FINAL
PROJECT REPORT
LILY
(AAL-2010-3-027)

Please send this report ELECTRONICALLY to the Central Management Unit (CMU) as well as a copy to the National Contact Persons (NCPs) of the coordinator and project partners

The coordinator of the project must submit this report within 60 calendar days after the final date of the project, on behalf of the consortium.

If you have any additional question,
please contact the AAL CMU at CMU@aal-europe.eu,
or your NCP (see details on www.aal-europe.eu/aal-ncp)

Report date	23/12/2014 , 16/01/2015, **20/02/2015**

PUBLISHABLE PROJECT INFORMATION (TO BE USED BY AALJP)

1A. PROJECT	
Project full title	Advanced Support for Independent Living : Human Life Cycle Approach in Senior Housing
Project acronym	LILY
Project No.	*AAL-2010-3-027*
Project Website	http://www.aal-europe.eu/projects/lily/ and www.LILY-AAL.eu
Project duration	• Starting date: *01/12/2011* • Termination date: *30/11/2014*
Coordinator's name and details	Full name: University of Oulu / Vesa-Pekka Ala-Siuru (Veikko Halonen principal investigator) E-mail address: pekka.ala-siuru@oulu.fi Telephone number: +358 40 197 7688 **** Both** e-mail address **and** tel. number must be provided.*

1B. PROJECT PARTNERS					
No.	**Partner organisation name**	**Partner org. acronym**	**Type***	**Project costs: Public grant in Euro**	**Project costs: Partner own contribution in euro**
1 (coord.)	University of Oulu	UOULU	RTD	323000	138590
2	Vienna University of Technology	TUW	RTD	151284	50429
3	Oulu University of Applied Sciences	OUAS	RTD	150000	64350
4	Visage SAS Camera Contact	VISAGE	SME	168980	206531
5	Siperia Systems Oy	SIPERIA	SME	80200	80200
6	The Districal Joint Municipal Authority of Health Care In Raahe	RAS	END USER (Public Organization)	92000	92000
7	Chambre de Commerce et d'industrie de la creuse	CCI	END USER (Public Organization)	210130	85683

1C. PUBLISHABLE PROJECT RESULTS SUMMARY *(1 PAGE)*

LILY project's main function and goal has been to develop ICT services to older people at home, thus helping them stay longer at their homes – ageing well with the support of the new technologies. The work of the project consortium has been user-driven so that in the Finnish and French pilot sites/areas the companies and universities has been working closely with the user organisations. Besides the consortium partners there has been close co-operation with other stakeholders, e.g. in Finland The Central Union for the Welfare of the Aged and in France such as insurance companies and regional hospitals and care organisations. Active end user involvement, as a Living Lab approach, took place in Finnish and French sites. This was supported by extensive attention to ethics, especially in preparing appropriate ways to involve the older participants in the research. The ethics guidelines and project's ethics policy drafted to address the specific needs of the LILY project could be used throughout the project. New issues and observations made by user partners could be collected, partners actively contributed to reflecting about the ethical dimensions of their work. These guidelines are fully deployable in the EU level. During the project the research partners worked together with the user organisations and SMEs – the main results were three systems running on tablets, smartphones and PCs. One goal was to build a common ground between the three systems (France:Visage, Finland:Pandora and Hovimestari). This interaction with the three systems were demonstrated in the AAL Forum 2013. The main functionality of these systems, however, were demonstrated and taken to use in the local sites in France and in Finland. The main pilot site area in France was Creuse and in Finland Raahe. In Raahe there was also developed an RFID-based smartphone system for the care givers to manage their daily work in a Senior Housing complex for memory impaired older people.

In France Lily project enabled to build a shared infrastructure that broadcasts services and products to older people. Using a touch screen at home which is always connected to the Internet and administered by the social network, elders receive pertinent services automatically.
In the Business plan part of the LILY project there was analysed for instance which kind of barriers exist for companies who want to enter the ageing market place, such as a lack of marketing spend on older age group(s) and the uncertainty around how to communicate with older people.
In LILY the software architectures for AAL systems were studied and developed. The proposed Decentralised Service Architecture and the refined Smart Living concepts are the major outcomes of that work. The idea of the architecture is to abstract whenever it is possible from the low-level technical interoperability to knowledge-based interoperability via such a high-level medium as the Web, using the Linked Data approach – in order to facilitate the minimum or no development effort for service provisioning. The architecture relies on semantic data models of services.

