different countries and their test managers were proven to be very valuable.

In the SILVER project it was not expected that only one solution would be chosen for Phase 3. Therefore, it is recommended for the future Pre-Commercial Procurement exercises that a decision on the minimum number of solutions in Phase 3 should be made before launching the call for tender. If all procurers agree that one solution is enough in Phase 3 then the process should be clarified in detail.

If having one contractor is acceptable for Phase 3 in the Pre-Commercial Procurement process, then any demands with regard to licensing out IPR should be documented, along with a clear timeline to which the contractor is committed. It



should be noted that the demand to license out IPR within the timeframe of the Pre-Commercial Procurement could potentially make Phase 3 less attractive for the contractors and there is a risk that they would choose not to apply for Phase 3 and take the product to market outside the scope of the Pre-Commercial Procurement.

During Phase 3, national and international events with participation of the contractor are recommendable – creates good PR for the consortium, the project as well as the contractor and communicates valuable learnings.

Phase 4: Commercialization diffusion of product/service

Phase 4 falls out of the scope of the SILVER project but since there was only one solution selected for Phase 3, the SILVER project needed carefully identify the actions to be taken after the SILVER project closes in end of August 2016. The prototype of LEA needs to pass several stages of re-design and certification to be ready for commercial procurement. It also needs to be licensed out and produced by a competitor. These activities are not covered by the SILVER Grant Agreement and are therefore not coordinated within the SILVER project. The SILVER Framework Contract has been updated to reflect the situation of only one contractor being involved in Phase 3 of the Pre-Commercial Procurement and the right for the Authority to terminate the contract if required.

As the product development work with LEA will continue for two or more years, in order to ensure the SILVER procurers are aware of any exploitable results arising or immaterial property (IP) developed and how it is being protected, their rights have been extended in the SILVER Framework Contract (clauses 17.3, 18.1, 18.2 18.4 and 18.4) to allow the SILVER procurers to continue to access information about IP progress and development for the next two years. The period in which Robot Care Systems must license out to third parties must be completed has also been extended until two years after the project completion date.

These updates address the European Commission's recommendations and allow for the SILVER procurers to develop their own plans for continued communication with the contractor and have legal rights to request information on their progress with the projects results and Immaterial Property Rights (IPR). Furthermore, the updates ensure that licensing out to third parties is completed before the procurers enter into a procurement phase for a solution. In other words, LEA care robot needs to be fully developed, tested and introduced to the market before it can be procured by the SILVER partners.

The SILVER consortium is committed to continue to support Robot Care Systems in product development. In practice this will be done by meetings (Skype and face-to-face) and by email. Procurers will also share information on their local healthcare network etc. by request and are also willing to offer help with the future testing of the prototypes. All the SILVER procurees have assigned a contact person to Robot Care Systems who will be responsible for organizing the meetings and providing the needed feedback.



Robot Care Systems has highlighted the areas that they need most support with. Firstly, Robot Care Systems needs information on most important stakeholders within the partnering countries in order to find the most potential markets for their solution. In addition, they would like to familiarize with the healthcare systems in each country. Secondly, Robot Care Systems would like to have support in building effective and country specific pricing strategies. Thirdly, Robot Care Systems would like to cooperate with the SILVER procurers in order to test the future versions of LEA Care Robot as well as to specify the user requirements.

Evaluation of the LEA Care robot

In SILVER project the assessment of Phase 3 results were mainly based on the Monitoring Report which was submitted by Robot Care Systems, the country Test Reports submitted by the procurers and the Consolidated Test Report submitted by the Overall Test Coordinator. Also the face-to-face meetings with the procurers and Robot Care Systems had an influence on the overall evaluation of LEA Care robot.



Image: LEA (Lean Elderly Assistant) by Robot Care Systems.

Especially the testing of the prototype in all partnering countries provided procurers with valuable information not only on LEA and its functionalities but also on end-users' (care personnel and the elderly) point of views. Furthermore, the procurers gained information on possible national and cultural differences that should be considered when finalizing the prototype. With this practical knowledge in addition to the official reports procurers were able to evaluate Phase 3 results in a comprehensive manner.

As actual procurement of the solution is not a part of the Pre-Commercial Procurement process, at the end of the Pre-Commercial Procurement the procuring partners in the SILVER project can only speculate if their organisations would like to procure the final solution, namely LEA Care Robot. In connection with the final Learning and Recommendations Reports (D5.4 and D5.5) the procurers were asked if they would want to put a business case together to procure the solution. For this most of procurers answered 'no'. This is mainly due to the fact that it was too early to commit given the level of maturity of the solution in the end of Phase 3. All procurers,

however, wish to keep track of the further development of the solution and consider a open call when the solution is closer to commercialisation.

Evaluation by partner

When evaluating the outcome of the procurement, one of the key questions addressed to procurers is whether LEA Care robot succeeded in meeting the SILVER challenge, namely: *“The SILVER challenge is to care for 10% more elderly with the same amount of staff in 2020 by having new robotics solutions that can take over all or part of the work of care givers. These robotics solutions should enable elderly – even when facing multiple physical and mental disabilities – to stay independent as long as possible and live in their own homes, if necessary in combination with assistance from home care staff.”*

Other key questions addressed are whether the procurers would be willing to procure LEA Care robot in it's current state and what are the most potential markets within the partnering countries. To be more precise, does the potential target market for LEA Care Robot lie more in the private or public sector. In addition, one of the key questions is, how LEA Care robot was evaluated against the requirements (usability, quality of life, time saving and independence) set by procurers on scale 1–5. The answers for these questions can be seen below by partner. An overall outcome of the procurer evaluation is that the SILVER Pre-Commercial procurement can be considered as a success.

City of Eindhoven

At this moment, the LEA is still too much of a prototype to express a sincere interest in buying the product. In the Netherlands, by the Social Support Act, the local authorities are responsible for supporting their citizens when they need help with their mobility. A citizen applies for support at his own municipality. This request is assessed by a professional (a medical doctor, occupational therapists, physiotherapists etc.). In this assessment also personal conditions, such as housing, support by family members etc., are included. The municipality decides which kind of support is needed as well as provides and pays for standard-solutions, such as standard strollers or wheelchairs.

The LEA Care robot can only be provided by the local authorities in the Netherlands when is has become a “standard-product” that is available on the consumer market. Another possibility is that a person in need of a solution for his long term mobility problems receives a “personalised budget”. That is a budget where this person himself can buy his own long term care, including solutions such as a wheelchair or – in the future – LEA Care robot. These personalised budgets do not fall under the responsibility of the local authorities in the Netherlands, but under the health insurance system.



Evaluation of procurement requirements

Quality of life: In Eindhoven, the end-users were enthusiastic about LEA Care robot when testing it in their own homes. The elderly saw and experienced a lot of possibilities, especially when LEA Care robot will be made able for outdoor use. That would really help them in going out on their own which in turn would improve their quality of life. Although the prototype was sometimes heavy to use, the end-users liked the stability provided. Score 4.

Independence: Being able to live independently at home also implies going out of their own homes on their own (for example for shopping and visits). Score 4.

Time saving: Not applicable because LEA Care robot was tested in people's own homes in Eindhoven. Some of the test users received home care and were only assisted by a professional caregiver in washing and clothing where as LEA Care robot did not assist in these tasks.

Usability: The test users in Eindhoven mentioned that the usability of LEA Care robot would improve considerably when it is available for outdoor use. The prototype was for indoor use only. Score 5.

Odense Municipality

Odense has been very satisfied with the results obtained in the SILVER project. The solution LEA Care robot has a big potential in the future when it is fully developed, and introduced to the market. The test in Odense showed that LEA Care robot has potential in the future to assist elderly people so they can be independent at home for a longer time. However, it is too early to say if it will reach the SILVER goal to care for 10 % more care recipients with the same number of care givers. It is also difficult to say exactly who the end users will be and what their disabilities and weaknesses are.

The most obvious possibilities for getting the LEA Care robot to the end users are through the private market directly to the end users or their relatives. Another possibility is to sell LEA Care robot to training centers and rehabilitation centers for the elderly, and use LEA Care robot for correct walking, dancing and walking exercises and for rehabilitation. The City of Odense is interested in continuing the support of Robot Care Systems with getting into the Danish market for assistive technology, and will be happy to share knowledge about LEA Care robot and the potential of the technology.

Evaluation of procurement requirements

Quality of life: LEA Care robot has a big potential to improve the quality of life of the elderly. It can help the user to get up and walk in a safe way. It can also help the user with exercises (dancing and physical exercises on the tablet). In addition, it can be used as a reminder, for example, when taking medicine, and it gives the user a possibility to stay in touch with relatives. Score 4.

Independence: Some of the users expressed that LEA Care robot was very stable to walk with. Score 3.

Time saving: LEA Care robot has a potential regarding the time saving in the future. Score 3.

Usability: The testing showed a good usability. Especially the exercises and the dancing rehearsals were greatly appreciated by the end users. In the test report the evaluation gives recommendations to further improve the usability of the prototype to create even higher usability. Score 3.

City of Stockport

As one of the procurers in the SILVER project, Stockport have made it very clear that they have been very pleased with the overall outcome of the SILVER project. It is very likely that LEA Care robot, when in the full market, will be made available for individuals and organizations within Stockport as long as it is fully developed, tested and introduced to the market. Stockport are clear that LEA Care robot will help contribute to a better quality of life for Stockport residents and if used in certain circumstances could result in both health improvements and higher levels of both mobility and daily functionality as well as improved independence for residents that depend on health and social care.

Stockport cannot say at this stage, as indicated in the test results, whether LEA Care robot could achieve the overall goal of caring for 10 % more with the same amount of staff and until LEA Care robot is fully ready for market is not possible to assess at this stage. It is also too early to say who the end users and purchasers will be in the UK. As it stands now it could be a mixture of private purchasers such as individuals or their carers and family, day care centres or nursing homes.

Given our previous commitment to the overall SILVER project and the contractor developing LEA Care robot we at Stockport look forward to working closely with Robot Care Systems to help them within the UK market as well as within our wider European Networks. This work has already begun within Stockport with plans being made to get involved within the next stages of development and testing for LEA Care robot.

