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1 Executive summary

Due to increasing mobility and the ageing society the demand for care will increase significantly, leading to high costs and unrealistic manpower demands. Florence will alleviate this by keeping elderly independent much longer by providing care and coaching services, supported by robots. This will greatly improve the efficiency in care and reduce costs. The second problem addressed by Florence is the acceptance of robots by elderly. For this purpose the project adopts a user-centric approach, by starting with focus-group sessions, having lab-tests in the OFFIS IDEAAL lab, and finally evaluating the services in the Granada-located AAL living labs. Moreover the acceptance will be promoted through a wide choice of services including fun and lifestyle services. The Florence consortium contains partners from the complete value chain: robot vendors, care and service providers, consumer electronics, and communication technology as well as health technology vendors. The consortium positions the service robot as a consumer device, supporting various lifestyle services. In particular the following services will be evaluated in the project:

- Social Connectedness: provide access to the social networks, including web-2.0 and synchronous communication tools
- Coaching: give feedback on specific activities like physical exercises, and advise on activities of daily life
- Care support: log care-related activities at home that are shared among professional or volunteer caretakers.
- Safety: use the robot as additional ears and eyes in comfort or safety situations, controlled by service providers or the elderly users.

In order to support this multitude of services, the Florence system will be based on a service-oriented architecture that provides programmatic interfaces towards the (interaction) capabilities provided by the robot, the home and remote service providers. Such integration will effectively turn the Florence system into a generic platform for home-services, integrating an autonomous robot with the smart home.

This document is structured the following way:

- Executive summary
- Introduction, gather general goals of the project and consortium description
- Dissemination activities including:
  - Several dissemination activity types
  - Dissemination activities which were accomplished during the first twenty-four months of the Florence project
  - Dissemination plans for the future months of the project
- Conclusion about the dissemination activities for Florence so far

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2 Introduction

2.1 General objectives

The main objective of the Florence project is to improve the well-being of elderly (and that of his beloved ones) as well as improve efficiency in care through AAL services supported by a general-purpose robot platform. The Florence system with its multipurpose mobile robot platform will pioneer the use of such robots in delivering new kinds of AAL services to elderly persons and their caretakers. The main objective is to make this concept acceptable for the users and cost effective for the society and care givers.

2.2 Relevance of Florence

Florence will put the robot as the connecting element between several stand alone AAL services in a home environment as well as between the AAL services and the elderly person. Via the care and coaching services supported by Florence the elderly will remain much longer independent.

2.3 Strived project goals

Possible Florence project results can be summarized as:

- Implementation and evaluation of example applications using those AAL-enablers,
- Definition and implementation of building blocks for integrating the home with the robot, in order to make sure that for instance context-information is exchanged and remote services can be accessed,
- Research into and evaluation of innovative concepts for control and interaction between the robot, the AAL services, and the elderly.
- Transparent usage of heterogeneous network technologies like BAN,-LAN and WAN, wired and wireless, through device abstraction in the context of a mobile robot at home, sensor networks, and communication equipment.
- Support of multiple technology domains via a verified middleware to enable seamless interaction between distributed service enablers as well as end-to-end service provisioning across domain boundaries. Relevant technology domains here are the robot, the home, service operators, and service providers.

To realize these goals the following preconditions will be materialized:

- A new kind of middleware will be needed that facilitates zero-management by users of the complex Florence system, and supports the rapid integration of new (remote and in-home) services for a robot-enhanced smart home.,
- An existing robot will be adapted and used for both the technical realization and the test with elderly persons.
- The Florence system must be evaluated with seniors, caretakers, and service operators.

2.4 Florence Consortium

The Florence consortium was originally composed of eight organizations from five countries with relevant experience in the domains related to the development of the Florence concepts and services. This experience is based upon their business

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activities and from their participation in other European projects. The composition of the consortium with industrial partners, SME and research institutes, gives the project a good consistency to guarantee dissemination activities that will reach different audiences. During the current project runtime, two organizations (TID, Wany Robotics) left the project. The tasks that were planned to be done by these partners are nearly completely taken over by the other project members.

Table 1: Partner's overview

	Countries				
Partners	**NLD**	**UK**	**DE**	**ES**	**FR**
Industries	Philips	NEC		TID (out)	
SME					Wany (out)
Non-profit Public Body				ASSDA	
Research Institutes	Novay		OFFIS	Tecnalia	

2.4.1 Philips

Royal Philips Electronics of the Netherlands is a diversified Health and Well-being company, focused on improving people's lives through timely innovations. As a world leader in healthcare, lifestyle and lighting, Philips integrates technologies and design into people-centric solutions, based on fundamental customer insights and the brand promise of "sense and simplicity". Headquartered in the Netherlands, Philips employs approximately 121,000 employees in more than 60 countries worldwide. With sales of EUR 26 billion in 2008, the company is a market leader in cardiac care, acute care and home healthcare, energy efficient lighting solutions and new lighting applications, as well as lifestyle products for personal well-being and pleasure with strong leadership positions in flat TV, male shaving and grooming, portable entertainment and oral healthcare.

2.4.2 NEC-Europe

NEC Corporation produces tailored solutions in the core technologies and services required in a networked world, ranging from advanced semiconductor solutions, to large-scale mission critical systems, systems integration, robotics, and broadband and mobile technologies. NEC began business in Europe in the early 1970s. Since then, NEC's activities have steadily increased to include sales, manufacturing and R&D functions. Today, NEC has 19 affiliated companies with over 4000 employees in Europe alone.

NEC Europe Ltd., which is wholly owned by NEC Corporation, was established in London in 1993. The NEC Laboratories Europe (NLE) in Heidelberg, Germany, have been established in 1997 as NEC's second European research facility. A special emphasis here lies on solutions that meet the needs of NEC's European customers, focusing on software-oriented research and development for the next-generation Internet, such as new communication architectures and protocols to support multimedia delivery and mobility together with intelligent Internet services.

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2.4.3 OFFIS

The OFFIS Institute for Information Technology, founded in 1991, is an application-oriented non-profit research and development institute related to the Computer Science department of the University of Oldenburg in Lower Saxony, north-western Germany. Its primary mission is to adopt the findings from university basic research in computer science and other relevant disciplines, to stay in touch with new market demands through its many years of experience in co-operation projects with the industry, and to bridge the gap between “basic research” and “application demands” through application-oriented research. The division involved in the Florence project is the health division which focuses on the technical integration issues associated with the support and improvement of patient care. In addition, it addresses specific issues in the medical field (e.g. sensor technology and measurement technology): Methods and tools for data analysis are also being investigated, which can be used as a basis for answering care research questions.

2.4.4 Novay

Novay is a publicly/privately funded not-for-profit research institute that performs applied research in the area of telecommunication and information technology and its applications. Its mission is to create breakthroughs in the way people live, based on innovative ICT solutions. Projects are typically carried out together with industry on a bilateral basis, or within the scope of national or European research programmes. The institute is funded both by the Dutch government and by its industry partners. The research capacity of Novay consists of its own personnel, and – on the basis of long-lasting cooperation agreements – of staff from Dutch universities and public research centers.

In Florence, the INCA („Intelligent Communication”) group of NOVAY participates. This group is very active in pervasive computing concepts, in particular on context management, and advanced reasoning and coaching applications.

2.4.5 Telefonica I&D (TID)

Telefónica Investigación y Desarrollo (I+D) is the innovation company of the Telefónica Group. Owned 100% by Telefónica, this subsidiary was formed it 1988, with the aim of strengthening the Group's competitiveness through technological innovation. Since it was founded in March 1988, its results have been directed at creating value for the clients of the Group, developing high-quality telecommunication products, services and systems. In this way, it helps meet their present needs, and, at the same time, creates innovative solutions in anticipation of future challenges.