The user organisations' experiences can be summarized as follows: *"Important result for us was that we get more information about technology and changed our own attitude towards ICT. ..project added care givers knowledge about older persons service needs now and in the future… older persons' capacity to use new technical devices is very good and they are interested about the new ways how the services are delivered to them… from the care givers point of view we found out that is important to be able to respond to the feeling of insecurity and loneliness and that new technical devices are good in that…LILY systems help the older people to be connected to each other and their relatives and care givers."*

CONFIDENTIAL PART OF THE REPORT

2. DELIVERABLES SUBMITTED AND MILESTONES ACHIEVED DURING THE PROJECT

In this section, please provide details in case your project deviated from the Description of Work *(work plan) with respect to delivery dates, achievement of milestones or changes in planned outputs; please indicate whether and to whom (AAL NFA/NCP) the changes have been communicated.*

Mainly the milestones and results have been realized in the course of the planned schedule. In Finland all the Finnish partners´ reports with Tekes has been effective every 4 months and the results of the project work and plans for the next periods have been reported respectively and accepted in the meetings of the national level Project Steering Group. In France and in Austria the national reporting has been effective once a year.

The main changes during the project run were done in the Vienna meeting in June 2012. Some deliverables were combined and work package months were refined. Those changes were communicated to AAL CMU (together with the signed CA) and NCP's. Unfortunately due to several partners' reasons the deliverable dates has not all been able to achieve.

Has the project been finalised in line with the Description of Work?	YES ☑	NO ☐	PARTLY ☐

THE DESCRIPTION OF WORK PART OF THE PROJECT PROPOSAL HAS BEEN ACTING AS THE FRAMEWORK FOR THE ACTUAL DEVELOPMENT WORK.
THE ACTUAL DESCRIPTION AND SYSTEM DEFINITION WORK HAS BEEN DONE DURING THE PROJECT TOGETHER WITH THE DIFFERENT USER GROUPS IN FINLAND AND IN FRANCE THUS FORMING A LIVING LAB – CO-CREATION ENVIRONMENT.

Has the project achieved its expected results as described in the Description of Work?	YES ☑	NO ☐	PARTLY ☐

THE PROJECT HAS ACHIEVED PARTLY MORE THAN HAD PLANNED - BUT FROM THE RESEARCH PLAN THE PRINTED ELECTRONICS PART COULDN'T BE INCLUDED - THIS WAS PARTLY BECAUSE THERE WAS NO NEED FROM THE USER ORGANISATION IN FINLAND TO TEST THAT KIND OF THINGS AND UNIVERSITY OF OULU CONCENTRATED TO FULFILL THEIR NEEDS IN THE CARE MANAGEMENT APPLICATION IN WHICH THE RFID – TECHNIQUE WAS USED.

Siperia Systems comments:

Has the project been finalised in line with the Description of Work?	YES ☐	NO ☐	PARTLY ☑

***IN CASE OF DEVIATION**, PLEASE EXPLAIN:*
- *WE DID NOT HAVE RESOURCES TO FINALIZE ALL THE TECHNICAL INTEGRATION AND PILOTING AS PLANNED*

Has the project achieved its expected results as described in the Description of Work?	YES ☐	NO ☐	PARTLY ☑

***IN CASE OF DEVIATION**, PLEASE EXPLAIN:*
- *MOST OF THE DEVELOPMENT RESULTS WERE ACHIEVED, AND A LOT OF OTHER RESULTS THAT WERE NOT PLANNED IN THE START OF THE PROJECT*

3 A. PROJECT RESULTS - SCIENTIFIC/TECHNICAL PROJECT RESULTS

Provide a summary of the confidential results, including:

- The progress per work-package
- The performance of the project consortium (added value of cooperation, added value and performance of each partner etc.)
- Scientific/technical achievements during the course of the project
- End-user services developed during the course of the project
- Other confidential information

Progress on Work Packages -

WP 1 – User experience, legal and ethical issues

- User Requirements, use cases and scenarios, Living Lab workshops
- Reports on user acceptance/evaluation, usability, accessibility and a quality of self-serve supporting environment
- Piloting field trials in France and Finland

WP 2 - System design, implementation and technical validation

- Self-serve supporting environment developed within a scope of LILY project on a base of existing environments, preindustrial prototypes, LILY set of products (SW&HW solutions, M24, M30, Restricted/Public)
- Evaluation framework, user guidance (Report, M24, Public)