Evaluation of procurement requirements

Quality of life: People who were testing LEA Care robots in Stockport were very keen to have a go with the robot within their own environment and pleased to sign up for testing. It was clear that there was significant opportunity for LEA Care robot to assist with increasing the daily quality of life for end users by giving them more confidence moving around their houses. It is also clear that when the next version of the robot comes out, if it could be reduced in size, it would assist even more in the smaller areas within peoples rooms. Score 4



Independence: The robot has the potential to help end users maintain independence by increasing their confidence with stability and movement as well as assisting with increasing their daily levels of activity with the exercises. Score 5

Time saving: In Stockport the people testing LEA Care robot by and large were able to manage with their own cleanliness as well as hygiene and so would not need assistance in this area. However, what LEA Care robot could do was to give people more confidence moving to and from rooms, such as the bathroom, which meant they would not need assistance in movement which could mean potential time savings. Score 4

Usability: What users said and what was observed in Stockport, was that the device needed to be a little smaller to be able to move around smaller rooms. In addition, it would greatly increase the functionality of the robot if it could be used outdoors and would greatly enhance independence. Score 4

City of Oulu

City of Oulu is actively seeking new technologies and/or robotic solutions to support independent living at home. In the SILVER project, a very concrete step was taken to find these kind of solutions. City of Oulu is satisfied with the cooperation between the contractor and the procures to build up new products which meet elderly peoples' needs. When developing LEA Care robot, the elderly's and the home care professionals' wishes and needs were heard and taken into account. Whether LEA Care robot will reach the overall goal of caring for 10 % more with the same amount of staff was not possible to assess at this stage.

In Finland, it is possible to loan an aid, such as a stroller, for free when you meet the predetermined criteria. Will solution like LEA Care robot be such an aid will be seen in the future. When thinking of the possible buyer for LEA Care robot, it is more likely that the buyer will be the elderly person him-/herself or their close one.

City of Oulu will be active in communicating to elderly what kind of solutions there are to support independent living at home in the market. When testing LEA Care robot in Oulu, it got publicity in the newspapers and was generally accepted among the target groups. City of Oulu will help to promote LEA Care robot and will be involved in further development when needed.

Evaluation of procurement requirements

Quality of life: City of Oulu sees that LEA does have the potential to increase the quality of life. Score 4.

Independence: The end-users experienced LEA as a steady and safe walking aid. Also reminders helped some of the end-users to to be more independent at home. Score 4.

Time saving: Time savings could be achieved in the future when end-user could complete tasks independently. That requires confidence in LEA and learning how to



use it. Very positive thing was that different functionalities were integrated in the same product. Score 3.

Usability: Since the City of Oulu was the first test location, there were quite many challenges with the prototype. This influenced on reliability of LEA and the test-users did not experience usability as very high. Tablet's user interface was clear and easy to use. Score 3.

City of Vantaa

As a procurer, City of Vantaa sees a great potential in LEA Care robot. It is a possibility that City of Vantaa will make an agreement with Robot Care Systems when LEA Care robot will be on the market. Other potential buyers could be the elderly and their relatives to whom City of Vantaa will recommend LEA Care robot.

In Vantaa, LEA was tested in a real environment in a service house for the elderly by two end-users. Although City of Vantaa was very keen on testing the goal of 10 % time saving this was impossible due to the short a test period as well as to the fact that LEA Care robot was only a prototype at the time of the testing.

Evaluation of procurement requirements

Quality of life: City of Vantaa experienced that LEA Care robot does have the potential to increase the quality of life of the elderly. Score 4.

Independence: The end-users experienced LEA Care robot as a steady and safe walking aid. Also reminders helped some of the end-users to cope more independently at home. Score 4.

Time saving: Time savings could be achieved in the future when end-user would be able to complete tasks independently. That requires confidence in LEA Care robot and learning how to use it. Very positive thing was that the different functionalities were integrated in the same product. Score 3.

Usability: Due to the fact that the City of Vantaa was the second test site, there were quite many problems with the LEA Care robot and that had an effect on reliability. In other words, people did not evaluate the usability of LEA Care robot so good. Tablet's user interface was clear and easy to use. Score 3.

City of Västerås

As a procurer, City of Västerås is satisfied with the outcome of the SILVER project. It is likely that the resulting innovation, LEA Care robot, will be sold and used in Västerås once it is fully developed and introduced to the market. LEA Care robot will certainly contribute to a better quality of life for persons in Västerås and it will probably result in better health and higher level of function and independence for persons normally depending on elderly care.

Whether it will reach the overall goal of caring for 10 % more with the same amount of staff is not possible to assess at this stage. It is also too early to say who the end buyer(s) will be. It might be one or more of the following: Private market meaning users and their relatives (very probable), Center for Assistive Technology, owned by the county council and the municipalities in the region together and the unit that today procures and distributes strollers, electric wheel-chairs and other assistive technology (more probable) City of Västerås, as a mean of providing elderly care (less probable)

Having invested so much time, money and effort into the SILVER project and the contractor developing LEA Care robot, City of Västerås will certainly continue the involvement, supporting Robot Care Systems to enter the Swedish market and following the future development.

Evaluation of procurement requirements

Quality of life: City of Västerås got very positive comments from some of the test users. Both the basic transfer and walking functions as well as the add-ons as exercises and dancing were said to be of high value to them. Score 5.

Independence: For some users in some ADL tasks it would have been score 5 but for other it could have been a 1 or 2 so the final score is a weighted rating. Score 4.

Time saving: Closely related to Independence because independent users save time. Lower rate here due to comparison on how many persons among all Västerås's care takers that would fit into the categories getting independent. Score 3.

Usability: This score is fully valid when the experiences from the frustrations combined with technical errors were cleared. When the prototype actually worked as intended the usability was 4. Score 4.



Activities increasing impact

Activities increasing impact on European level

Communicating the SILVER project results is key for further exploitation of the results, which in turn increases the likelihood of long-term sustainability. The SILVER consortium partners have been active in promoting the SILVER project as well as its innovative approach in their respective countries as well as on European level. Furthermore, European Union has promoted the SILVER project – and especially the public documents – for other PCP and PPI projects.

The key target audiences of the SILVER project are the public procurers in each partnering countries, innovative companies across the EU as well as local, national and European-level policy makers. Most of the communication activities have been targeted to these stakeholders since they have been recognized as the most critical players in promoting new, innovative procurement methods.

Events

The Members of the SILVER Consortium have been actively disseminating the results of the SILVER project as well as the Pre-Commercial Procurement tool by giving presentations in national as well as in international seminars, such as AAL Forum, and other events, such as EAFIP (European Assistance for Innovative Procurement) hosted workshops. Furthermore, during the spring and summer of 2016 the SILVER Consortium delivered two SILVER workshops for European level decision-makers, six national SILVER workshops organised by the procurers as well as end-of-project conference and workshop in relation to the end-of-project conference.

According to the verbal and written feedback given by the participants, all these events have provided a wider understanding over the Pre-Commercial Procurement tool in general as well as shared practical tips for the future exercises. Especially the SMEs and other PCP/PPI project have found the SILVER events useful in this respect. Furthermore, the presentations by the contractor, Robot Care Systems, and demonstrations of LEA Care robot have been found very inspirational by the participants.

SILVER European level workshops

The SILVER project has organized two high level European level workshops for EU level decision makers and other stakeholders. First of these workshops was held within the European Robotics Forum, which is an annual networking conference of euRobotics. The event was held on 21–23rd March 2016 in Ljubljana, Slovenia. The SILVER project hosted a workshop on 21st March titled “Pre-Commercial Procurement Enabling Robotics Based Care-Innovations for the Elderly”. The workshop presented the results of the SILVER project and also explored the possibilities of Pre-Commercial Procurement when procuring innovations. Furthermore, LEA Care robot as well as the benefits Pre-Commercial Procurement for the SMEs were presented by Robot Care Systems.



The second European level workshop was held within “Healthcare challenges and the underexploited role of innovation procurement (PPI/ PCP)” workshop which was hosted by DG Connect and the EPP eHealth project on the 11th of May 2016 in Brussels. This workshop brought together key actors and those engaged in healthcare PPI and Pre-Commercial Procurement projects, buyers and supply chain representatives and EC officers. The workshop reviewed current state of the art, considered barriers and opportunities, and proposed future calls to enable the wider adoption of innovation procurement. During the workshop, the lessons learned as well as the results of the project were presented by funding Manager Andy Bleaden.

With the European Robotics Forum, the SILVER consortium reached a vast amount of SMEs specialized in Robotics. This target group found it very useful to hear about the opportunities with Pre-Commercial Procurement and what EU funding could offer for them. European Robotic Forum participants also appreciated the opportunity to hear the story of Robot Care Systems and, in particular, how they have developed a successful start-up company during the timespan of the SILVER project.

With regards to the DG Connect workshop, participants found very valuable to hear the grass-root level learnings regarding the Pre-Commercial Procurement as well as the experiences of the procurers.

SILVER Final conference and workshop

The SILVER Final conference was held on the 7th June 2016 in Amsterdam, the Netherlands. During the Conference, the results of the SILVER project were shared and the Pre-Commercial Procurement process as an innovative tool for public procurement was discussed. Both procurers’ and contractors’ views on Pre-Commercial Procurement as well as on best practices were also shared. Furthermore, the successful Phase 3 solution LEA Care robot was presented by the contractor, Robotics Care Systems, and the participants had an opportunity to test it.

On the same date with the SILVER Final conference, the SILVER Consortium hosted a workshop which took a deeper look into the recommendations for the upcoming Pre-Commercial Procurement exercises. During the session participants had an opportunity to discuss Pre-Commercial Procurement themes in grass-root level in four groups facilitated by the consortium members and Robot Care Systems. One of the groups concentrated on the question on how it can be insured that the solutions developed with the Pre-Commercial Procurement process match the needs of the end-users. The second focused on the topic when a Pre-Commercial Procurement process gives the best value for the procurers. Third group concentrated upon the possible methods that could be used with Pre-Commercial Procurement to improve the levels of dialogue between potential procurers and contractors. And finally, in the fourth group Robot Care Systems led discussion on the main challenges in adopting Pre-Commercial Procurement in the SME sector.

The invitation list was same for both of these event and included the following: SME representatives, public procurers, EU level decision makers and other EU representatives, other PCP/PPI projects, and city/municipality representatives.



Members of each of these target groups were present in the final seminar as well as the workshop the largest participant group being the other PCP and PPI projects.

Detailed Programme for both of these events is available at:
<http://www.silverpcp.eu/silver-conference-and-workshop-june-7-2016/>

According to the feedback received by the SILVER Consortium, the final conference participants found most valuable to hear about the procurers' as well as contractors' experiences and recommendations regarding the Pre-Commercial Procurement as an instrument for innovation. This gave the participants a good overview of the SILVER project as well as highlighted the pros and cons of the Pre-Commercial Procurement. The demonstration of the actual outcome of the procurement process, namely LEA Care robot, was found equally beneficial. Furthermore, the participants mentioned that they appreciated the key note speaker as well as enjoyed the panel discussion, which gave very practical tips for future Pre-Commercial Procurement exercises during the actual discussion and as well as during the Q&A session.

Regarding SILVER workshop followed by the final seminar, participants named the discussions with the procurers as well as with Robot Care System as a most valuable content for them. Especially the municipality point of view was subject to great interest since the SILVER Pre-Commercial procurement was the first cross-national project. Furthermore, participants appreciated the opportunity to network.