Telefónica’s innovation process, which is largely based on the activities of Telefónica I+D, is based on four fundamental lines of work: infrastructures, development of new services, deployment of the so-called “personal digital environment” and a series of common elements which play the role of for the rest of activities. These four lines contribute to the internal evolution necessary to face the future challenges of the changing Telecom and IT panorama.

Telefonica I&D has left the project in May 2012. Telefonica’s dissemination activities have been taken over by the other partners. From the user test perspective mostly Novay will take care of Telefonica’s activities. The final user tests will now take place in the Netherlands at Novay. The software components promised by TID will now be developed by Novay as well.

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2.4.6 TECNALIA

Fundación TECNALIA RESEARCH AND INNOVATION (www.tecnalia.com) is, from the 1st of January 2011, a private, nonprofit, research organisation resulting from the merging of eight research centers: Cidemco, ESI, EUVE, Fatronik, Inasmet, Labein, Leia and Robotiker.

TECNALIA is the leading private research and technology entity in Spain and the fifth largest in Europe, employing 1500 people (164 PhDs). TECNALIA operates in all the fields of today and tomorrow's industry: Industry and Transport, ICT, Sustainable Development, Innovation Systems and **Health and Quality of Life**. TECNALIA is very active in FP7, participating in 168 projects and coordinating 34 of them. TECNALIA has a strong market orientation aiming at achieving major impact in economic terms, through innovation and technological development. Under this premise, it contributes to the management and social development, transferring new technologies to companies, or promoting the creation of new business activities.

The Health & Quality of Life (H&QoL) Unit (former Fatronik and Robotiker Research centers) is focused on the ICT application to Assistive Technologies for disabled and elderly people, developing solutions for autonomy, safety, independence and quality of life at home: e-health, assistive robotics, solutions to make the caretaker's job easier, prevention of physical and cognitive deterioration, rehabilitation and compensation of motor and cognitive impairment and promotion of social life. The H&QoL Unit also works in Ambient Assisted Living (AAL) and smart home technologies, working on regional, national and European R&D&i projects.

Our areas of expertise are:

- Life at home: Development of solutions for autonomy, safety, wellbeing maintenance, independence and quality of life at home; service robotics
- Active aging and prevention of situations of dependency: Prevention of dementia; social integration and muscle maintenance.
- Rehabilitation and compensation of motor impairments: Mobile robotics, therapeutic robotics, functional electrical stimulation, tele-rehabilitation, etc.
- Rehabilitation and compensation of cognitive impairment: Neurobotics, mechatronics devices for accelerated rehabilitation after episodes of cerebrovascular accidents, identification of behaviour patterns.
- Rehabilitation and compensation of sensory impairment: Accessible solutions for people with sensory impairments; adaptive, multimodal and ubiquitous interfaces.
- Support for the patients and health staff: eHealth – telemedicine, patient monitoring to support formal and informal carer.

The H&QoL unit is now participating in ten European projects on ambient assisted living and companion robotics: SOPRANO (FP6-AAL call), AMIE (ITEA 2006 call), DUSBOT (FP6 IST Advanced robotics call), COMPANIONABLE (FP7- ICT and Aging call), HAPTIMAP (FP7-ICT-2007-2 call), BEDMOND (AAL-2008-1 call), HMFM (AAL-2008-1 call), TECFORLIFE (FP7-REGIONS-2008-2), FLORENCE (FP7-ICT-2009-4 call) and European Network on Robotics for NeuroRehabilitation (COST – 2009).

TECNALIA is member of EURON (EUropean RObotics research Network), ARTEMIS (Advanced Research & Technology for Embedded Systems), ECCAI (European Coordinating Committee for Artificial Intelligence) and of two other International Associations related to AT, such as: AAATE and RIBERDISCAP.

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2.4.7 ASSDA (formerly FASS)

The Fundación Andaluza de Servicios Sociales (FASS - Andalusian Social Services Foundation) is a non-profit organisation of the Andalusian regional government (Junta de Andalucía), located in Sevilla and Malaga, Spain. The current number of employees is over 400. FASS was founded in October 2000, and it provides all social and care services in Andalusia from one source. Among its main objectives, it should be mentioned the application of new technologies to social services, the promotion and development of transnational initiatives, families support, prevention and training. Within the “new technologies for social services” action line, ASSDA offers a community alarm service. ASSDA runs a tele-assistance service centre that provides a 24 hour and seven days a week service. The centre is equipped with state of the art work stations running with the PCN4 software from Tunstall. Clients only need to push a button at a device installed in their homes to connect to the service centre. There is also a service agreement with the 112 emergency number.

2.4.8 Wany

Wany is a leading creator and integrator of innovative technologies in a wide spectrum of products. Wany Robotics designs and develops robotics technologies and applications aiming to widen the use of robots by the society. Wany Robotics developed the successive generations of Pekee robots a robotic mobile platform which is sold like a Dell or Apple computers with a various choice of possible configurations in terms of accessories, sensors, mobile system or CPU power. The company proposes its robots as ready-to-use platforms but also performs advanced modifications or design of unique prototypes intended to be used in specific project. Finally, Wany Robotics works under licensing or engineering contracts to bring its technologies to consumer market or to design solutions for industrial needs. R&D activities carried out by Wany Robotics include development of service robots (robotic vacuum cleaners, window cleaning robots and surveillance robots). Wany Robotics is member of EURON (EUropean RObotics research Network), GDRR (Governmental French Research Group in Robotics), and of SYROBO (the French federation of service robotics).

Wany leaved the Florence Project by end of the year 2011. All dissemination activities from Wany are moved to other partners. The robotics software design (low level) has been taken over by Tecnalia and Philips, the hardware modification work has been taken over by OFFIS, Philips and Tecnalia.

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3 Dissemination plans

3.1 Overall dissemination plans

All partners will and already have disseminated the results of the project in order to strengthen their reputation, attract potential customers, attract high potential personnel and students and stimulate the exchange of valuable research results and standardization.

All project partners (especially academic partners and research centers) published or will publish scientific papers at high-tier conferences and workshops, as well as presented / will present research results in premium journals and magazines. Industrial partners have complemented / will complement dissemination of results through, realizing proof-of-concept prototypes, field tests, and demonstrations at professional exhibitions.

The dissemination of the results is supported by a website (http://www.florence-project.eu) dedicated to the project, which contains the latest news, activities, and results of the project. The dissemination of the results is supported by producing a project flyer as well. The dissemination levels of all deliverables were fixed in the description of work. Most of them are public and will be therefore published on the Florence project's website.

Since the Florence project is now ongoing for 30 months it already has a good dissemination profile showing multiple dissemination activities. There are concrete plans for several dissemination activities for the last project months as well.

Further dissemination activities the project will be characterized by:

- Florence brings together partners from different regions and different disciplines. While respecting the intellectual property rights of the partners (consistent with the EC guidelines) the Florence consortium will commit to a maximum transfer of information within and outside of the Framework Program.
- The research institutions and companies with strong links to universities will integrate the topic to university courses (for example including AAL technologies in the robotic lecture at the University of Oldenburg) and disseminate the results through their networks of other research institutes.
- The internet will be a major vehicle for publishing and disseminating relevant project results. The Florence website is established (http://www.florence-project.eu/), summarizing all current results of the project. This website will consist of public sections. A private part is provided by a specific document share program which contains the consortium-confidential information. The public website will contain all freely available material, such as published papers, proposals to standardization bodies, conference contributions, showcases etc.
- Next to the public part of the overall Florence website, several partners plan to set up local websites aiming at dissemination specific work package results to their national and international networks.
- Technical workshops will be organized, in which participants will explore user requirements and present their work, ideas and results with the aim of sharing relevant knowledge with all people involved in the project. Some of these workshops will also be open to the public.