WP 3 - Business strategy

- Business analysis and main components have been established together with the SMEs
- Business framework and models has been drawn up and distributed to all partners
- Impact evaluation and conclusions has been produced, distributed and agreed by all partners
- Exploitation plan was produced and distributed to partners
- Disseminations have been established

WP 4 - Management and coordination

- Project management plan; scheduling, comm. and reporting tools were set up and accepted by all the partners
- Project ethical policy was defined with all the partners
- Quality Assurance has been accepted by the consortium per each partner´s own quality assurance procedures.
- Project presentations have been addressed to partners
- Periodic reports to EU (AAL)

Consortium work

The project consortium has had several meetings where the issues concerning the project work have been discussed and further developed:

Kick-off meeting in Oulu, Finland 2/2012, Vienna Consortium meeting 6/2012, AAL Forum 2012 Eindhoven, Gueret, France Consortium meeting 5/2013, AAL Forum 2013 Norrköping (mid-term review meeting) and 6/2014 in Oulu/Raahe and AAL Forum 2014 Bucharest. The partners have been actively presenting the work in the AAL Forums (-12, -13,-14) and the project has had own stand in those exhibitions. Responding to the timelines concerning deliverables and work package leading has been variable – somewhat tighter coordination effort could have been needed. However in overall the performing of partners have been good.

Scientific and Technical achievements

LILY project's research partners had different research approaches and goals during the project:

1) In **University of Oulu** the project work concentrated in the user involvement part and the Living Lab approach development. During the project international student exchange and cooperation was established between the University of Oulu Dept. of Information Processing Sciences and the University of Angers in France. The themes of the exchange work were Business Plan development and Gamification in User Interface development.
    a. The research work concerning the development of the Home Care management system (Near Field Communication, NFC) with the user organisation partner RAS continues (2015) as a *Graduate Thesis work* by a student in the dept. of Information Processing Sciences. We have already fully operational prototype software tested in the home care premises (Feenix Home Care in Raahe).
    b. The Living Lab approach is further developed and researched in *PhD Thesis work*:
        i. *Pekka Ala-Siuru*: "Data analyzing methods related to the Living Lab Approach: Quality Function Deployment as an example".
        ii. Recently the results have been presented in the European Network of Living Labs (EnoLL) Open Living Lab Summer School (Amsterdam 4.9.2014) WS25: International Living Lab for products and services for elders and their autonomy, presentation on "LILY project's Living Lab Approach." and in the AAL Forum 2014, Bucharest 8-12.9. 2014 Proceedings paper "Ala-Siuru et al, Users Voice: Participative Design and Living Lab Approach in LILY".
    c. Research visit to Japan – 3 months by researcher Eeva Leinonen during the spring 2014 – results have been presented in the NordiCHI 2014 conference publication.

2) **Oulu University of Applied Sciences** was responsible of the applied technical research work which was concentrated mainly in the development of the HoviMestari software platform and decentralized service architecture:

    - The proposed Decentralised Service Architecture and the refined Smart Living concepts are the major outcomes of the work. The idea of the architecture is to abstract

whenever it is possible from the low-level technical interoperability to knowledge-based interoperability via such a high-level medium as the Web, using the Linked Data approach – in order to facilitate the minimum or no development effort for service provisioning. The architecture relies on semantic data models of services.

- Some aspects of human living, such as education, work, cultural and social life, range beyond those living environments where Smart Homes operate. The concept of Smart Living is better suitable since it essentially assumes all the aspects of human living being affected with technologies. Technological challenges are similar regardless of a smart space and its domain. Understanding that may bring to a development of generic, unified solutions that could be reusable across smart spaces and domains.
- The HoviMestari system is utilising the Decentralised Service Architecture framework and designed based on needs of elderly people. The system is intended to be used for delivering services for elderly people living at home or nursery house.
- Using the system elderly people could get services easier, it is not necessary to move away from home or when needed it is possible to access the needed transportation services.
- At the moment the system is under consideration to be commercialized. The possible business models are evaluated.