SILVER in eHealth Week 2016

eHealth Week 2016 was held on the 8–10 June 2016 in Amsterdam and it focused on three main themes: Empowering People, Trust and Standards and Social Innovation and Transition. The SILVER project participated for the "*Robotics for Active & Assisted Living*" session during which Robotic Care Systems' CEO Maja Rudinac pitched the LEA Care robot and Funding Manager Andy Leaden (City of Stockport) took part in discussion panel where the benefits and barriers regarding scaling up and implementation of robotics and domestics were covered.

The SILVER project participated also for the eHealth Week exhibition which showcased the latest trends and innovations on the eHealth market. Both the SILVER consortium members as well as the Robot Care System representatives were present at the SILVER booth. Furthermore, hands on demonstrations of LEA Care robot were available for all eHealth Week expo visitors. In fact, the eHealth Week participants were very keen on "test driving" LEA Care robot and also the Pre-Commercial Procurement process utilized in the SILVER project was subject to many discussions.

SILVER National workshops

In order to reach local stakeholders in national level, the SILVER Consortium hosted several local workshops/seminars in order to highlight the results of the SILVER project and the learnings gained. All these events followed the same workshop

concept in order to communicate the results in a consistent and coherent way. Consortium partners invited for these workshops all the relevant stakeholders in national level such as other EU funded PPI/PCP projects, national level public procurers, local decision makers, municipality and city representatives and project leaders from public/health organisations.

Procuring partners organized national workshops during the spring and summer of 2016 in parallel with the testing of the LEA Care robot. This way the participants had a chance to meet the developer of the solution, Robot Care Systems, as well as to experience a demonstration of LEA Care robot. First national workshops were hosted by the cities of Oulu (April 18th) and Vantaa (April 20th). These workshops were followed by workshops organized by Odense Municipality (June 2nd), City of Eindhoven (June 7th), City of Stockport (July 26th) and City of Västerås.

According to the feedback given, the participants found the national workshops very useful. Firstly, they had an opportunity to discuss about Pre-Commercial Procurement in cross-organisational as well as in cross-professional setting. Secondly, participants appreciated the opportunity to learn more about the cooperation with the SMEs and funding opportunities with EU. Thirdly, participants were very keen on seeing and testing the actual outcome of the procurement, namely LEA Care robot. Fourthly, participants were interested in hearing just how the testing phase was conducted including end user engagement and what was the methodology used. And finally, participants with other PCP/PPI projects were eager to hear what are the learnings from the SILVER project.

Communication materials

SILVER Website

The SILVER website (www.silverpcp.eu) is the main communication channel of the SILVER project. It shares the latest news and events and it has been regularly updated to communicate the recent developments within the SILVER project. It also acts as a communication channel between the SILVER consortium and the members of the target audiences. All the public deliverable documents as well as communication materials are available for downloads via the SILVER website. The SILVER website will be open until the end of the year 2017.

In order to secure the availability of the SILVER documents and the key results after the closure of the SILVER website, the materials will be made available through Procurement Forum (www.iclei-europe.org) during the autumn of 2016.

SILVER Newsletters and press releases

The SILVER project has published in total five SILVER Newsletters in order to present the major milestones and the key findings of the project. In addition, the SILVER newsletter highlights the most important news of the project and promotes the SILVER events. The newsletter archive can be found at: www.silverpcp.eu/media/publications/. Furthermore, the SILVER brochure and the SILVER factsheets (5 language versions) communicate the basic information on the

SILVER project and the Pre-Commercial Procurement process used. These are downloadable on the same site as the SILVER newsletters and press releases.

During the SILVER project three press releases have been published in order to highlight the results of each phase in the procurement process. These can be found at: www.silverpcp.eu/media/publications/.

LEA Videos

In order to disseminate the Pre-Commercial Procurement process, the different phases and the outcome, three videos have been produced, namely:

- [LEA Demonstration](https://vimeo.com/171714584) (<https://vimeo.com/171714584>)
- [LEA User](https://vimeo.com/171714583) (<https://vimeo.com/171714583>)
- [SILVER PCP – Lean Elderly Assistant \(LEA\)](https://vimeo.com/180551390) (<https://vimeo.com/180551390>)

First of the videos demonstrates the validity of the Pre-Commercial Procurement process to allow new innovations to be developed over a three-phase process. The second video demonstrates the validity of the testing process and end user engagement to support further development of the prototype. The third video focuses on demonstrating the validity of the LEA Care robot to meet the requirements of the procurers.

Public documents

One of the most remarkable outcomes of the SILVER project are the documents created during the project. The members of the SILVER consortium have been actively communicating and sharing these documents with their networks. These public documents are:

- D2.2 / Generic process
- D2.3 / Generic templates
- D3.1 / Specific call documents, Phase 1
- D3.2 / Initial specific call documents, Phase 2 & 3
- D3.3 / Final specific call documents, Phase 2
- D3.4 / Final specific call documents, Phase 3
- D5.1 / Learning and recommendations report – Post competition
- D5.2 / Learning and recommendations report – Post phase 1
- D5.3 / Learning and recommendations report – Post phase 2
- D5.4 / Learning and recommendations report – Post phase 3
- D5.5 / Learning and recommendations report – Overall
- D6.6 / Sustainability plan

These documents are already being widely used and have been found valuable especially in other Pre-Commercial Procurement exercises. All these public documents are available for downloads via SILVER website at:

www.silverpcp.eu/deliverables/ as well as through Procurement Forum at: www.iclei-europe.org



Media

According to the Meltwater media monitoring reports, the SILVER project has gained a reasonable amount of media coverage in national as well as in international media. There has been printed articles as well as online articles on the SILVER project as well as its result, LEA Care robot. The SILVER project has also been promoted through social media channels by the partnering organisations as well as other actors. The project SILVER launched both Twitter and LinkedIn accounts during the spring of 2016 in order to communicate the SILVER events as well as the outcomes of the project.

Furthermore, SILVER has been presented several times through the DG Connect Newsletter and other EU communication channels. Also the SILVER final events, such as final conference and workshop, have been promoted through these channels.

Networks

The SILVER project has a close collaboration with other EU funded Pre-Commercial Procurement projects, such as ENIGMA, PRACE, SELECT for Cities, IMAILE, THALEA and CHARM. This has boosted the synergies between the projects and has created new opportunities to share the SILVER project learnings with a wider audience. Furthermore, these projects have actively used the outcomes of the SILVER project, such as tender documents, within their own projects hereby increasing the impact of the SILVER project.

The SILVER Consortium has identified several networks that are beneficial for disseminating the SILVER project results and thus increasing the impact. These include, for example, the European Network of Living Labs (ENoLL), Eurocities, the European Network of Social Authorities (ENSA) and Ambient Assisted Living Network (AAL). The SILVER Consortium has co-operated with these networks in multiple ways during the project life span and will continue this work after the project closure. Furthermore, the SILVER Consortium has also co-operated actively with the EAFIT and another actors promoting better innovative public procurement, such as Public Procurement Network.

Activities increasing impact by partner

Aalto University

Aalto University considers the key impact and importance of the SILVER project as a case example of large-scale, cross-border Pre-Commercial Procurement process implementation. As one of the first ones of its' kind, it has been a grave undertaking, and can serve as an inspiring learning case for others considering to use the process. With this, awareness raising of the project as a whole is more important than focus on the developed technologies.

With this, events, publications and reports are considered the best way to disseminate the project to broad audiences. Aalto University presented the SILVER



project in workshops like annual Aalto Business Schools CKIR seminar in August 24-25, 2016. Aalto University has also written news and articles about the project for Aalto research community through our newsletter and websites. Aalto community and stakeholders are considered a good target audience because of their specific interest in innovations and technology adaptation processes.

For general public, Aalto targets newspaper articles that focus on the technologies and innovations the SILVER project works with. This focus on the robot and elderly care will be of greater interest for general public. Aalto will also engage with national health care exhibitions and conferences as a speaker, and present the SILVER technology solution and the development process for targeted audiences in health care domain.

European research community will be reached through numerous ongoing technology innovation related projects Aalto university is involved in. Many of the projects deal with technologies and close-to-market innovations, either in software or hardware. In these cases, the research questions center around technology diffusion, acceptance and go-to-market strategies. Pre-Commercial Procurement process, and the SILVER experiences in particular, will help Aalto better understand the logic pertaining these questions, and support future projects. Work is already ongoing in the European IoT platform initiative, where Aalto participates in business model and ecosystem task forces.

The SILVER project gives grounds for several conference papers and teaching cases. These have not yet been done, but can be written for publications like Research Policy, Technovation and the European Journal of Innovation Management. In terms of teaching, the SILVER case can be used for Aalto Executive Education courses on project management as a case example of complex long term project. Project serves as a learning case also for bachelor and master level programs.

Aalto works with national funding agencies to develop future research programs and strategic research agendas. In this work Aalto will promote Pre-Commercial Procurement process and the SILVER project as an example, and seek to influence future funding for the process. Aalto works closely with European Network of Living Labs, and promotes living lab experimentation in policy front, as well as practitioner in projects and other research initiatives. Aalto also works with non-profit impact organisations like chambers of commerce and technology industries head organizations, and promotes Pre-Commercial Procurement in their consultations, events and training programs for SMEs and companies.

Brainport Development NL

Brainport Development actively disseminated not only the SILVER project but also the Pre-Commercial Procurement process through different means. Progress was frequently taken up in, for example, newsletters of both Brainport Development as well as the Cooperative Slimmer Leven in order to reach out to a larger audience with regards to the SILVER project and the Pre-Commercial Process. Furthermore, there was input from Brainport Development during events such as the SILVER meet-up during the eHealth Week 2016.



With the increased dissemination and the several entrants coming from the Netherlands at the start of the tender process, we believe that we will have a good supporting platform to work towards engaging in more Pre-Commercial Procurement activities.

City of Eindhoven

City of Eindhoven is one of the three Dutch Partners in the SILVER projects. Most of the activities carried out in the Netherlands aimed at increasing impact, were organised as joint action of these partners.

City of Eindhoven together with Netherlands Enterprise Agency gave a presentation on the Pre-Commercial Procurement methodology and the lessons from the SILVER project for the Dutch Association of Local Authorities. Furthermore, City of Eindhoven presented the SILVER project at a session on Pre-Commercial Procurement organised by EUROCITIES.

Together with Brainport Development and the Netherlands Enterprise Agency, City of Eindhoven presented the SILVER project for the members of the Smart Living Network in Eindhoven Brainport Region to start the testing period in Eindhoven.

City of Oulu

City of Oulu shares information in many events on how Pre-Commercial Procurements can be utilized. The SILVER project is used as an example of innovative procurements in many different national events and when there are international visitors present in City of Oulu,

City of Oulu held a workshop in April in city of Oulu together with Forum Virium Helsinki. During this workshop the results of the SILVER project were shared and LEA Care robot was demonstrated by the Robot Care Systems. Forum Virium Helsinki held a presentation over the Pre-Commercial Procurement process and learnings within the SILVER project.