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- Results of the ongoing work within the Florence project will be presented at several national and international conferences and published in national and international journals as well as open workshops that address topics related to Florence.
- Industry partners will also perform organization internal dissemination, like promoting the project via internal fairs and documentation in general, but also directly to product units to ensure the take-up of project results and their exploitation.

3.2 Dissemination plans for the last period

The M31-M36 – period's main activity is the execution of the final user tests in real home environments. The dissemination activities will be heavily influenced by this fact, we plan to submit the gathered results to multiple conferences. Furthermore, it is planned to hold a Florence workshop at the AAL Kongress 2013 (January).

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4 Performed dissemination activities

4.1 Special section: dissemination performed in M24-M30

The following table summarizes **major dissemination activities** within the M24-M30 period. The full list of all activities can be found in section 7.

Date	Topic	Type	Partner responsible / involved
24-25/01/2012	Criteria for Quality and Safety while Performing Unobtrusive Domestic Mobility Assessments using Mobile Service Robots, 5. Deutscher AAL-Kongress 2012, 24.-25. Januar 2012, Berlin, Deutschland, accepted	Conference paper Talk	OFFIS
02/02/2012	'It is the pawn who opens the game - using Comodity Robots for Assisted Living' invited talk at the 1. Karlsruher Forum zu Anthropomatik und Robotik	Presentation, Video	NEC
14/02/2012	European Year for Active Ageing and Solidarity between Generations Forum of the Committee of the Regions. : Regional approaches for healthy and independent living. Brussels. Belgium.	Presentation	ASSDA
29/02/2012	'The M2M Cloud Evolution How Cloud Computing can help to master the complexity of connecting millions of devices and services' Talk by NEC Vice President at MWC in Barcelona with Florence domain of Robots in an intelligent Home as important application domain	Presentation	NEC
06/03/2012	Presentation at Robots in healthcare and welfare workshop in the **euRobotics Forum 2012** (Odense, Denmark)	Presentation	Tecnalia
13/04/2012	'Identifying Requirements for eHealth: Ambient Assisted Living' - Joint Workshop by WHO and ITU	Presentation	NEC
03/06/2012	Invited participation and talk on Dagstuhl Seminar, Future Internet for eHealth	Presentation	NEC
25/06/2012	Keynote presentation at 8. EURO-NF conference on Next Gen Internet, NGI 2012 Kronskala, Sweden	Keynote presentation	NEC
26/06/2012	2 Talks and a live demonstration at **ISG*ISARC**, Biennial World Conference on technologies and technology use to serve the aging society (Gerontechnology), in combination with the yearly ISARC conference dedicated to Robotics and Automation in Construction	Presentation / Demonstration	Philips, OFFIS

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Date	Topic	Type	Partner responsible / involved
accepted	Paper @ **IROS 2012** Workshop on Assistance and Service robotics in a human environment	Workshop Paper	TECNALIA, OFFIS, Philips
accepted	Paper @ **Ro-Man 2012** Workshop "Robot Feedback in Human-Robot Interaction: How to Make a Robot "Readable" for a Human Interaction Partner"	Workshop Paper	Philips, OFFIS, Novay
January 2012	Handbook of Ambient Assisted Living Technology for Healthcare, Rehabilitation and Well-being Volume 11 of Ambient Intelligence and Smart Environments Editors: J.C. Augusto, M. Huch, A. Kameas, J. Maitland, P.J. McCullagh, J. Roberts, A. Sixsmith and R. Wichert (Chapter "R&D Projects Related to AAL in TECNALIA's Quality of Life Unit")	Book	TECNALIA

4.2 Partners' individual dissemination

4.2.1 Living labs

OFFIS, TECNALIA, and Philips have disseminated the project via the Living Lab at three different locations in Europe: Philips Eindhoven, Netherlands, OFFIS Oldenburg, Germany, and Tecnalia San Sebastián, Spain. Integration, evaluation, and demonstration of interim states and results have been done at different Living Labs, which are visited by interested parties, partners, and the open society.

Also NEC and Novay set up a lab environment which emulates an elderly home to evaluate, demonstrate and promote Florence results. Thus the project has been shown to a broad range of people from several disciplines. The demonstration of the Florence project in a more or less realistic home environment has proven to be a good starting point for fruitful discussion and following research / exploitation activities.

The OFFIS Living Lab can be visited via a virtual tour on the Living Labs website www.ideaal.de as well.

Further dissemination activities of the partners are listed below. Some parts were taken from the description of work:

4.2.2 Philips

Philips has so far disseminated the Florence project by:

- Defining research projects for M.Sc. students based on project results
- Interaction with other (national) research projects, in particular KSERA, mobiserve, companionable, roboearth and URN.
- Presentation at non-scientific (semi-public) events such as seminars and workshops, and interact with the media and the press.
- Philips has co-authored a number of papers, of which 2 as first author

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- Philips has presented the Florence project results at a number (> 8) of conferences, symposiums and exhibitions.
- Philips has presented the Florence project and results an number of times inside Philips to relevant people from research, home healthcare and consumer lifestyle.

4.2.3 NEC

NEC fed results in:

- Non-public funded research collaborations within Europe
- Press releases and the NEC Laboratories annual press event in Heidelberg, Germany.
- NEC will also enable M.Sc. Students from all over Europe to perform research based on Florence results (thesis and internships).
- Results of the project will be used to develop patents and contribute to standardization bodies and industrial flora.
- NEC will perform intensive dissemination of Florence within the company to explore business opportunities
- Wherever applicable Florence objectives and findings are introduced to other EU Projects to gain the maximum synergy and to promote the Florence technology area

4.2.4 OFFIS

OFFIS disseminated the project concept and project results on several ways:

- The in-house magazine "Datawork" (DW) is published three times a year and is distributed for free to partners, friends, and interested parties. The Datawork is displayed in the public space of the institute building and ready for download on the institute's website.
- On a yearly basis, OFFIS also distributes its annual report. These distribution channels will include the activities and results of the Florence project.
- OFFIS regularly attends national trade fairs like e.g. the German CeBit and Hannover Messe.
- Description of the project on the institute's website: http://www.offis.de/en/offis_in_portrait/structure/projects.html?user_offis_pi2[action]=detail&user_offis_pi2[project]=2015&cHash=ebcb97c54eff90a2381d6f53bf730ebc
- An internal workshop on Human-Robot Interaction with OFFIS' Intelligent User Interfaces group was conducted in September 2010
- In October 2010, the Senioren Union Edewecht was invited to a tour through OFFIS and was introduced to the Florence vision as an end user group.
- In collaboration with the other partners, OFFIS designed a Florence project three fold flyer, now available to all partners for use at meetings, fairs and conferences. Regular updates of the flyer will allow interested companies and end-users to get an impression of Florence's idea. See 10.5.
- At the open day 2011 of OFFIS, the Florence Project was presented to a wide spread public
- In 2011 about 15 groups of elderly people have been introduced to the Florence concepts during tours through the OFFIS living lab.
- The Florence project, especially the fall handling scenario was presented at the open business day at OFFIS 2012

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- In 2012 so far about 10 official and numerous unofficial groups visited the OFFIS living lab which also includes the Florence description
- An article was presented in the in-house Datawork magazine about the review that took place at OFFIS.
- A group of students is working on the Florence robotic functionalities within a study course at the University of Oldenburg
- Two bachelor thesis and one student internship will so far take place in the context of the Florence project in 2012

4.2.5 Novay

The institute disseminated the Florence project and results by:

- Defining research projects for M.Sc. students based on project results
- The website of Novay provides information about the project: http://www.novay.nl/okb/projects/florence/7528. Beside general information the website offers information about the involved person working on the project and related projects.
- As a spin-off of Novay's focus group sessions, an article was published in a local newspaper in spring 2011. See 10.1.
- During the open project-day at Novay in Enschede on June 24th, 2010, Florence took part in a poster-presentation. About 50 external visitors, from various organizations in Novay's network where present. See 10.2
- In August 2010, representatives of Florence attended the European Conference on Cognitive Ergonomics (ECCE) Workshop "Robots that care" in Delft, The Netherlands, discussing about Florence with other projects.