3) **Technical University of Vienna** has been responsible of the research in the ethical questions of LILY:

A comprehensive approach to ethics was adopted in the LILY project from the outset. The guidance provided was considered helpful. An ethics policy and a document on ethical and legal state of the art and user involvement were provided for the support of all partners, especially those collaborating with various end users. The ethics policy focuses on ethical principles in research, informed consent, and relevant national and EU legislation and policies. D1.1/1.2 addresses more closely user involvement in the LILY context. The ethics guidance documents are based on commonly accepted principles of research ethics, backed up by a literature review and years of experience in ethics management in international R&D projects. The focus was in particular on the ethics of user involvement. A check list and reminders were made focusing on ethical issues to take into account before, during, and after user involvement activities. Legal issues, especially from the point of view of data protection, privacy, and relevant bodies governing research ethics, were included. The documents provide comprehensive support in strategies for data management, informed consent, and exit.

One of the barriers is adoption of technology by older users. An important finding of LILY is that the take up and continued use of technology requires much personal involvement and commitment from the side of the service providers. The French partners' example of engaging well-trained facilitators to bring new technology into the homes of older users and keeping the system running shows that frequent and regular personal contact is necessary for successful use. This was later adopted also in the Finnish pilot site partly.

End User Services developed:

In France the end user participation was carried out by the partner CCI together with the partner VISAGE:

Some notices about the services which were implemented in the VISAGE touchscreen system:

The service application parts respond to elderly needs such as health & wellness, home care, mobility, social interaction, hobbies, supply with goods & chores, information and learning. Products and services are broadcasted for the entertainment and healthcare through the terminals in the homes of older people. To provide a self-service to the society, the system includes a repository of services that can be automatically pushed to the end-user to preserve independence of persons even if they are not motivated to use ICT. Diffusion and integration of services are adapted for maintenance at home in a holistic approach.

Each program broadcast engages 30% of fees for service of the cost of the service delivered. The cost could be played by elder (end-user tier-1) or by other end-users (tier-2–3) such as organizations, territorial collectives, and formal care givers of elders such as hospitals, national insurances.

In Finland the Hovimestari system provides services from the different service providers, e.g. RAS (hospital and home care), public organisations, city information, news, radio programs transportation, food service information, grocery store offers. Pandora system provides care services (billing etc.) to the home care givers. The electronic voucher system was piloted in the system also.

The social innovation part in LILY has been also important: one result of LILY is the plan for a Memory Home programme of RAS. That type of service is provided to the memory impaired older persons.

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3 B. PROJECT RESULTS – BUSINESS MODELS & INDICATORS

The following Business model & data concerns the French SME partners CCI and CAMERA CONTACT:

The infrastructure (hardware) is distributed by professional helpers that manage a large number of elders, by families or by the older person her/himself. It includes network access and devices and common services. This is done at low cost, and could be largely sponsored by helpers. This model is inspired from the mobile phone at 1€ sponsored in exchange of an engagement of using services after.

An "e-service store" lists all services available online on the infrastructure and adapted to the elder. The services can be bought by any helper or by an elder, and being served to one elder. End-user tier 1 (older persons), orders a service that she likes, such as a coach to make adapted physical activity at home and at distance. End-user tier 2 (families) offer one e-service for their elder; (care givers) buy service to coordinate efforts among them or to track their employees when they are at home of the elder. End-user tier 3 (national organisations) buy the e-service that consist in broadcasting an interactive prevention program to the elders selected. All the services are interactive and the feedback of the elder is sold, such as 1€ par data gathered from the elder (such as the knowledge of the hour when an employee arrived at home, an appointment with a taxi company to transport the elder and so on).

Insurances could pay 5 to 10€ per month for such intervention and prevention to their elders. Social and Care givers at home are ready to pay 5 to 10 € per month to be in contact with their employee at home. Local private companies would pay about 1 € for each of their intervention, meeting with elder e.g.

Please answer the questions below, if possible:

What is the **targeted range of manufacturing/service costs** per product/service unit (€, € per month etc.)?	20 € per month for end users Pay-per-use for companies
What is the **estimated size of the targeted market** in Europe for your product/service (in €)?	10 000 000 €

In your business model, **who will pay** for the product/service (you can tick more than one box):

☑ End user (older person) ☐ Informal carers ☐ Formal care providers ☑ Public subsidies

☑ Insurance ☑ Other (add if necessary) : relatives and families ☐ not yet decided

In your business model, **who will take the decision about purchase** of the product/service (you can tick more than one box):

☑ End user (older person) ☑ Informal carers/family ☐ Formal care providers ☑ Public subsidies