Collaboration with City of Oulu and Japan is quite active. City of Oulu was present in "*Finland – Japan Joint Committee Meeting for Scientific and Technology Co-operation*" which was held in March 2016 in Tokyo. The SILVER project was mentioned in the meeting as an interesting and innovative project that City of Oulu is participating. During the spring 2016 there were also other visits in Japan where the SILVER project was presented.

City of Stockport

Stockport are planning the future impact of the SILVER project now and are looking to continue efforts since our first involvement in the SILVER project. Stockport has already presented the SILVER project in the following settings:

Horizon 2020 European Commission Call for Robotics January 2014 in Luxembourg which was organized by The Robotics unit of the Communication Networks, Content and Technology Directorate-General and was information event in Luxembourg on the 13th and 14th January 2014 to present the activities, focus and goals of "Robotics" within this Call. The SILVER project was presented as a successful Pre-Commercial Procurement project in order raise the awareness of using a Pre-Commercial Procurement process for the calls in 2014 that were calling for Pre-Commercial Procurements. There was a great deal of interest in both the SILVER project in terms of the solutions coming forward and the Pre-Commercial Procurement experience.

Stockport has repeated this at the events organized by EAFIP (European Assistance for Innovative Procurement) in the UK which was a national workshop for Project SILVER in November 2015 around Innovative Procurement and showed off the Pre-Commercial Procurement process used in the SILVER project and the lessons for procurers. Stockport also presented the SILVER project for the EUROACAD session on Health Funding for EU Projects in February 2016 in Berlin.

Stockport also took part in the European Robotics Forum and eHealth Week and will look to replicate the methodology used there in the future as mentioned above in the Impact Assessment. Stockport Council are well placed as active members of EIP-AHA to continue to increase the impact of the SILVER project through participating in events including the EIP-AHA annual meeting of partners.

Stockport will also look to the EU Open Days events to share lessons from the SILVER project both in terms of the Pre-Commercial Procurement process and the LEA Care robot. These events held yearly always have sessions dedicated to Health and Active Ageing. Furthermore, Stockport will seek to take part in seminars and workshops where possible around the field of Active and Healthy Ageing and are more than ready to continue to share the experience of the SILVER project and maximise its impact. This will be as a municipality but also as part of our wider network commitment.

Stockport will also continue to exploit Twitter which we have done throughout the lifetime of the SILVER project to bring the project to a wider audience. In addition, we will continue to use LinkedIn where we have already published several posts on the SILVER project.

City of Vantaa

City of Vantaa will be active in developing procurement methods and that way uses Pre-Commercial Procurement experience as a resource in its own procurement processes. City of Vantaa also seeks other opportunities to begin a Pre-Commercial Procurement process with other organizations.

The SILVER project gave City of Vantaa information on new technologies and robotics which increased positive attitude towards introduction of new working methods by using technology and robotics. These learnings have been shared, for example, through the national SILVER workshops organized together with Forum



Virium Helsinki on the April 20th 2016 in Vantaa.

City of Västerås

City of Västerås is regarded as the leading municipality in Sweden in the field of digital elderly care and digital solutions within social care sector. This gives City of Västerås plenty of arenas to talk both on innovation procurement generally, Pre-Commercial Procurement in special and – of course – the SILVER project. City of Västerås has done so all through the project, and will continue both for the rest of the project time and for many years ahead.

City of Västerås is often invited to speak on the SILVER project among those interested in digital social care but also quite often when the agenda is on public procurement and innovation procurement. This is often carried out in cooperation with VINNOVA, the Swedish Innovation Agency, and/or The Swedish Agency for Public Procurement. Moreover, we have had close cooperation with Swedish MedTech, the Association for Medical Technology in Sweden. Mats Rundkvist of City of Västerås has actually been listed on their chart of the most powerful individuals in the field of Medical Technology in Sweden two years in a row. City of Västerås plans to continue and develop the cooperation with all these organisations.

As mentioned under Impact Assessment, City of Västerås has initiated a proposal to form a “Beställargrupp” (translated as Buyers group) in the field of digital elderly care solutions. City of Västerås arranged a seminar at the largest national conference on the subject, Mötesplats Valfärdsteknologi och e-hälsa, in Stockholm in February 2016. The seminar was attended by approximately 70 representatives for Swedish municipalities and by leading officials of the Swedish Association of Local Authorities and Regions (SKL) who accepted to take the lead on forming the Beställargrupp. SKL has recently turned to City of Västerås asking us to appoint a leading coordinator for a Beställargrupp. City of Västerås is very much looking forward to this much needed new arena for cooperation between the municipalities of Sweden and believes that it can found a good base for future activities regarding innovation procurement.

As described in local dissemination plan, City of Västerås is planning to make presentations on the SILVER project on all major national conferences covering the topics involved, such as Offentliga rummet and eFörvaltningsdagarna (both on digital public management), Upphandlingsdagarna and SOI:s årskonferens (both on public procurement) and Vitalis and MVTe (both on digital social and health care).

Together with VINNOVA City of Västerås is also planning a national SILVER workshop in autumn 2016 in Stockholm or Västerås. It will invite people from all public sectors interested in innovation procurement and it will focus on sharing knowledge and experience from the SILVER project more deeply than in other conferences and seminars.

All since it started, City of Västerås has had a close cooperation with European Union funded Pre-Commercial Procurement project IMAILE (www.imaile.eu). There have been several meetings, both physical and online, with the Project Coordinator Ellinor Wallin who has expressed her deep gratitude for the possibility to learn from the



experience of City of Västerås has had on Pre-Commercial Procurement within the project SILVER. City of Västerås will continue to have the mutual exchange with IMAILE as long as that project will continue.

Forum Virium Helsinki

As part of the City of Helsinki Group, Forum Virium Helsinki is an innovation unit playing a key role in developing and implementing innovative solutions and approaches. This unique position within the City of Helsinki opens doors to various networks and also provides access to the communication channels within the City of Helsinki.

Forum Virium Helsinki supports the further use of SILVER project results by co-operating with Tekes and its Smart Procurement Programme. The objective of this programme is to speed up the introduction of innovations through procurement excellence and the development of markets. The aim is to improve market access for products and services developed by SMEs in particular and also to improve the productivity and effectiveness of public services. The programme focuses on those sectors which are addressing society's major challenges, and where the public sector has a significant role in market development, such as health care services. Forum Virium Helsinki has been an active member of this programme and has participated for several meetings. Also the preliminary results and documents of the SILVER project have been provided to Tekes in order to help forward the use of Pre-Commercial Procurement too in Finland.

During the last 12 months of the SILVER project there has been a close co-operation with the National Audit Office of Finland (VTV), which is Finland's Supreme Audit Institution and operates in affiliation with Parliament. It audits the state's finances, monitors and evaluates fiscal policy and oversees party and election funding. Through its independent audit work the National Audit Office ensures that public funds are spent according to Parliament's decisions, in compliance with legislation and that fiscal policy is exercised in a sustainable manner. Based on the SILVER project, Forum Virium Helsinki has shared the learnings regarding Pre-Commercial Procurement process and has met the representatives of the National Audit Office several times.

Forum Virium Helsinki organized together with the Cities of Vantaa ja Oulu two national workshops, which were held in April 2016 in both cities. During these workshops, the results of the SILVER project were shared and LEA care robot was demonstrated by the Robot Care Systems. Forum Virium Helsinki was present in these both workshops and held a presentation over the Pre-Commercial Procurement process and learnings within SILVER project.

Forum Virium Helsinki has also actively promoted the SILVER project through various communication channels such as Forum Virium Helsinki's newsletter (Finnish and English versions), web site and social media channels (Twitter and Facebook). Furthermore, the SILVER project has been presented to various national as well as international visitors and also for other Pre-Commercial Procurement project representatives, for example, for SELECT Project kick-off meeting. In addition, it has

been presented through the networks that Forum Virium Helsinki is active in, namely EBN (European Business Network), ENoLL and OAC (Open and Agile Cities). Since Forum Virium Helsinki is owned by the City of Helsinki, member of EUROCITIES, the SILVER project has also been presented in the EUROCITIES events.

Innovate UK

Innovate UK continues to support public sector organisations in the running of new SBRI competitions. Due to the impact of SILVER Pre-Commercial Procurement and involvement in other Pre-Commercial Procurement's with United Kingdom stakeholders and across Europe has gained further knowledge and increased contacts in the European Commission.

Innovate UK continues to promote and support Pre-Commercial Procurement within the United Kingdom, supporting the EAFIP conference in the UK and also investigating new methods for innovation such as Innovation Partnerships leading to the development of a community of practitioners meeting to discuss all these methods of innovation and support their increased use to drive economic growth within the United Kingdom.

Netherlands Enterprise Agency (RVO.nl)

Pre-Commercial Procurement has been added as one of the innovation procurement instruments (www.innovatiekoffer.nl/) and will be promoted to procurement networks through the National Innovation Procurement Programme, currently managed by PIANOo.

Netherlands Enterprise Agency continues to support contracting authorities in the running of new national SBIR competitions and continues to inform and advise contracting authorities on the possibilities of Pre-Commercial Procurement and Public Procurement of Innovative Solutions (PPI) in Horizon 2020. Due to the involvement in SILVER Pre-Commercial Procurement and other Pre-Commercial Procurements within the European research programmes, RVO.nl has gained valuable experience and expertise in setting up and running a Pre-Commercial Procurement in a European context. This experience and expertise will be promoted and shared with organisations that have an interest in participating in a Pre-Commercial Procurement or PPI.

PIANOo and RVO.nl will promote Pre-Commercial Procurement developed within the SILVER project as:

- Best practice by adding it to the best practices in the online innovation procurement instruments www.innovatiekoffer.nl
- Best practice in (lunch) meetings for procurement networks
- Best practice at the annual congress for procurers in the Netherlands

PIANOo and RVO.nl are also investigation new methods for innovation within the public domain by promoting Innovation Partnership and stimulating the formation of buyer groups for innovative products and services.



Odense Municipality

Odense Municipality has participated in a workshop together with Health Innovation Center of Southern Denmark. The workshop was arranged by Local Government Denmark (LGDK) and concerns the opportunities for growth and employment the municipalities are offered through participating in EU programmes (Horizon 2020). The workshop participants were consultants and politicians working with innovation and creating jobs in municipalities all over Denmark. The workshop was found to be very relevant for the SILVER project.

Like the EAFIP workshop in United Kingdom, this was not a workshop that Odense Municipality arranged, but Odense Municipality was able to have a session concerning 'an aging population' as a part of the event. At the workshop the Pre-Commercial Procurement process was presented and the lessons for procurers were shared.

Odense hosted a workshop together with Health Innovation Center of Southern Denmark. This workshop was held at the nursing home Aertebjerghaven, where the LEA Care robot was tested, and Odense presented the Pre-Commercial Procurement process and the test methods used in Phase 3. The participants invited were public procurers from municipalities and from the region of Southern Denmark. Furthermore, CoLab Denmark participated for the workshop and has specialists within healthcare technologies close to home and in public-private collaboration. CoLab Denmark orchestrate and conduct tests that primarily focus on everyday life and create value across the health sector in collaboration with local stakeholders.