4.2.6 Tecnalia

TECNALIA has contact points with end user associations, private companies and public institutions.

- Internal dissemination through the Tecnalia Express online news bulletin.
- External dissemination through the Tecnalia website news section.
- Dissemination through the Solera magazine. The Solera magazine is published by a retired and pensioners association in Donostia. The Solera magazine is free of charge and is targeted at elderly users who regularly attend the association facilities or those who prefer to have it delivered by mail.
- Dissemination through the prototype in our HomeLab facilities
- Quality of Life Unit, involved in Florence project, will attend the final activity of the Tecforlife project: the Launching conference to publicly present the Assistive Technology Cluster in San Sebastian. Flyers in Spanish and English were distributed among the participants. The conference was on the 28th of January 2011 and participants include local industries, public bodies, universities and research centres around health, quality of life and assistive technologies.
- Tecnalia has contributed to the "Handbook of Ambient Assisted Living Technology for Healthcare, Rehabilitation and Well-being" Volume 11 of Ambient Intelligence and Smart Environments Editors: J.C. Augusto, M. Huch, A. Kameas, J. Maitland, P.J. McCullagh, J. Roberts, A. Sixsmith and R. Wichert with the following chapter in which Florence was described: "R&D Projects Related to AAL in TECNALIA's Quality of Life Unit".
- Throughout October and November 2011 Tecnalia presented the Florence project in different events where the unit was taking part such as project

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meetings, open days and robotic events. At this time, partial developments were demonstrated such as 'follow me' and flyers and presentations provided. Tecnalia's Florence team will keep contributing in the various events the unit regularly holds.

- Tecnalia is willing to contribute to scientific papers as authors or collaborator to other partners in the following topics: user tests in controlled environments, human aware robot navigation and Florence services.
- Tecnalia has co-organised in the AAL Summit 2012 to be held in Bilbao and has also presented the Florence project result at this conference.
- Tecnalia will establish contact with professors in university departments of interest in order to try to establish a local dissemination and future collaboration network.
- In our aim to disseminate results to user end stakeholders an article to be published in the "Balance de la dependencia" (balance of dependency) publication is being prepared.
- Tecnalia worked on a paper on the gesture detection activity for the IWAAL 2012, 4th international workshop on ambient assisted living (Vitoria Spain) under the following topic: Human-Computer Interaction at AAL environments. The resolution for accepted papers has been delayed to August 15th
- Tecnalia worked on a paper on user tests and the user involvement techniques and methodology applied within Florence for the IEEE/RSJ International Conference on Intelligent Robots and Systems (Vilamoura, Portugal). The paper has been presented and accepted in the Assistance and Service Robotics in a Human Environment workshop. Philips and Offis also contributed to this paper.

4.2.7 ASSDA

ASSDA has multiple contacts at public and private level, as well as collaboration with cross sector organizations. The following dissemination action lines are used within the Florence Project:

- Dissemination within the Andalusia Regional Government of Equality and Wellbeing, including the different directorates.
- Dissemination within the different public entities and organizations that work with the Andalusian Regional Government for Equality and Wellbeing.
- Dissemination within Universities and Public Research Institutions
- Dissemination within the private companies and organizations that collaborate with the Andalusian Regional Government for Equality and Wellbeing.
- Dissemination at public events, conferences and presentation given by ASSDA at regional, national and international level.

The following summarizes the different directorates within the Andalusian Regional Government for Equality and Well being:

- Technical General Secretary for Equality and Well being
- Directorate for childhood and Family
- Directorate for the elderly
- Directorate for handicapped and disable people

Furthermore, ASSDA has been disseminating the different achievements and activities from Florence within its own website as well as with other partners from other European projects such as We Care and CVN from the AAL programme, Independent and Commonwell from the ICT-PSP programme and national organisations who could

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potentially could be interested in the different services and devices tested such as the red Cross in Spain.

4.2.8 Wany Robotics

Wany took an active part in the dissemination of Florence outcomes by:

Maintaining a demonstrator that will be used to present the various achievements of the project during public events the company will attend to.
Elaborate and maintain multimedia content to be permanently displayed on the company's and projects websites.
Interact with media and press in France
Participate in international business fairs or shows to promote Florence know-how and try to find possibilities to obtain customers for Florence know-how or at least new economic partners.

Wany left the project so these activities have only been carried out until the end of 2011.

4.2.9 TID

Telefonica did internal dissemination in Spain based in the Telehealth value chain. The Value Chain is a concept introduced by Michel Porter, which represents a chain of activities that, applied to a product, add some value in each one of them. The chain of activities gives the products more added value than the sum of added values of all the activities. The building of a value chain is a basic part of the elaboration of an exploitation plan for a given product. Moreover, when talking about emerging services or products like the telehealth related ones, is almost mandatory, to know which kind of services should be offered and which would be the required partnerships and the interactions among the different stakeholders to get a product such as HELP into a successful market position

TID, as major industrial partner involved in Florence, has established a consultation process among the market experts into the Telefonica Group, in order to build the value chain for the telehealth products, which should be applied to our project.

Three different business areas with different stakeholders are defined:

- Devices: Industrial partners involved in the development of medical and assistive devices. For the Florence project, NEC provides sensors and actuators
- Platform: support technology providers, both in the provision of communication services and infrastructure. For the Florence project, this is mainly provided by OFFIS, PHILIPS and Novay
- Provision: Private and Public healthcare providers (hospitals, private insurance...) deliver the services to the final clients. In the case of Florence, the representative stakeholders in this area are TID and OFFIS. The added value of the Florence platform consists of allowing 3rd parties to offer a service using the Telefónica servers and infrastructure. The integration with other projects is also possible.

This is a cooperative model, in the sense that it is not possible for a single actor in the whole value chain to put a service into the market without the cooperation of the rest of the involved actors. The Florence consortium is composed of a set of partners that are stakeholders in each one of this areas, thus the interaction among them is well defined and balanced. TID is developing a strategy to enter new markets like eHealth. Network services are commercially available when tested in this area. TID is working and testing Florence as a telehealth platform, composed of NGN infrastructure and network

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services (multiplatform videoconference, indoor/outdoor location, gateway device connection, agendas, image recognition for rehabilitation (physical and cognitive) and a collaborative tool supporting clinical sessions).

Telefonica has stopped these dissemination activities since they left the project but up to then these activities have been valid and contributed to the project dissemination.

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5 Strategy for collaboration with other projects

In the recent past, research on technologies for Ambient Assisted Living experienced a significant growth. To benefit from each other and to create synergies, it is advisable to set-up collaboration activities between projects. The Florence consortium therefore aims to interact with related international projects. The consortium has developed a strategy for such collaborations with relevant projects, which is outlined in this chapter.