☑ Insurance ☐Other (add if necessary) ☐ not yet decided

At what **stage of development** are you with your product/service (e.g. research, pilot, real life trial etc.)?	Real life trial
When will your product/service be **ready for market**?	No sufficient critical market size at the moment
What type of **further research/development** is necessary to finalize the product (technical, adoption, market research etc.)?	Need to expand its network so as to build the necessary critical mass

What **further investments** are necessary to launch product on the market?	Communication and investment in equipment (touch screen…)
Which is the **expected turnover** to be generated by your product/service in 2-3 years?	900 000 € in 3 years

Please insert here any other information related to the business model, such as:

- *what is the targeted market niche?*
- *do you need certification for your product/service before gaining access to the market?*
- *what type of certification and from who?*
- *do you need to perform reliability testing?*
- *Any other information*

……

3 B. PROJECT RESULTS – BUSINESS MODELS & INDICATORS

The following Business model & data concerns the Finnish SME partner Siperia Systems:
The main product is a software product for planning, controlling, follow-up and reporting elderly care services (Pandora)

- *The software is developed for managing the service production and developing the well-being of residents in senior service houses.*
- *The software is designed so that it can be used in all sizes of organizations providing and coordinating various home care, health and social related services.*

Pandora - Service Management Information system goals and benefits

Service quality

- *Providing equal services for all customers*
- *Planning and tracking of operations*
- *Customer safety*

Information sharing

- *Better co-operation between private and public sector*
- *Supports multiprofessional teamwork of individual caregivers*
- *Supports independent working and professional development*
- *Provides real-time information for all users*
- *Saves time*

Creates new possibilities

- *Easy analysis, reporting and statistics based on collected information*
- *Wireless data collection and retrieval*

The product will be sold to private and public elderly care service provider organizations.

Please answer the questions below, if possible:

What is the **targeted range of manufacturing/service costs** per product/service unit (€, € per month etc.)?	10 € / month / end user
What is the **estimated size of the targeted market** in Europe for your product/service (in €)?	….
In your business model, **who will pay** for the product/service (you can tick more than one box): ☑ End user (older person) ☐ Informal carers ☑ Formal care providers ☑ Public subsidies ☐ Insurance ☑ Family ☐ not yet decided	
In your business model, **who will take the decision about purchase** of the product/service (you can tick more than one box): ☑ End user (older person) ☑ Informal carers/family ☑ Formal care providers ☑ Public subsidies ☐ Insurance ☐Other (add if necessary) ☐ not yet decided	
At what **stage of development** are you with your product/service (e.g. research, pilot, real life trial etc.)?	Real life trial
When will your product/service be **ready for market**?	Partially now
What type of **further research/development** is necessary to finalize the product (technical, adoption, market research etc.)?	Technical modifications, closer integration to other systems
What **further investments** are necessary to launch product on the market?	Sales channels and partners
Which is the **expected turnover** to be generated by your product/service in 2-3 years?	500 000 €
*The availability and the scalability of some functionality of the system can be improved by utilizing more **cloud services**.*	

3 C. PROJECT RESULTS – END USER INDICATORS	
In the section below, please provide the information you have gathered during your project on primary, secondary and tertiary end-users[1] of your product/service. Note that secondary end-users can be formal and informal careers (see footnote). For the indicators cited below, please provide information if available; any other qualitative or quantitative information on beneficiaries can be provided instead.	
Type of end-user (primary, formal and informal secondary, tertiary end-users)	Individuals Secondary end-users (relatives, nurses, …) Companies publics organizations
Total number of end-users involved (by type of end-user, gender, etc.)	- 63 individuals - 140 secondary end-users - 40 companies public organizations
Average age and age distribution of involved end-users	- 80 years old for individuals - 50 years old for secondary end-users - 55 years old for companies and public organizations - 41 to 72 years old individuals (Raahe area)
Location of end-user (rural, town, large city, etc.)	Rural – end users located in the area of Creuse Rural and Urban end users (Raahe area)
Situation of end-users (single household, family setting, independence, etc.)	Numbers m-f Family status Percentage 18 couple 28,50% 02 with their sons 3,20% 02 with their daughters 3,20% 41 single 65,10% 100,00% of these 63 persons live in their own house