Odense will also seek to take part in seminars and workshops where possible around the field of Active and Healthy Ageing and are willing to continue to share the experience of the SILVER project and maximize its impact. This will be as a municipality but also as part of our wider network commitment.

Region of Southern Denmark

The Region of Southern Denmark, represented by the Health Innovation Center of Southern Denmark (HICSD), is highly committed to communicating the SILVER project learnings and project results in all relevant settings nationally as well as at a European level.

The dissemination of the SILVER project learnings and results falls naturally within HICSD's general role as a facilitator for health innovation and public-private cooperation in a national perspective and as a 3-star reference site on EIP on AHA (European Innovation Partnership on Active and Healthy Ageing) at an EU-level. At a national level the dissemination of the SILVER project is ongoing. HICSD communicates the SILVER project and its official learnings regularly at local, regional and national events, such as a national EU event in 2015 hosted by KL (the national advocacy organisation of Danish Municipalities) and the Health and Rehab Exhibition 2016 in Copenhagen, as well as in connection with Phase 2 testing in Odense in 2015, where five articles about the SILVER project were published in the Danish press.



When relevant, communication about the SILVER project is done in collaboration with Odense Kommune, who participates as a procurer in the project. For example, the Health Innovation Center and Odense Kommune hosted a joint national workshop for relevant stakeholders in the beginning of June 2016 in connection with Odense Kommune's Phase 3 testing activities.

The Health Innovation Center has an extensive network of relevant stakeholders within healthcare innovation and innovative procurement. HICSD plans to communicate the results of SILVER through:

- Welfare Tech – a market-driven business cluster for health and welfare technology in Denmark (<http://www.welfaretech.dk>), including the project Innovationsnetværk for Sundhed og Velfærdsteknologi – The Innovation Network for Health and Welfare Technology
- OPI Guiden – a site with knowledge, inspiration and tools for public-private innovation collaborations – targeted at both the public and private sectors (www.opiguide.dk)
- KL – Local Government Denmark – the national advocacy organisation of Danish municipalities (www.kl.dk)
- Dansk Industri – The Confederation of Danish Industry – a private organisation for 10,000 companies within manufacturing, trade and service industry (www.di.dk)
- Danske Regioner – the interest organisation for the five regions in Denmark (www.regioner.dk)
- CoLab Denmark – an organisation uniting companies, municipalities and hospitals with an interest in healthcare technology (www.colab-denmark.dk)
- Markedsmodningsfonden – The Market Development Fund – an organisation helping enterprises bring their new products to the market faster (www.markedsmodningsfonden.dk)
- IKA – Association of Public Procurers – an organisation hosting several events and think tanks regarding procurement, functional requirements etc. (www.ika.dk)
- www.udbudsportalen.dk – the “Tender Portal” – as well as www.bedreudbud.dk – “Better Tenders”
- Internally at the Region of Southern Denmark through the procurement department and Medicoteknik

On an annual basis the Health Innovation Center of Southern Denmark is visited by delegations and visitors from a wide range of fields. In 2015, for example, HICSD welcomed 75 delegations from all over the World who have a special interest in health and welfare technology and innovation. Whenever the topic of a visit falls within innovative procurement or robotics HICSD incorporates the SILVER project and learnings as an example.

HICSD's setting in Forskerparken in Odense (The Science Park of Southern Denmark), which is the center for innovative robot technology in the region, also provides HICSD with a unique opportunity to share the SILVER project's results within robotics solutions to relevant stakeholders.



At EU level one of the main channels for communicating about the SILVER project will be through EIP on AHA and through HICSD's involvement in other international projects, such as the Interreg 5A project DEMANTEC.

Vinnova

Vinnova has already presented the SILVER project on a number of occasions at a wide selection of conferences, seminars etc. Vinnova will continue in the same vein going forward, and a number of these conferences are recurring on a regular basis, either every year or every other year. Most of the conferences are on a national level, many with international elements and participants. These conferences include, but are not limited to the following:

- Offentliga rummet – SALAR yearly conference on Digital Transformation in the public sector.
- Kvalitetsmässan – “The quality fair” targeting public sector and quality development
- Upphandlingsdagarna – “The procurement days”, commercial conference on public procurement
- E-förvaltningsdagarna – “E-government days”, commercial conference on digital solutions for the public sector.
- Innovationsdagen – “Innovation day”, Joint conference Vinnova – SALAR on innovation in the public sector
- Mötesplats välfärdsteknologi – Conference on technology for healthcare
- Vitalis – Conference for actors in the healthcare sector.

Most of the dissemination will be done by or together with the Swedish National Agency for Public Procurement and the Swedish Association of Local Authorities and Regions. Vinnova will also support dissemination by The City of Västerås, the Swedish Procurer in the SILVER project.



Appendix

Appendix 1. Impact assessment plans by partner

Aalto University

Aalto University first engaged with Pre-Commercial Procurement projects in 2010 as a partner in FP7 project Enhancing Innovation in Pre-Commercial Public Purchasing Processes (PreCo), FP7-ICT-2009.9.3. Aalto University acted as a WP leader for policy recommendations, and accumulated valuable knowledge base on Pre-Commercial Procurement process. This gave the motivation to engage with SILVER project, and further learn about Pre-Commercial Procurement process adaptation in the area of independent living. The SILVER project has enabled Aalto to see a real life adaptation of the process, and learn in practice about the barriers and challenges for Pre-Commercial Procurement. As a test coordinator for Phase 3 Aalto works closely with the supplier and the test cities, which has led to learning and important experiences in the planning and organizing trials. This is something that Aalto University is planning to use in the future projects.

Aalto University's participating unit Center for Knowledge and Innovation Research (CKIR) works in the area of innovation management and societal transformations. SILVER presents partial solution to one of the grand challenges of our time, and thus represents a technology innovation in a complex context of home care and assisted living. As a case, SILVER testing and Pre-Commercial Procurement process provides an interesting multi-sided case that can be approached from many different research traditions and stakeholders' view point. The SILVER project has given the opportunity for better understanding the health technology innovation and development process, user-driven innovation paradigm, cross-organizational and cross-border innovation, discourse and institutional logic formation processes, as well as practical management of a complex, explorative projects. The project learnings will be archived for the future use by students and researchers working in the area of Pre-Commercial Procurement, living lab experimentation, project management or health technology development.

Aalto has had the opportunity to apply the learnings in ongoing IoT projects, like bloTope and CONCORD, where Aalto is working on user-driven development processes and experimentation of new technologies with real users. Aalto is responsible for project ethics and open calls, where the principles of call proposals, publication and evaluation are similar to Pre-Commercial Procurement. The objective is to accelerate the transition to new technologies on national level. In FI PPP project the use and adaptation of FIWARE platform technologies is boosted using Pre-Commercial Procurement process with selected cities like Seville. Project work is a concrete way to further work on the Pre-Commercial Procurement process development and policy recommendations for its' support and broader use.

In April 2016 Aalto participated in a proposal for H2020 project Smart Aging where Aalto would apply the learnings from the SILVER project, especially in terms of developing templates and questionnaires for real life testing, as well as related



documentation and reporting templates. Aalto further participated in a proposal Synchronicity, which focuses on IoT pilots, which is an area where Pre-Commercial Procurement process would work well in the future. Should these projects receive funding, they would run until 2020. For the longer term, Aalto continues to follow the developments in the European Pre-Commercial Procurement research and innovation through newsletters, events and publications.

In addition to future projects, the SILVER project has created a community that Aalto wishes to continue working with in the future. Aalto sees Pre-Commercial Procurement process well fit with the Smart City movement and experimentation, which is gaining momentum and used as an application area for new technologies. Helsinki is an active developer and adopter of new technologies, and can hopefully participate in similar experiments also in the future. In addition to the Pre-Commercial Procurement process, the project accumulated important learnings about the health technology development and testing. Real life, living lab type testing provided important insights to the intended, delivered and perceived value proposition of the technology. The users found surprising means to use technology, and the supplier discovered that a part of support features were not useful. This will help in the design of future technologies and features. It also helped to define the target market for the technology in more detail.

The SILVER project work is disseminated through publications and reports, and presented in workshops like annual Aalto Business Schools CKIR seminar. The SILVER project gives grounds for several conference papers and teaching cases. Aalto further works with national regulators and ministries and has the opportunity to promote Pre-Commercial Procurement process in their consultations and plans for future funding.

The impact of the project to Aalto University overall has been accumulated learning, community building and broadening view of means to support uptake of new technologies, which is among the key research questions for innovation research. Further projects in the area ensure that work continues. Without funding and large scale experiments the work remains solely academic, and thus the role of continued Pre-Commercial Procurement project funding, either on European or national level would be a pre-requisite for continued impact creation for SILVER project.

Brainport Development NL

Brainport Development became involved in the SILVER project through its role as an economic development agency. In addressing the Grand Societal Challenges it works to push innovation in order to work towards finding opportunities to overcome these challenges. Within the Brainport Health Innovation program the main goal is the promotion of innovative healthcare solutions whilst also addressing the ageing population. This in order to create a balanced mix of promoting economic and business opportunities whilst working towards and achieving societal goals.

Working closely alongside Brainport Development is the Cooperative Slimmer Leven 2020 (Smarter Living). This organization has a focus on supporting the elderly to allow them to live independently for a longer period of time in their home environment.



This whilst not compromising their health but instead, to add two healthy living years. With their involvement in (among others) EIP on AHA, they provided a good helping hand in linking the business aspects of a Pre-Commercial Procurement process to, finally, the testing phase.

Within the SILVER project, Brainport Development made contributions to several of the different work packages, namely; WP2 (creation of a generic Pre-Commercial Procurement process), WP3 (creation of specific call for independent living), as well as WP6 (dissemination) and WP7 (pilot projects running under Pre-Commercial Procurement).

With regards to the Pre-Commercial Procurement process, the SILVER project provided a good opportunity to familiarize ourselves with the further working of a Pre-Commercial Procurement process. Due to the nature of Brainport Development as an economic development agency and in their status as a non-profit organization, there has not been an extensive track record with the Pre-Commercial Procurement process within the Brainport Health Innovation domain.

However, through SILVER, further opportunities to engage in Pre-Commercial Procurement activities became more evident, not as the primary driver of the procurement, but as the facilitator of the process. This due to the inherent structure of Brainport Development and the Cooperative Slimmer Leven 2020 as triple / quadruple helix organizations, combined with the extra capabilities to facilitate the process through the Brainport Healthy Living Lab in bringing together the parties engaging in the Pre-Commercial Procurement.