Project Categories

To balance between potential benefits and the limited resources, the collaboration strategy defines tiered engagement. For this we have defined a categorization for relevant projects and assigned different types of interaction to them. The categorizations have been done by taking into account the potential value as well as the effort required for collaboration. In detail we defined:

Category 1:

Projects, which we consider to be very valuable for the Florence project. For these projects we want to investigate whether we can actively collaborate with them. Given that such collaboration demands time, this can only be a very short list.

Category 2:

Projects that are relevant for specific aspects of the Florence project, and where the hurdles for collaboration are limited, e.g., if one of the Florence partners is involved there as well

Category 3:

Projects those are potentially interesting to interact or collaborate with. Due to the limited resources, we will take an opportunistic approach here and limit us to either monitoring them or to interact on the occasion of workshops, cluster meetings etc.

5.1 Legal Aspects

Collaboration always inherits some exchange of information. If this is restricted on the content of publicly available documents, there is no issue. However, to have a fruitful collaboration, it might require exchanging information which is not public. Even the exchange of software components is possible. This especially applies to collaboration with Category 1 projects.

Such a disclosure affects the Intellectual Property Rights (IPR) of project partners. So measures have to be taken, to protect this IPR. Florence seeks as part of the collaboration strategy for a best practice solution how to manage this kind of project external IPR disclosure. This might be an agreement which complements the Consortium Agreement, it also could be a Specific Non Disclosure Agreement (NDA) between the projects. Legal offices of partners have been asked to prepare adequate solutions.

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6 Performed collaboration with other projects

6.1 Category 1: most-promising projects

In the first category, we have currently identified three projects: KSERA, UniversAAL and CompanionAble. They are discussed in the following three subsections.

6.1.1 UniversAAL

UniversAAL [1] is an FP7-funded project with the goal to create an architecture and open source middleware for AAL services. UniversAAL aims to produce a platform that provides the necessary technical support and that acts as an open, common basis for both developers and end-users.

As part of their activities, UniversAAL seeks to create a non-profit AAL Open Association (AALOA) [2] open to individuals, institutions and industry, to “provide a meeting point able to catalyse interest and efforts around AAL, promote standardization and identify key areas of research”.

Since all deliverables of the UniversAAL project are public, the Florence project checks at regular times the architecture and deliverables of the UniversAAL project and assess whether they are useful and can be reused by Florence. Note that the architecture of UniversAAL will build further on other relevant projects in this area. Examples are SOPRANO [3], OpenAAL [4], Persona [5**Error! Reference source not found.**] and AALIANCE [6]. This allows Florence to build upon and align with a lot of relevant research results in the area of “ICT for ageing”. Further, we have regular contact with partners of the UniversAAL project. For example, Philips is also part of the UniversAAL consortium. The Florence project also assesses the usefulness of participating in the AALOA association. UniversAAL organizes regular workshop related to conferences to bring together relevant research projects and companies. Florence aims to participate in one or more of these workshops organized by UniversAAL.

Contacts with UniversAAL have been established already on different paths. Recently documents have been exchanged and are under evaluation for the time being. We expect to get into even deeper collaboration with UniversAAL.

Date	Activity
29.07.2011	We have had a meeting with Milan Petkovic involved in UniversAAL about joining forces in standardizing robot specific items together with UniversAAL. UniversAAL has interest in this and it was decided that ETSI ISG would be a suitable, low-threshold format to initiate standardization
01.08.2011	Discussion on joint standardisation activities started
13.04.2012	exchange of Information at FZI, follow-up activity planned

6.1.2 KSERA

KSERA [7] is a research project in the EU's 7th Framework Programme. The main aim is to develop a socially assistive robot that helps elderly people, especially those with

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Chronic Obstructive Pulmonary Disease (COPD), with their daily activities, care needs and self-management of their disease.

In the first months of the Florence project, the project coordinator of Florence has established regular meetings with the coordinator of KSERA project to exchange information and explore opportunities for collaboration or even sharing non-differentiating results. These are ongoing.

6.1.3 CompanionAble

The FP7-funded project CompanionAble [8] aims to provide synergy between Robotics and Ambient Intelligence technologies and their semantic integration to provide for a care-giver's assistive environment and to support the cognitive stimulation and therapy management of the care-recipient. This is done by mediation by a robotic companion (mobile facilitation) working collaboratively with a smart home environment (stationary facilitation)

Since the topic of CompanionAble is strongly related to the Florence objectives, we have identified CompanionAble as an interesting project for Florence. We contacted the Companionable project directly and investigated what we can learn from each other. Note that we have already some limited contact in the sense that one of the Florence partners, Fatronik-Tecnalia, is closely related to Robotiker-Tecnalia, one of the partners of the CompanionAble project. After the merging of various technological centers (including Robotiker and Fatronik) Tecnalia is now a technological centre on its own.

Florence has participated in one of the workshops organized by the CompanionAble project (The 3rd CompanionAble Workshop IoPTS on December 2nd 2009 in Brussels) and disseminated there the rationales of the Florence project.

6.2 Category 2: easy-to-collaborate-with projects

The table below provides an overview of projects where we can easily interact/ collaborate with; typically because one of the partners is involved in this project. The second column indicates which type of interaction/collaboration we (can) foresee, the third shows the specific topic of interest for collaboration. It is quite likely that Florence will have some sort of interaction with these projects, to a large extend on an informal basis. The Roboearth project will be described in more detail.

Project	Link	Interaction Topic
SENSEI (EU FP7, IP, Ends 2010) [9]	Direct involvement of Florence partner (NEC)	Sensor Network Integration, Actuation Framework, Use case AAL@home
IoT-A (EU, FP7, IP, Ends 2013)[10]	Direct involvement of Florence partner (NEC)	Internet of Things Architecture, Sensor Mobility, requirements exchange, AAL@home use case
SOPRANO	Direct involvement of Florence partner (ASSDA)	Soprano provides an service oriented platform for AAL services (OpenAAL)
Roboearth[11]	Direct involvement of	Roboearth aims to create a

	Florence partner (Philips)	knowledge base and common language platform for robots

6.2.1 Roboearth

Roboearth [11] is an FP7 funded project with the aim to create an internet-accessible open source network database that can be accessed and continually updated by robots around the world. The idea is that by sharing knowledge shared on such a large scale, and with businesses and academics contributing independently on a common language platform to create a powerful feed forward to any robot's 3D sensing, acting and learning capabilities.

The Florence project keeps track of the results of the Roboearth project by studying their public results and output. Next to this, Florence will evaluate whether using this knowledge base is useful for the Florence system or whether even contribution to this open source database would be useful.

Date	Activity
28.07.2011	The coordinator of the Roboearth project has taken the initiative to address the issue of "safety for robots" with a number of projects. We (Philips) have reacted very positively to this initiative. Philips has participated in a meeting on November 2nd which coincided with the Roboned seminar in Utrecht (Netherlands). As a result / next step of this meeting, a white paper will be written.

6.3 Category 3: contact-on-occasion projects

Finally, there are a number of projects, we want to track and learn from, as they cover one or the other relevant aspect. This can be by keeping track of their public deliverables and publications. It also can be by using the opportunity when we meet representatives of those projects at dissemination or cluster activities like workshops and conferences, as these are good opportunities to catch their status and to get in contact with those projects. We will take an opportunistic approach here. Some identified projects are exemplarily listed in the following; but this list is extended during the lifetime of the project.