1 Definition of end-users in AAL Joint Programme:

- *Primary end-user is the person who is actually using an AAL product or service, a single individual, "the well-being person". This group directly benefits from AAL by increased quality of life.*
- *Secondary end-users are persons or organisations directly being in contact with a primary end-user, such as formal and informal care persons, family members, friends, neighbours, care organisations and their representatives. This group benefits from AAL directly when using AAL products and services (at a primary end-user's home or remote) and indirectly when the care needs of primary end-users are reduced.*
- *Tertiary end-users are such institutions and private or public organisations that are not directly in contact with AAL products and services, but who somehow contribute in organizing, paying or enabling them. This group includes the public sector service organizers, social security systems, insurance companies. Common to these is that their benefit from AAL comes from increased efficiency and effectiveness which result in saving expenses or by not having to increase expenses in the mid and long term.*
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Health status (disabilities, mobility, cognitive function, etc.)	3.20 % are people with disabilities
Socio-economic background (education, income class, etc.)	
Total number of end-users effectively using the AAL solution beyond the project implementation period	- 65 individual - 140 secondary end-users - 40 companies public organizations - 17 individual (Raahe, Finland)
Any other information	

Please describe here the principles applied and procedures followed in handling ethical issues such as ethics towards technology use, to privacy, data management, ethical considerations regarding human-robot interaction, exit strategy, etc.

Elderly people

1 - Meetings with representatives of municipalities were organized for presenting the project and the users target

2 - Setting up a list of elderly people who were at least 80 years old

3 - Appointment Scheduling with elderly people in order to explain the services offered as part of lily project

4 – Filling form which persons interested

5 – Signing Agreement between CCI and elderly persons so as to install touchscreen and use the services delivered

SME and companies

1 - Awareness campaigns toward companies to demonstrate some of the silver economy opportunities that exist for businesses and present those companies able to help consumers maintain more independent lifestyles.

2 - Interactive workshop regarding the barriers to the ageing marketplace

3 - Workshops to develop creativity and innovation

4 - Marketing and psychographic segmentation to understand how to sell products or services to a grouping people according to their most basic values

5 - Working group to define a business

3 D. PROJECT RESULTS – OTHER INDICATORS	
Patents, which are the direct result of the project work	……
Other **Intellectual Property Rights** (IPR) resulting from the project work	The IPR negotiations between partners has not been effective yet.
Collaboration to **standards**, which are the direct result from the project work	……
Publications (scientific or other), which are the direct result from the project work (please provide details)	V. Kramar, M. Korhonen, and M. Rauhala, "End-user experiences and perspectives – HoviMestari," in Mobile and Information Technologies in Medicine and Health MobileMed 2014, 2014. V. Kramar, M. Korhonen, S. Smidtas, and M. Rauhala, "Decentralised Approach to Provision of Home Services," in Proceedings of the 16th Conference of Open Innovations Association FRUCT, 2014. P. Ala-Siuru, M. Rauhala, V. Kramar, E. Leinonen, and S. Smidtas, "Users Voice: Participative Design and Living Lab Approach in LILY," in Proceedings of the 6th AAL Forum, 2014. V. Kramar, M. Korhonen, S. Smidtas, and M. Rauhala, "Smart Living and AAL Services," in Proceedings of the 6th AAL Forum, 2014. I. Piippo, E. Leinonen, V. Kramar, and E. Laulumaa, "Sähköinen palvelusetelijärjestelmä – keskitetty vai hajautettu?," Finnish J. eHealth eWelfare, vol. 5, no. 2–3, pp. 113–119, 2013. V. Kramar, M. Korhonen, and Y. Sergeev, "Particularities of Visualisation of Medical and Wellness Data through a Digital Patient Avatar," in Proceedings of the 14th Conference of Open Innovations Association FRUCT, 2013. V. Kramar, M. Korhonen, and Y. Sergeev, "Data Models for Home Services," in Proceedings of the 13th Conference of Open Innovations Association FRUCT, 2013, pp. 72–84. S. Balandin, E. Balandina, Y. Koucheryavy, V. Kramar, and O. Medvedev, "Main Trends in mHealth Use Scenarios," J. Sel. Top. Nano Electron. Comput., vol. 1, no. 1, pp. 64–70, 2013. S. Smidtas, V. Kramar, and M. Ojala, "Architectural Challenges in Constructing an AAL System; LILY Approach," in Proceedings of the 4th AAL Forum – Eindhoven, 24 – 27 September 2012, 2012, pp. 211–216.