City of Eindhoven

The City of Eindhoven was invited to join the SILVER project by the end of 2014 when the first phase of the project had ended and the consortium was preparing the second phase of the project. At that time the consortium decided that a Dutch local authority as procurer was missing in the project. The two Dutch partners in the project – Brainport Development and the Netherlands Ministry of Health, Welfare and Sports (represented by the Netherlands Enterprise Agency) – proposed the City of Eindhoven.

In 2011, Eindhoven has been named the smartest region in the world by the international think tank Intelligent Community Forum. The Eindhoven Brainport region came ahead of regions around Seoul and Silicon Valley because it is home to many knowledge intensive companies, the Technical University and a Science Park as well as the public-private cooperation programme Brainport.

The City of Eindhoven decided to join the consortium not only because promoting active and healthy ageing is an important theme in the local social policy but also – because of being the smartest region – innovation and technology are supported by the Eindhoven City Council.

Eindhoven participated as lead partner with six other partners from various European regions in the European (INTERREG IIIC) Telemedicine project that aimed to establish



a seamless and secure exchange of patient data between authorised health care providers and patients, using technical communication standard in order to provide patients with tools that can lead to better self-management and an improved awareness of their health.

Together with Brainport Development, Eindhoven also participated in the (INTERREG IVB) Innovate Dementia project in which ten European worked together to create innovative solutions for dementia care by focussing on exploring, developing, testing and evaluating assistive design solutions for people living with dementia and their carers from different perspectives: intelligent lighting, living environment, nutrition and exercise and models of assistance.

City of Eindhoven is convinced that robotic technological solutions can help in supporting independent and healthy living of older persons in their own homes. Eindhoven is also interested in the methodology of Pre-Commercial Procurement for the health and social services sector as offered by the SILVER project.

The impact of the SILVER project in Eindhoven has been that it has strengthened the collaboration with Brainport Development in the implementation of health and wellbeing promoting projects. Eindhoven. The experience of Eindhoven with the Pre-Commercial Procurement methodology for health and social services as well as the lessons learned from the SILVER project also served as input for meetings for representatives of local authorities on national and international level.

The participation of City of Eindhoven in the SILVER project will result in the continuation of the dissemination of the experiences and lessons learned in the SILVER project at local, national and international level, whether they concern the implementation of robotics in health care and daily activities of older people or the pre commercial procurement process of local authorities.

City of Oulu

In Oulu Strategy, it is one goal that innovative procurements are developed in city of Oulu. City of Oulu will act as a knowledgeable purchaser and a developer which aims that fair market takes place in economy. The goal is set that over 20 % of City of Oulu's procurements are carried out using innovative procurement methods. Innovative procurements and strategic leadership in procurements have also a big role in road map to a smart Oulu which is a growth pact made with Finnish government department. When using innovative procurement methods, the goal is to speed up developing new products and services and to buy more cost efficiently and more effectively. The goals can be achieved by gaining more knowledge in procurement methods and to produce the services with new tools and methods.

The SILVER project gave a possibility to be in top spot place to develop innovative procurement methods. Furthermore, in the SILVER project the goal was interesting: To support independent living for the elderly through robotics. City of Oulu was not involved in the SILVER project in the very beginning, there were other procurers from Finland supposed to take part in the project. However, Tekes – Finnish funding

agency – wanted cities of Oulu and Vantaa to join the SILVER project and gave the needed funding for participation.

In city of Oulu the strategic goal is also to support independent living at home and develop professional home care. It has been realized that technology and robotics can offer solutions that will help in the future by being cost efficient and bring the elderly quality of life.

In Oulu, there is an active ecosystem called OuluHealth, which strives to be a forerunner in creating innovative solutions to global challenges in the health care sector, aiming for the efficient return of investments and, most importantly, for the creation of jobs and health.

The OuluHealth ecosystem comprises several stakeholders from academia, the public sector, and the private sector. The principal idea is to facilitate open collaboration and to accelerate innovation by bringing together various partners able to contribute to the needs of the health care sector. The ecosystem approach enables the combination of expertise from wireless information technologies and life science to introduce smart ICT solutions for delivering advanced, personalized, connected health service solutions. OuluHealth Labs offers a unique innovation platform which enables citizen and professionals' involvement. New prototypes / solutions can be developed and tested in real user environments or lab-environment.

OuluHealth actively seeks global partners and ideas to develop products and services. We are part in European Connected Health Alliance. City of Oulu is also a member in EIP – AHA network, European Innovation Partnership – Active and Healthy Aging. Collaboration in EIP-AHA has increased knowledge and given a possibility to understand the needs within Active and Healthy Aging. City of Oulu is applying 2016 to be again a reference site, 2012 city of Oulu was awarded with two stars.

In conclusion, City of Oulu seeks possibilities where to utilize innovative procurements and also how to implement robotics in home care. In the SILVER project, City of Oulu received a lot of good experience and learnings and in the future we will develop services where robotics are involved in collaboration with Japan. The memorandum of understanding, collaboration agreement to develop has been signed with Northern Ireland and Kanagawa Prefecture, Japan.

City of Stockport

Stockport Council became involved in the SILVER project just after the beginning of the project following an approach by the then called Technology Strategy Board (Innovate UK) who were looking for local authorities in the UK who were interested both in the field of robotics and also support for seniors and who were willing to get involved with the SILVER project and the Pre Commercial Procurement.

Stockport Council decided to join the consortium firstly because Stockport recognized that there was a distinct lack of robotic technological solutions in the market within the UK and that current providers were not able to offer suitable solutions that assisted.



Secondly Stockport also wanted to work in collaboration with other partners to lessen the risk of engaging with a contractor directly. Lastly Stockport also wanted to trial a new innovative procurement methodology which the SILVER project offered.

The impact so far of the SILVER project has been that it has enabled Stockport to be seen as an expert in the field of Pre-Commercial Procurement and Robotics gaining involvement directly with the EU Commission and presenting at various forums presenting both the Pre-Commercial Procurement model and the SILVER lessons. Stockport have also been evaluators of other robotics and Pre-Commercial Procurement projects such as ECHORD ++ and FP7 proposals.

Stockport have also been involved in another robotics projects with one of the participating companies in Phase 1 of the SILVER project in Project Mario (which is a Horizon 2020 funded project).

It has also helped Stockport to develop clear guidelines about ethics both nationally and internationally as well as develop a robust testing procedure for the SILVER project.

The impact in the future will be in the short term to continue to disseminate the good practice and lessons from the SILVER project across the EU and as part of the EIP-AHA. We expect that this role will continue for the next 2-3 years as the lessons from the SILVER project are still relevant to other Pre-Commercial Procurement or Robotics Projects or indeed for other innovative procurement projects. This will largely be in the form of presenting at European or national forums as well as presence during webinars.

It is also envisaged that Stockport will also seek to use its position within the European Innovation Partnership on Active and Health Ageing (EIP-AHA) as a potential new reference site following the calls in 2016 for new EIP-AHA reference sites. These are three year commitments and will be measured as part of Stockport's commitments to a wider Greater Manchester Proposal to be a reference site. In addition, Stockport have as a city signed up to a Commitment following a similar call to the reference sites but this time to request commitments from cities.

Stockport will also look to further exploit the results of the SILVER project through its other networks such as through its membership of the European Connected Health Alliance (www.echalliance.com) which has a large connector platform with which to share the lessons from the SILVER project as well as bring Robot Care Systems to a wider market. Secondly Stockport is also a member of the CORAL network.

CORAL is a European network of regions collaborating in the field of Ambient Assisted Living and Active and Healthy Ageing. Through a process of open innovation to solve the barriers implementing AAL and AHA solutions and services. CORAL focuses on 'regional policies about Active and Healthy Ageing' and 'Ambient Assisted Living'. Project SILVER would be of great interest to other members of CORAL.

CORAL connects stakeholders in the regional networks and innovation clusters for partner searches in European projects and tenders. Coral successfully connects regional stakeholders – like universities, companies, municipalities, care institutions

etc. – all over Europe that would be ideal as part of planning for the SILVER project sustainability. This could also be in partnership with other regions that have partners in the SILVER project such as the Region of Southern Denmark (Odense) or in Sweden.

The network frequently holds presentations at and contributes to the debate at conferences, seminars, workshops and other events all over Europe. For example, at the AAL Forum, E-Health week, annual EIP AHA conference, Open Days of Regions and Cities and several national and regional conferences.

As part of Stockport's ongoing resource commitment we will also looking to work closely with Robot Care Systems to engage with potential purchasers in the UK in the short term and share our experience of working with them as well our review of the robot.

If the tests are successful and achieve the requirements from the testing plan and the wider objectives from the SILVER project, Stockport Council will look at the necessary procedures and regulations regarding entering into contractual relationship with Robot Care Systems whether through the creation of a follow-up Public Procurement Initiative (a PPI) or through another suitable methodology.

The resource requirements will be the current SILVER project staff as well as people who have been involved in the testing of LEA Care robot within Stockport who would be vital in order to boost the impact from involvement of real users.

City of Vantaa

In Finland the national funding organization Tekes took over an initiative on getting procurers involved in the SILVER project. The ambition of Tekes was to get national experience for Finland on Pre-Commercial Procurement which was used in hardly any procurement. The other ambition was to promote robotics because they have development programs on supporting small on middle scale companies to develop technology. That is why they contacted us and also City of Oulu because we both had experience on innovative procurement. The reasons why City of Vantaa decided to take part in SILVER project were firstly to learn about Pre-Commercial Procurement but also to develop new tools for elderly care and in future to be able to take care of more care recipients with the same number of care givers. This was and still is very essential to City of Vantaa because Vantaa is one of the most rapidly aging cities in Finland.

During the Pre-Commercial Procurement process, we came to a conclusion that a single city in Finland is too small an organization to carry out a Pre-Commercial Procurement process. Anyhow we think that there are challenges to be met in which we might need the tool of Pre-Commercial Procurement and this cross-national co-operation gives a good basis on either national or cross-national realization of Pre-Commercial Procurement. It would be interesting and benefit our service production to begin with a Pre-Commercial Procurement process on service procurement. What it might need more is fluent co-operation with the suppliers.



In home care of the elderly we have taken different equipment in to use and LEA Care robot or another robot might meet the challenge of integrating all the equipment the elderly has at home. The SILVER test period showed us that old people living at home are willing to use technology in case it is easy to use and they get support in learning how to use it.

Until now we have not been able to get much time saving but in future there are opportunities to develop work processes and at the same time safer environment for the elderly by technology to make time savings possible.

The SILVER project offered us both information on the market situation of robotics in Europe and also we learned a lot from other countries and their home care, further how they use technology.

In Finland we have procurement networks and representatives of organizations interested in innovative procurement gather together to share experiences on different kinds of good practices in procurement. They are very good opportunities to give information Pre-Commercial Procurement and discuss the future plans of doing Pre-Commercial Procurement. Because of rare Pre-Commercial Procurement processes in Finland there is a need to tell about our experiences in different kinds of workshops and seminars.