Project	**Link**	**Interaction Topic**
Mobiserve (EU, FP7, STREP, Ends 2012) see [12]	The objective of the MOBISERV project is to support independent living of older persons as long as possible in their home or various degrees of institutionalization. The MOBISERV platform will consist of the following: • a physical robotic unit • an optical recognition unit • wearable health supporting unit • a Smart Home Automation	Similar to Florence, MobiServ develops a platform which integrates smart home environment and a robot, although its platform is dedicated to support a specific physical health unit, whereas Florence platform is infrastructure agnostic.

	and communication unit	
ExCITE (FP7, STREP, Ends 2012) see [13]	The main objective of ExCITE is to evaluate user requirements of social interaction that enables embodiment through robotic tele-presence. The prototype used is called the Giraffe system and consists of a screen and web camera mounted on a simple robotic base that can be tele-operated.	This project is very relevant for a number for the social connectedness and safety related scenarios developed within Florence
Humour (FP7, STREP, Ends 2011) see [14]	Humour is an EU-funded research project which aims at investigating and developing efficient robot strategies to facilitate the acquisition of motor skills.	With its health status monitoring through feedback of motor sensors approach it offers a technology for monitoring and coaching with a strong focus on robotic technology

6.4 Ongoing Collaborations

During the project runtime, different levels of collaboration with other projects have been established by several partners, leading to a mutual gain. Introduction to other projects' visions and ideas, as well as discussions, presentations and workshops have been planned and conducted. The following sections give an overview of the topics and current activities with these projects.

6.4.1 Companionable

During the past months Tecnalia's Quality of Live Unit had internal meetings in which project managers within their company presented each other both projects Companionable and Florence. Extending the collaboration between both groups, a shared workshop was considered and may be placed within Companionable's 6-month workshop cycle. This will advance Florence's dissemination to an even broader audience, due to the high prominence of Companionable.

6.4.2 SENSEI

In order to realize the vision of Ambient Intelligence in a future network and service environment, SENSEI integrated heterogeneous wireless sensor and actuator networks (WS&AN) into a common framework of global scale and made them available to services and applications via universal service interfaces. As already depicted in the DoW, Florence intends to adopt solutions gained in SENSEI and to apply them to the specific Florence needs.

NEC has performed meetings and discussions with project members from SENSEI several times to ensure the applicability especially of the SENSEI actuation framework and will continue this collaboration. SENSEI project has ended recently.

6.4.3 IoT-A / IoT-I

IoT-A is the European Lighthouse Integrated Project in FP7 addressing the Internet-of-Things Architecture. It proposes the creation of an architectural reference model

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together with the definition of an initial set of key building blocks to allow heterogeneous objects to interact with the physical environment and to form crucial foundations for fostering a future Internet of Things. The project started in September 2010. NEC is member of the consortium and expert for information gathering and processing as well as context related issues.

One of the activities in IoT-A is to enhance complex event processing (CEP) by statefulness, to draw out the best of both existing models, the CEP and the stateful approach like it is applied also in Florence. In discussions with the respective Task Leader of IoT-A, NEC could access the so far available information within IoT-A and fulfil a need of WP3 in Florence to also have a look at the CEP model.

IoT-A does have a use case scenario called 'home and health'. In a stakeholder meeting of IoT-A NEC will present the Florence project and its objective, since AAL in general and Florence Services including the robot are considered as relevant for IoT-A as well.

It was agreed with the IoT-A staff within NEC, that in regular informal meetings an information exchange will be performed and further synergies will be sought.

The Internet of Things (IoT) is one of the most important areas of a Future Internet with high potential to positively impact European economy and society. The IoT initiative (IoT-i), a EU Framework Programme 7 project, started in September 2010, brings together key actors from all relevant but currently fragmented IoT communities in Europe to work jointly towards a common vision of the Internet of Things. It represents the first serious attempt in building a unified IoT community in Europe, going across boundaries of disparate technology sectors, in order to create a joint European strategic vision of the Internet of Things and aligning this vision with the current developments on the Future Internet. IoT-i pursues the achievement of the following strategic objectives: (1) Creating a joint strategic and technical vision for the IoT in Europe that encompasses the currently fragmented sectors of the IoT domain holistically, (2) Contribute to the creation of an economically sustainable and socially acceptable environment in Europe for IoT technologies and respective R&D activities and (3) Creating an environment that favours international adoption of European IoT technology.

Date	Activity
28.01.2011	Introduction of Florence as AAL Use case to be used in IoT-A as one of their target scenario
30.03.2011	Introduction of two use cases of the HOMINT Service to become part of a questionnaire about IoT related scenarios
March 2012	IoT-I conducted a questionnaire on marked acceptance of IoT technology. Different scenarios were examined, among them a Florence AAL scenario (transcript of questionnaire available). Results of the questionnaire is not yet published

6.4.4 EIT ICT Labs

Novay is a core member of EIT ICT Labs. In that role Novay contributes to two activities: "Living Lab" and "Service Spaces for Health and Wellbeing". Both are coordinated by the Dutch ICT Labs node [15].

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This will offer opportunities for both EIT and Florence to exchange information on methods and techniques for design & evaluation, and on software platforms.

Also Philips is a core member of EIT ICT labs. From the Florence project perspective Philips contributes to the “Service Spaces for Health and Wellbeing” activity. In this activity, Philips and Novay have developed a unified UI (framework) for the Florence application services. Novay has made the UI design and Philips has made the implementation.

6.4.5 Page

The Page [16] project is a German national research project funded by the German aerospace center (DLR) and supported by clinical partners, hardware developers and also a team of researchers from OFFIS. Its aim is to develop a platform for integration of assistive healthcare technologies into existing healthcare networks. Florence researchers from OFFIS are continually collaborating with Page in topics regarding behavior analysis, gait analysis and medical assessments. With the gained knowledge, techniques and algorithms for health monitoring and fall handling strategies will be improved.

Date	Activity
06.2011	First integration test of the gait analysis software from Page on the Florence robot

6.4.6 EU Mobiserv

Mobiserv [17] is a Collaborative Project, that started on December 1st, 2009 and it is scheduled to run for 36 months. In MOBISERV there are nine partners from seven countries representing Universities, Research Institutions and Industry.

The objective of the MOBISERV project is to develop and use up-to-date technology in a coordinated, intelligent and easy to use way to support independent living of older persons as long as possible in their home or various degrees of institutionalization. The support will be delivered in interior (at home) daily living situations. The implementation will be based on the user acceptance of the technology and understanding of user interaction that truly addresses user needs.

Date	Activity
07.04.2011	NEC introduced Florence to CSEM, project partner in Mobiserv. Mobiserv is like Florence a project in the challenge 7.1 and has similar objectives.

6.4.7 J-NP-UNR

Date	Activity
07.06.2011	Japanese Project Ubiqiotous Network Robot; Service Robot to assist elderly, informal information exchange
09.09.2011	Intro of UNR to Florence management, further activities envisioned
16.05.2012	NEC visited company representatives of the NP-UNR project

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	in Japan. Tutorial on Florence technology was given. Florence and UNR will further keep contact to continue the series of joint dissemination events
21-06-2012	Philips has presented the Florence results at a symposium organized by the UNR project in Tokyo.

6.4.8 D-SmartSenior

The SmartSenior [18] research project is divided into nine project segments in order to best integrate the skills and know-how of the 28 partner companies and organisations. The project management looks after, plans and guides five SmartSenior project segments which focus on applications affecting scenarios relevant to users:

- Emergency assistance
- Telemedical health services
- Home safety solutions & the comfortable living service portal
- Communications solutions for social networking
- Vital signs data capture and management

Date	Activity
21.09.2011	first information exchange on SmartSenior and Florence project with Deutsche Telekom (Coordinator of SmartSenior: >30 partners, 40Mio)

6.4.9 MobileSage

The idea of MobileSage [19] is to provide elderly people with context-sensitive, personalized and location-sensitive tools which allow them to carry out and solve everyday tasks and problems in the self-serve society when and where they occur, “just-in-time”.