	M. Rauhala, S. Oechsner, P. Ala-Siuru, M. Peyrot, E. Leinonen: "(Im)material interventions: Towards a broader conceptualization of exit strategies in AAL projects"; AAL Forum Eindhoven 2012, Eindhoven; 24.09.2012 - 27.09.2012; in: "Proceedings of the AAL Forum 2012", (2012). P. Panek, C. Beck, G. Edelmayer, P. Mayer, M. Rauhala, W.L. Zagler: "Connecting AAL devices and systems to improve service delivery"; AAL Forum 2014, Bucharest; 09.09.2014 - 12.09.2014; in: "Broader, Bigger, Better - AAL solutions for Europe - Proceedings of the AAL Forum 2014", (2014). E. Leinonen, A-L. Syrjänen, M. Isomursu, "Designing Assistive and Cooperative HCI for Older Adults' Movement"; NordiCHI '14, Oct 26-30 2014, Helsinki, Finland ACM 978-1-4503-2542-4/14/10. http://dx.doi.org/10.1145/2639189.2670183 …… ……
Other **dissemination activities**	Conference : Home automation and home : the Limousin, a precursor territory - Paris, From the 2nd of October to the 21th of November 2012 Round table : European Year of Active Ageing and Intergenerational Solidarity- Limoges, 13 December 2012 Conference : Happy boomers in the heart of the silver economy – Paris, 24th September 2013 Breakfast-debate : Care insight conference- Paris, 28 January 2014 International Conference : Health, Wellbeing and the 'Silver Economy' - Limoges, 15 April 2014. Televised leaders debate : Limoges, 15th of May 2014 Silver Expo Fair, Paris : Paris, 04 and 5th of December 2014 …… Invited talk: M. Rauhala; "Experiences in Participation in the AAL-JP. An Introductory Note"; 2014 Europe

	Conference of the Austrian Federal Ministry of Science and Research – Launch of Horizon 2020; Vienna; 21.01.2014. Invited talk: P. Ala-Siuru; "Living Lab Approach in LILY" EnoLL Summer School Workshop: International Living Lab for products and services for elders and their autonomy. Amsterdam, 2-5.9.2014. Invited talk: P. Ala-Siuru: "Needs of end-users to have interoperability: from elders and professionals point of view" AAL Forum 2014 Side event *Interoperability APIs and Living Labs for AAL,* 9 September 2014, Bucharest Joint Seminar: The Central Union for the Welfare of the Aged in Finland and LILY project arranged a joint seminar in the spring 2014. The issues of older peoples' care givers were discussed in groups and the work was analysed by the association's researchers and feedback given to RAS partner.
Type and size of audience reached by dissemination activities	In all workshops the audience has been both AAL professionals, policy makers and users. Especially in the national (Finnish, French and Austrian) workshops or exhibitions the audience has been user-oriented. The results have been distributed in all media channels (TV,Radio,Internet,Newspapers).
Technology transfer agreements and/or any other **business deals** achieved	Agreement of International Student Exchange between the Information Processing Sciences Department of University of Oulu and the University of Angers, France
Spin-off/s set up	A Spin-off based on the work by OUAS is under further development with the help of the Business Kitchen start-up incubator in the City of Oulu
Number of **jobs** created	

4. FINANCIAL INFORMATION - OTHER COMMENTS

Please check appropriate box:

The financial part of the project ☐ is in line with (or) ☑ deviates from the partner's Grant Agreements & Work Packages plans (personal efforts, other costs, etc.)**?**

In case of deviation, please give a short explanation:

The personal efforts of RAS were lower than planned because of the financial situation in the public health sector – The partner had to make major financial cuttings during the project run.

Due to some lack of resources all the planned integration and piloting work could not be done in the end of the project (SIPERIA).

Other comments related to financial part of the project:

For a SME like Siperia Systems, 3+ years is a long time and many issues in business and plans usually change. This requires changes in resources allocated to the project. Funding the own effort is also challenging sometimes.

5. AAL JP PROGRAMME

Please comment, using your AAL project experience, on the main advantages and disadvantages of AALJP projects.

International co-operation opens eyes towards international business and larger customer base.

Especially AAL Forums give an excellent overview of the technology level and maturity all around Europe, and they open a new opportunity to find partners for the future development and business.

Some results can be used and changed into new business already during the project.

Many results can be used for customers in other business segments as well (e.g. mobile software modules and billing system components).

Developing products together with the end-user organizations is also a great advantage in AAL projects. It is very important to get feedback straight from the potential customers.

It is also important to learn the differences and similarities in elderly care service processes and organizing in different countries. This includes also the ethical issues and the need of localization in each geographical area.