City of Västerås

City of Västerås was invited to participate in the SILVER project because of our leading role in implementing innovations and digital solutions in elderly care. However, we had no previous experience of Pre-Commercial Procurement and it took some effort initially to understand the concept. During the project we have not only participated in the SILVER project but also visited, often invited as a speaker presenting the SILVER project, a number of national conferences and seminars on innovation and/or public procurement and there we have learnt more on both Pre-Commercial Procurement and on procurement of innovations in general. This has been an on-going learning process which is still in progress.

During the progress there has been internal learning seminars both within the Social services department and the Procurement department of the Municipality. When assessing the impact of the SILVER project on the organization of Västerås and the future activities within both procurement and care sectors it would be false to state that we probably will run one or more Pre-Commercial Procurement's on our own. There has been significant impact but more on the national level mediated by Västerås and there are good chances that there will be future procurements in Sweden inspired by the SILVER project but not with Västerås as the single procuring body. See Activities Increasing Impact for more information on planned and probable future activities.

When analyzing the learnings from the SILVER project the conclusion in City of Västerås is that the Pre-Commercial Procurement concept is very interesting as such and as a method to influence what innovations are created by researchers, entrepreneurs and companies and how and when they are brought to the market. We



have the experience that too many of all innovations within the health technology field are initiated by an idea from the innovator (often an engineer) who when discovering the solution starts looking for a matching need. This often results in innovations not succeeding when reaching the commercialization phase and also in lack of innovations really needed by the needs owners such as care givers and municipalities. Pre-Commercial Procurement is a way of turning this process around letting enabling the needs owners to have a greater influence on what innovations the innovators focus on. Nevertheless, we believe that Pre-Commercial Procurement has its shortcomings as a solution for the Swedish elderly care sector.

In Sweden, the 290 municipalities are responsible for social elderly care and home health care. There is little coordination between the municipalities who have a large degree of autonomy and there is no national agency or other body that coordinates activities like innovation procurement. In e.g. UK our understanding is that NHS has a role where they can initiate national innovation procurements to ensure that new solutions meeting common needs reach the market. No equivalent actor is present on the Swedish scene.

We have not had difficulties defining important challenges to the elderly care sector in Sweden that would be suitable for an innovation procurement process e.g. a Pre-Commercial Procurement. When discussing these challenges, we see no specifically local aspects for Västerås in them but they are all shared with the rest of the Swedish municipalities. By that reason we cannot argue why we as a single municipality should invest both local tax payers' money and lots of time and other resources to run a Pre-Commercial Procurement when the benefits will reach all of the Swedish municipalities.

Thanks to the SILVER project the City of Västerås has made two different initiatives regarding innovation procurement and elderly care sector. The first was a project run together with the cities of Norrköping and Linköping aiming at launching a Pre-Commercial Procurement on social care alarms. This was however abandoned in favour of the second. This one is ongoing and is aiming at setting up a "Beställargrupp" (translated as buyers group) which is a cooperation forum amongst municipalities where one of the goals is to facilitate innovation procurement processes.

The work within the SILVER project as well as the learnings surrounded it mentioned above and the networking nationally on innovation and procurement has however increased the knowledge and interest in City of Västerås for other activities within the field of PPI and we have run several procurement processes within the field of elderly care technology where we have been the first customer of new solutions and where we have been an active part of the innovation process. We have also established a test bed for innovations aiming at elderly and persons with disabilities and the care sector for those persons which has been very successful and which has gained a lot of interest both nationally and internationally.

So to conclude we would like to say that the impact in City of Västerås of participating in the SILVER project has been huge and will last for long but the outcome will probably not be that we will run Pre-Commercial Procurement's on our own. We have a close cooperation with Vinnova, the Swedish Innovation Agency and the other



Swedish partner in SILVER, and with the Swedish Agency for Public Procurement as well as with the Swedish Association of Local Authorities and Regions and with all these we have a mutual interchange of knowledge and experiences ensuring the sustainability of our own impacts from the SILVER project.

Forum Virium Helsinki

In the SILVER project, Forum Virium Helsinki was responsible for the Work package 6 (Dissemination and exploitation of the project results) but acted as a national coordinator for Finland and contributed to other Work packages as well. Regarding Forum Virium Helsinki's ambition to participate in the SILVER project, it was two-fold:

First ambition of Forum Virium Helsinki was to develop insight into the use of robotics in the domain of home care for the elderly. Forum Virium Helsinki, as well as City of Helsinki who owns Forum Virium Helsinki fully, have a long history of innovation projects on the domain of increasing independent living of the elderly and the frail. These include some prior pilots with care robotic (e.g. Paro), but most of the innovation activities on this domain have been on user-centric design, re-design of care processes, and piloting and up-taking of ICT and IoT solutions for the home care.

Here on short term the SILVER project provided opportunities to better understand the state-of-the-art of robotics for independent living. This includes bringing in the experiences and knowledge of the SILVER project into other innovation challenges on the social and health care, for example Nordic Independent Living Challenge (2013-2016; open innovation challenge similar to Pre-Commercial Procurement process), and Smart Kalasatama Agile Pilots for social and healthcare services (2016).

The envisioned long-term impact of SILVER is to speed up the up-take of robotics in the eldercare in the City of Helsinki. Here the SILVER project has not yet been able capture and capitalize further opportunities as planned.

Also, there are several internet-of-things eldercare pilots going on in City of Helsinki. These include smart homes for customers of city home care with connected devices (alarms, food dispensers, video visits). In future, these will provide a connected environment where the solutions developed and probed in the SILVER project can connect to, to directly connect to care services and processes.

Second ambition of Forum Virium Helsinki was to acquire hands-on experiences on the Pre-Commercial Procurement process. Before the SILVER project, Forum Virium Helsinki was working with various innovation challenges and their methods (e.g. Apps4Finland, Apps4Europe), as well as with City of Helsinki's procurement processes, executed within the procurement legislation. Pre-Commercial-Procurement was seen as an interesting method to complement these "more traditional" demand-side innovation tools. Also, the EU's large investment plans into Pre-Commercial Procurement (via Horizon2020 programme) were seen as an interesting leverage to further steer the R&D towards the needs of the cities.



Here on short term, the SILVER project has already provided hands-on experiences on the opportunities and challenges of the Pre-Commercial Procurement process. This has led to critical evaluation of the further Pre-Commercial Procurement collaboration propositions for Forum Virium Helsinki and City of Helsinki: Pre-Commercial Procurement is not a general “procurement tool” that suits all demand-side needs, and it has been quite “tricky” to tune the Pre-Commercial Procurement projects into a mode where the local co-funding investment is justified. These lessons learned from the SILVER project have already contributed to the successful start of other Pre-Commercial Procurement projects, for example Select4Cities (select4cities.eu), a Pre-Commercial Procurement project funded by Horizon2020, that has started 2016. Forum Virium Helsinki is coordinating Select4Cities and acting as a procuring authority.

Long-term impact and ambition on this is to further exploit the Horizon2020 Pre-Commercial Procurement as a tool to drive research and innovation towards the needs of the City of Helsinki. Another long-term impact is to influence in the further planning of the EU demand-side innovation instruments (e.g. Pre-Commercial Procurement of the future), to make these suit the real-life needs of the procuring authorities.

Innovate UK

Before the SILVER project Innovate UK has been successfully running its own Pre-Commercial Procurement scheme at National level, Small Business Research Initiative (SBRI). More than 70 Public sector organisations have already used SBRI successfully in delivering over 270 competitions and investing more than £270m in research and development contracts.

Involvement in the SILVER project has allowed the sharing of best practice from the successful SBRI scheme to support the SILVER project and also vice-versa. It has also supported greater involvement with other partners in the other countries to share knowledge and develop relationships. Innovate UK has been involved in CHARM Pre-Commercial Procurement using its resource to support the competition delivery process and also engage in Knowledge transfer to other Pre-Commercial Procurement projects such as IMALIE, Inspire, Preforma, and SmartFire.

Regular attendance to the EC Pre-Commercial Procurement concentration meeting has allowed the continued sharing of information from the SILVER project among all existing EC funded projects and also allowed Innovate UK to drive involvement of UK stakeholders to attend EAFIP conferences to further develop the potential for EC funded Pre-Commercial Procurement lead public sector organisations within the United Kingdom.

Involvement with the SILVER project and other Pre-Commercial Procurement opportunities has helped drive awareness of Pre-Commercial Procurement nationally where Innovate UK has supported stakeholders from NI regarding the MAGIC PCP and also Edinburgh University for PRACE Pre-Commercial Procurement.



The Impact of the SILVER project has helped further develop understanding of Pre-Commercial Procurement and supported updates to document templates for the SBIR scheme. During the project the learnings from our Monitoring Officer have also been transferred to IMAILE project who are now using the same resource for their project to leverage as much experience as possible as the SILVER project draws to a close.

Netherlands Enterprise Agency (RVO.nl)

Before the SILVER project, the Netherlands Enterprise Agency started developing and experimenting with the national Pre-Commercial Procurement method “SBIR” in 2004. Since then an average of 4–6 Pre-Commercial Procurement’s a year had been executed by the Netherlands Enterprise Agency. SBIR is a much simpler way of executing a Pre-Commercial Procurement with only one public procurer, very fast procedures and using the General Government Terms and Conditions for Public Service Contracts (ARVODI), with only minor adaptations for IPR and publicity.

RVO.nl had never been involved in a needs assessment and market consultation for a Pre-Commercial Procurement, since they only get commissioned after a public authority has done this preliminary phase themselves and has come to the conclusion a Pre-Commercial Procurement might solve their problem and provide solutions. Thanks to the SILVER project this aspect was added to the existing experience and contributed to a more overall experience and view on the whole Pre-Commercial Procurement process. In addition, the reviews by the EC experts contributed to a broader (legal) understanding of the Pre-Commercial Procurement process and changes to the national SBIR were made to operate in line with the European view on Pre-Commercial Procurement.

SILVER Pre-Commercial Procurement has enabled Netherlands Enterprise Agency to become from an expert on the implementation of the national Pre-Commercial Procurement method to an expert in the whole Pre-Commercial Procurement trajectory. Several invitations from all over Europe followed, usually with an interest in both the national and international experiences with Pre-Commercial Procurement. Among the countries that invited national expert Carla Dekker were Norway, Sweden, Czech Republic, Lithuania.

Carla Dekker was also invited to present the SILVER Pre-Commercial Procurement at several European conferences targeting European procurement professionals, policy makers and Healthcare innovation professionals.

- 1ST European forum for public procurement of healthcare innovation on 30 May 2013, Parc des Expositions, Paris www.salons-sante-autonomie.com/en/conferences-congress/1st-european-forum-for-public-procurement-of-healthcare-innovation
- Conference on Health Innovation in Galicia (28 April 2014, www.galiciahealthinnovation.com/?lang=en)
- EcoQUIP 2nd Innovation Procurement Workshop (19 November 2014)
- And even outside Europe, The Conference Board of Canada 's Centre for the Advancement of Health Innovations showed an interest in the Pre-Commercial Procurement method. Two skype presentations were given, in November 2014 and March 2015).