Modern elderly live longer, are healthier, more active, mobile, independent and more demanding customers than ever before. They will increasingly look for useful, user-friendly and personalized ICT services that add value to their active and mobile life and that can help them to stay active despite various impairments. Here MobileSage provides a timely approach and solution.

Date	Activity
04.09.2011	Presentation of platform for eHealth application for handicapped and elderly people

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7 Publications and presentations listing

7.1 Overview

The subsections provide lists of **already done** and **currently ongoing** dissemination activities. Some major contributions are counted in the following table:

	Philips	NEC	OFFIS	Tecnalia	Novay	ASSDA	TID	Wany
Paper	2	1	8	1	3	0	0	0
Book	0	0	0	1	0	0		
Conference Presentation	2	7	4	1	2	7	0	0
Workshop Demonstrations	5	9	5	0	1	1	0	0
Press Release	1	2	3	4	2	0	0	0
Other	4	6	1	0	1	0	0	1
	14	**25**	**21**	**7**	**7**	**8**	**0**	**1**

7.2 Conference presentations

Date	**Name of Activity and Conference / Symposium**	**Contributions (tutorial, presentation, poster, talk)**	**Involved Partner**
14/06/2010	International Conference on Active Aging, Seville, Spain	Presentation	NEC
23-25/ 06/2010	The 3rd International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'10) 2010, Crete, Greece	Presentation	OFFIS
17/09/2010	AAL Ambient Assisted Living Forum 2010. “New Technologies in Telecare”. Odense, Denmark.	Presentation	ASSDA
04-07/10/2010	8th European Week of Regions and Cities. "Elderly and disabled people: transforming challenges into opportunities through innovation in ICT and regional accessibility measures". Brussels, Belgium.	Presentation	ASSDA
04/11/2010	ICT for the Elderly Care international event. Granada (Spain)	Presentation	ASSDA

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25-26/ 01/2011	AAL Congress - 4th German congress on AAL, 2011, Berlin, Germany	Presentation	OFFIS
14-17/ 02/2011	Mobile World Congress 2011, Barcelona; "Processing Real World Information in the mobile Cloud", Mobile Cloud Forum	Presentation	NEC
17/02/2011	Innovation in Home Care Services. Local Province Government, delegation of Social Rights, supported by CLECE Social Services. : Exchange of good practices in the home care services. Málaga. Spain	Presentation	ASSDA
30/03/2011	Conference on Education and training in Telecare and Telehealth – Towards a National Strategy. Guildford, UK	Presentation	ASSDA
26/05/2011	Invited speaker presentation at petra2011 (the 4th international conference on Pervasive Technologies Related to Assistive Environments)	Presentation	Philips
26-28/09/2011	AAL Ambient Assisted Living Forum 2011. Telecarers as crucial actors for facilitating technology to elderly, disabled people and Presentation dependants. Lecce, Italy	Presentation	ASSDA
10/11/2011	People Conference on Local & Regional actors contributing to Silver Economy. Regions Committee. Brussels. Networking and discussion with stakeholders, dissemination of T-Cares results. Brussels, Belgium.	Presentation	ASSDA
02/02/2012	'It is the pawn who opens the game - using Comodity Robots for Assisted Living' invited talk at the 1. Karlsruher Forum zu Anthropomatik und Robotik	Presentation, Video	NEC
06/03/2012	Presentation at Robots in healthcare and welfare workshop in the euRobotics Forum 2012 (Odense, Denmark)	Presentation	Tecnalia
13/04/2012	'Identifying Requirements for eHealth: Ambient Assisted Living' - Joint Workshop by WHO and ITU	Presentation	NEC
29/02/2012	'The M2M Cloud Evolution How Cloud Computing can help to master the complexity of connecting millions of devices and services' Talk by NEC Vice President at MWC in Barcelona with Florence domain of Robots in an intelligent Home as important application domain	Presentation	NEC

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26/01/2012	Paper / Talk at German AAL Kongress 2012	Presentation / Paper	OFFIS
26/06/2012	2 Talks and a live demonstration at ISG*ISARC, Biennial World Conference on technologies and technology use to serve the aging society (Gerontechnology), in combination with the yearly ISARC conference dedicated to Robotics and Automation in Construction	Presentation / Demonstration	Philips, OFFIS
03/06/2012	Invited participation and talk on Dagstuhl Seminar, Future Internet for eHealth	Presentation	NEC
25/06/2012	Keynote presentation at 8. EURO-NF conference on Next Gen Internet, NGI 2012 Kronskala, Sweden	Keynote presentation	NEC

7.3 Paper, abstracts, and journal article publications

Date / issue	Name of Activity and Journal / Conference / etc.	Activity Type (journal / proceedings paper, press release, etc.)	Involved Partner
2010	”Personal Assistive Robots for AAL Services at Home - The Florence Point of View”; Special issue of the UBICC journal; web link: www.ubicc.org	Journal paper	OFFIS, NEC
23-25/ 06/2010	“A Mobile Robot for Self-selected Gait Velocity Assessments in Assistive Environments“; The 3rd International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'10) 2010	Conference paper	OFFIS
17-21/09/2010	Robotergestütztes Mobilitäts-Assessment für Rehabilitation und Geriatrie, 126. Versammlung der Gesellschaft Deutscher Naturforscher und Ärzte (GDNÄ), 17.-21. September 2010, Dresden, Deutschland	Conference poster	OFFIS
25-26/ 01/2011	“Enhancing Mobile Robots' Navigation through Mobility Assessment in Domestic Environments”; AAL Congress - 4th German congress on AAL,2011, Berlin, Germany	Conference paper	OFFIS
25-26/07/2011	Robotic interaction with domestic environments considering AAL services and smart home technologies, 3rd	Conference paper	OFFIS

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	International Workshop on Intelligent Environments Supporting Healthcare and Well-being (WISHWell'11), July 25th-26th 2011, Nottingham, UK		
16-18/11/2011	Sensing, Actuation Triggering and Decision Making Platform of the Florence System, The International Joint Conference on Ambient Intelligence (AmI-11), November 16-18, 2011, Amsterdam, The Netherlands	Conference paper	Novay
16-18/11/2011	Touch versus In-Air Hand Gestures: Evaluating the acceptance of seniors on Human Robot Interaction The International Joint Conference on Ambient Intelligence (AmI-11), November 16-18, 2011, Amsterdam, The Netherlands	Conference paper	Novay
24-25/01/2012	Criteria for Quality and Safety while Performing Unobtrusive Domestic Mobility Assessments using Mobile Service Robots, 5. Deutscher AAL-Kongress 2012, 24.-25. Januar 2012, Berlin, Deutschland, accepted	Conference paper	OFFIS
January 2012	Handbook of Ambient Assisted Living Technology for Healthcare, Rehabilitation and Well-being Volume 11 of Ambient Intelligence and Smart Environments Editors: J.C. Augusto, M. Huch, A. Kameas, J. Maitland, P.J. McCullagh, J. Roberts, A. Sixsmith and R. Wichert (Chapter "R&D Projects Related to AAL in TECNALIA's Quality of Life Unit")	Book	TECNALIA
accepted	Paper @ IROS 2012 Workshop on Assistance and Service robotics in a human environment	Workshop Paper	TECNALIA, OFFIS, Philips
accepted	Paper @ Ro-Man 2012 Workshop "Social robotic telepresence"	Workshop Paper	Philips, OFFIS, Novay