Due to the experiences with SILVER Pre-Commercial Procurement and SBIR RVO.nl became involved in three other Pre-Commercial Procurement projects: CHARM, THALEA and ENIGMA, where experiences from the SILVER project were used to help these Pre-Commercial Procurement projects to have a head start and move on more quickly with e.g. the tender documents and market consultation. Other Pre-Commercial Procurement projects, like Cloud for Europe and PRACE were coached, sharing experiences and discussing ways to tackle certain issues.

The own experiences of RVO.nl have helped to give potential participants in a Pre-Commercial Procurement a realistic and enthusiastic impression on what it means to participate in a cross-border Pre-Commercial Procurement: what can be learned, the positive effects of networking and the amount of work that is involved. The last years RVO.nl has been raising awareness among groups that traditionally are used to international cooperation, but were only looking at participating as a research organisation in Horizon 2020 projects, like the academic hospitals. RVO.nl will continue to provide awareness on both Pre-Commercial Procurement and PPI to these and other groups.

To boost impact, more resources would be needed from the Ministries that commission RVO.nl. At the moment no such resources are foreseen.

Odense Municipality

The municipality of Odense was involved in the SILVER project because of the Southern Denmark European Office. The Office assists public institutions, NGOs, and private sector enterprises with international co-operation as well as research and development projects within the European Union. They contacted The Municipality of Odense to hear if we were interested in participating in the project.

The municipality of Odense was already working on several other projects concerning implementing more mature technologies supporting elderly and disabled. In addition, the municipality had an interest in testing methods for development of new technologies.

Odense decided to join the consortium because of the possibility of developing and testing the Pre-Commercial Procurement method, and due to an interest in developing new technologies for assisted living. Furthermore, Odense saw possibilities in developing their European network and gaining new knowledge regarding procurement.

The SILVER project has given Odense a broader knowledge about working with the Pre-Commercial Procurement method. The method presents a different way of working together with a private company regarding developing new technologies in cooperation. Furthermore, the SILVER project has given inspiration to developing a new and more structured testing method for testing new technologies with end users.

Phase 2 testing was performed by Health Innovation Center of Southern Denmark in cooperation with Odense. Cooperation succeeded well and Odense was able to

participate in the test team with two Physiotherapist and a Social and health Care Assistant.

LEA Care robot was tested in a realistic end user scenario in a controlled test environment. Odense has since Phase 2 test established their own controlled test environment, where it will be possible for the care staff to do training in new technologies before implementing them in real life at end users.

As part of Odense's ongoing resource commitment we will also be looking to work closely with Robot Care Systems to engage with potential purchasers in Denmark in the short term and share our experience of working with them as well as our review of the robot.

The resource requirements will be current SILVER staff as well as people who have been involved in the testing of LEA Care robot within Odense who would be vital in order to boost the impact from involvement of real users.

Region of Southern Denmark

The Region of Southern Denmark participates in the SILVER project through The Health Innovation Center of Southern Denmark (HICSD). HICSD is a regional player for health and welfare technologies in Denmark aiming to "create value for somatic and psychiatric hospitals, social institutions and regional companies by contributing with innovation, inter-sectorial cooperation and public-private cooperation".

The SILVER project has been a unique opportunity for the Region to learn more about Pre-Commercial Procurement as a tool for innovation and public-private cooperation. The purpose of joining the SILVER project was partly to promote and aid in facilitating the future utilisation of innovative procurement methods within the Region of Southern Denmark but also at a national level and across borders. As WP5 leader HICSD has been responsible for capturing learnings and generating recommendations throughout all phases of the project, providing the Region with valuable insight into the possibilities and challenges of a cross-national Pre-Commercial Procurement process.

For the Region the distribution of this knowledge is relevant far beyond the framework and reports of the SILVER project and the knowledge will be utilised and disseminated through the Health Innovation Centre's general role as a facilitator for health innovation and public-private cooperation.

As a 4-star reference site on EIP on AHA (European Innovation Partnership on Active and Healthy Ageing) the Region of Southern Denmark represented by the Health Innovation Centre of Southern Denmark is actively involved in the innovation partnership. Being a reference site means bringing good examples that illustrate an extensive, innovative approach to healthy and active ageing into the partnership. The SILVER project is of great relevance in gaining more knowledge, which the Region can share with partners both within and outside of the innovation partnership.

EIP on AHA and the SILVER project support the Region's target areas and entail the following:

- Enabling the citizens to lead healthy, active, and independent lives while ageing.
- Improving the sustainability and efficiency of the social and health care system.
- Boosting and improving the competitiveness of the markets for innovative products and services, responding to the ageing challenge at both EU and global level, thus creating new opportunities for businesses in the Region.

Exemplifications of Current Impact

Throughout its involvement with the SILVER project the Region has benefitted considerably from the experiences and has regularly employed the learnings from the project. The learnings are multifaceted, covering experiences with the Pre-Commercial Procurement process, prototype testing, gathering and conveying learnings and recommendations as well as general participation in a cross-national EU project.

The SILVER Pre-Commercial Procurement learnings have for example had an impact within the Region of Southern Denmark's procurement department where innovative procurement methods are gradually gaining a footing, if not necessarily in the form of a Pre-Commercial Procurement process or similar as of yet. There is a general focus on dialogue with (potential) contractors, to which the SILVER learnings can potentially help with inspiration. Innovative procurement methods such as Pre-Commercial Procurement are found to be especially relevant in situations where a need or challenge is not solved by existing products or services and infers high expenses for society and the health care system.

There is a general increase in cross-regional procurement collaboration in Denmark and it has become a joint strategic focus for the regions from 2010 until 2020, in the realisation that joint efforts within procurement can be more cost-efficient and contribute to saving an estimated 1 billion DKK (€135 mio.) across the 5 Danish regions from 2015 to 2020 (<http://www.e-pages.dk/regioner/80/>).

The overall learnings from the SILVER project also contribute to the Region's involvement in similar or related projects both at a national and international level, such as "fælles tolkeudbud" – a Danish project for cross-regional procurement of interpretation services – and "DEMANTEC" – an Interreg-funded cross-border project aiming to help people with dementia via new technologies, where the Health Innovation Center is responsible for the test phase. Several of HICSD's larger pipeline projects as well as future projects have and will undoubtedly benefit from the learnings of SILVER.

CoLab Denmark, a cross-sectorial collaboration between the Health Innovation Center of Southern Denmark and the regional hospitals and municipalities, also employs the learnings from the SILVER project in relation to the experiences from Phase 2 testing and the general collaboration between procurers and contractors in the project. CoLab Denmark unites parties from companies, municipalities and



hospitals who have an interest in healthcare technology. As a meeting point and accelerator CoLab leads projects from ideas to development through tests for implementation of technological healthcare solutions across sectors and local boundaries, with a focus on everyday life and creating value across the health sector.

The future impact will be to continue to disseminate the learnings from the SILVER project regionally, nationally and in a European perspective through the Region's participation in partnerships, future projects and events in the years to come.

The resource requirements will be current the SILVER project participants as well as other stakeholders connected to the Health Innovation Center, who will continue to utilise and disseminate the learnings whenever relevant.

Vinnova

At the start of the SILVER project, Vinnova had an assignment from the Swedish government to stimulate and catalyze and increase the use of public procurement of innovation, through Pre-Commercial Procurement as well as through other processes. In addition to working with raising awareness of the possibilities this tool presents, and increasing the competence level around its use, Vinnova also provided both process and financial support to contracting authorities through projects where the process was used. Thus the main objective of Vinnova's participation in the SILVER project was to extract experience concerning the Pre-Commercial Procurement tool for the purpose of dissemination and support to Swedish contracting authorities with the aim to "demystify" the process and further its use in Sweden.

The SILVER generic process has been the basis for a Pre-Commercial Procurement guideline in Swedish that was published in September 2013. These guidelines and also templates have been used by more than 20 Vinnova funded projects since then. In hindsight it has been an iterative process where the funded projects have developed and elaborated the Call for tender templates further.

The responsibility for support of innovation procurement was January 1st 2014 transferred by the Swedish government to the Swedish Competition Authority, and thereafter transferred again September 1st 2015 to the newly formed Swedish National Agency for Public Procurement. An agreement was formed between Vinnova and Swedish Competition Authority, and then also with the Swedish National Agency for Public Procurement, to formalize and ensure the dissemination of the experiences gained from the SILVER project and Swedish generic process to a wider audience of Swedish contracting authorities.

The Swedish National Agency for Public Procurement has supported more than 10 different Swedish PCP projects with experiences from the SILVER project based on the Swedish guidelines and templates based on the SILVER project.

Vinnova continues to give financial support to Pre-Commercial Procurement projects in Sweden, and the experience and knowledge gained from the SILVER project form an important basis in many preparatory discussions. Vinnova is also often called upon



to provide expertise on the subject of innovation procurement in general and Pre-Commercial Procurement in particular in conferences and seminars targeted at the public sector and contracting authorities.

The collaboration between Vinnova and the Swedish National Agency for Public Procurement is focused on four areas:

- Information dissemination
- Project support and collection of knowledge
- Exchange of experiences
- Competence building and business intelligence

In all of these areas the SILVER project and the experience and knowledge gained throughout the project will play an important part. The SILVER project is already being used in many contexts as a good example and for inspiration, as well as providing valuable insights and material that can be used in other projects.

When the SILVER project has been completed, the result will be available through both Vinnova's website and the website of the Swedish National Agency for Public Procurement. The results will also be disseminated in a variety of ways, by both Vinnova and the Swedish National Agency for Public Procurement.

Vinnova also has a collaboration agreement with The Swedish Association of Local Authorities and Regions, SALAR. SALAR is both an employers' organisation and an organisation that represents and advocates for local government in Sweden. All of Sweden's municipalities, county councils and regions are members of SALAR. The results from the SILVER project will be disseminated through their networks, with the aim to increase the use of Pre-Commercial Procurement.

Results and experiences will also be spread through local, regional, national and international networks that Vinnova has established through other initiatives in connected areas. These networks are related to innovation in the public sector, innovation in health and care as well as to digital transformation. Vinnova connects with all of these networks on a regular basis, both digitally and physically.

On a policy level, the result from the SILVER project will also be communicated to policy makers in relevant ministries, primarily the Ministry of Finance, which is also responsible for public procurement issues, and the Ministry of Enterprise and Innovation. The objective is to provide information to help support policies that promote the use of innovation procurement in the public through addressing, among other things, regulatory frameworks and incentives.

The Vinnova resources available for dissemination mainly consist of the project group and steering group working with innovation in the public sector. However, the connection to the Swedish National Agency for Public Procurement and the Swedish Association of Local Authorities and Regions, ensures that dissemination on a larger scale and with a wider reach is possible.