7.4 Open workshops and demonstrations

Date	Type of workshop	Type of audience	Involved Partner
02/12/2009	"Personal Assistive Robots for AAL at Home - The Florence Point of View", IoPTS workshop, Brussels	Presentation	OFFIS, NEC
02/12/2009	FP7 consultation meeting on Service and Social Robotics for the Ageing Population	Presentation	Philips

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22-26/ 03/2010	Spring School on Social Interaction Computing http://sspnet.eu/2010/01/spring-school-on-social-interaction-computing/	Presentation	Philips
24/08/2010	ECCE 2010 Workshop: Robots That Care http://sites.google.com/site/robotsthatcare/	Presentation	Novay, Philips
27/09/2010	ICT2010: E-Inclusion Companion-Robots (EI-CR) Networking Session Focus: Companion Robotics for e-Inclusion & Ambient Assisted Living http://ec.europa.eu/information_society/events/cf/ict2010/item-display.cfm?id=3525	Participation at panel	Philips
27-29/ 09/2010	BroadBand WorldForum 2011, Paris M2M@home for monitoring and actuation	Demonstration	NEC
30/09/2010	Companionable 4th workshop at Brussels organized by companionable project http://www.companionable.net/index.php?option=com_content&view=category&layout=blog&id=17&Itemid=26	Presentation of Florence project and vision	Philips
14-17/ 02/2011	Mobile World Congress 2011, Barcelona Exhibition: M2M Home Gateway for Monitoring and Actuation	Demonstration	NEC
19/04/2011	Presentation of Florence to eHealth related Business Unit targeting European Market	Presentation	NEC
06/07/2011	Presentation and live Demo of the Florence Project during the open day from OFFIS “OFFIS Tag”	Presentation & Demonstration	OFFIS
25/08/2011	Talk with NEC Deutschland, Sales Organisation on M2M and AAL		NEC
07/09/2011	Presentation of Florence Technology to T-Mobile Poland	Presentation	NEC
15/09/2011	Workshop presentation at WiMi-Care Workshop (Prof. Andreas Hein, "Benutzerakzeptanz als Basis für den erfolgreichen Technologietransfer. Serviceroboter als Lifestyle-Produkt im Projekt "Florence"") www.wimi-care.de/eng/index.html	Presentation	OFFIS
21/09/2011	Presentation of Florence Technology to Deutsches Rotes Kreuz and elaboration of potential exploitation activities. Agreement on jointly organising a local stakeholder event in 2012	Presentation of Florence project and vision	NEC
10/2011	Strong Interest of NTT on NECs AAL activities. NEC conducted several technical talks and	Presentation	NEC

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	presentations to top management representatives of different NTT groups, achievements of EU Florence was one major topic.		
08-09/11/2011	Participation at the 4th International Workshop on Human-Friendly Robotics (HFR 2011), November 8th-9th, 2011, at the University of Twente, The Netherlands		OFFIS
11/11/2011	Talk "Integration von Servicerobotern in AAL-Systeme" (Prof. Andreas Hein at the 3rd Fachtagung "AAL in Niedersachsen. Servicerobotik - Potential fuer Pflege, Prothetik und Reha" at the Jade Hochschule Oldenburg)	Presentation	OFFIS
14/02/2012	European Year for Active Ageing and Solidarity between Generations Forum of the Committee of the Regions. : Regional approaches for healthy and independent living. Brussels. Belgium.	Presentation	ASSDA
Plan for fall 2012	Organisation of a workshop on 'Robotic meets Internet of Things'. A stakeholder initiative of the EU IoT-A project started to prepare a proposal for a workshop at a larger scientific event (either in China or Amsterdam in 2012), addressing the challenges of the converging of robotics and IoT research areas. Due to the Florence experiences, S.Gessler (NEC) became member of the Programme Organisation Comity. It is under evaluation whether Florence can act as co-organizing project.	Workshop	NEC

7.5 Press releases and internal dissemination

Date	Topic	What media	Partner responsible / involved
DW No. 48, May 2010	“Projekt Florence: Roboter unterstützen ältere Menschen im heimischen Umfeld” – Article about the project start	in-house magazine	OFFIS
	Presentation to Respironics	Presentation	Philips
24/06/2010	Poster session at open project-day	Poster	Novay
25/09/2010	Workshop on Human-Robot Interaction	Internal workshop	OFFIS
20-22/ 10/2010	“My daily Assisted Living in the Cloud”: Training/Seminar given multiple times to various business units and top	Presentation at NEC Central Research Labs ‘Open House’: Annual company	NEC

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Date	Topic	What media	Partner responsible / involved
	management	internal dissemination event for global research	
20-22/ 10/2010	Introducing Florence Project towards Strategic Marketing Division and discussing scenarios	Presentation and bilateral discussion	NEC
03/2011	Newspaper article on conducted focus group results and comments	Press release	Novay
06/2011	Descriptive Florence article in Solera; journal for retired people in Donostia	User community	Tecnalia
13/11/2011	Miramon Technology Park Open Day (Information stand and follow me demo)	General public	Tecnalia
29/11/2011	European Robotics Week Event in Donostia-San Sebastian(Information stand and follow me demo)	Students	Tecnalia
27/10/2011	Presentation of the Florence project and user involvement activities in the project for the scenario definition and follow me demo within the **Value Ageing project meeting** (http://www.valueageing.eu/)	Value Ageing project members and field experts	Tecnalia
DW No. 54, June 2012	“Mobile Roboter bereit fuer den Feldtest” – Article about the Florence Review at OFFIS	in-house magazine	OFFIS

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7.6 Other dissemination activities

Planned/ actual Dates	Activity	Type of audience	Country	Partner responsible / involved
23/02/2011	Interview by Laurens Meulenbroeks. A master student doing is his master thesis on "Smart Homes and the role of the elderly user in the innovation process" (final research for my master Science & Innovation management at the Utrecht University in the Netherlands) The Florence project is a case study in his master thesis. 6 pages of the thesis are spent on the Florence project. See http://igitur-archive.library.uu.nl/student-theses/2011-0825-203623/UUindex.html	Scientific community	NL	Novay, Philips, OFFIS
23-25/03/2011	The Florence robot was shown as part of the Wany slideshow at the Wany booth at the Innorobot 2011 (France) http://www.innorobo.com/	Industry	FR	Wany
15/04/2011	Presentation on Florence project to PhD students participating in 3TU spring school on "social signal processing" in Delft. See http://3tuspringschool.ieis.tue.nl/programme.php	Scientific community	NL	Philips
28/04/2011	Florence scenarios and ideas have been shown to Professor Rothermel, University of Stuttgart	Scientific community	GER	NEC
20/05/2011	Florence AAL scenarios were presented to the Broadband Forum as a M2M use case	Industry	GER	NEC
08/06/2011	Florence scenarios and concepts have been demonstrated to NEC Service Platform	Industry	GER	NEC
08/06/2011	Florence scenarios were presented at a Service Robots for AAL Meeting with C&C Innovation Research Labs	Industry	JPN	NEC
03/07/2011	Florence scenarios and ideas have been shown at the University of Aalborg	Scientific community	GER	NEC
04/07/2011	Florence scenarios and concepts have been demonstrated to NEC America	Industry	GER	NEC

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13/09/2011	Presentation to students of AVANS hogeschool Den Bosch (~ 100 students)	Academic	NL	Philips
14/09/2011	We have formulated an assignment of designing (conceptually) fun services for the Florence robot. Six students from the Communication & Multimedia Design education of the the Avans Hogeschool in Breda (Netherlands) have designed during 10 weeks a "fun" service for the Florence robot. These services are: content recommender, collaborative gaming, cooking companion, virtual gardening, and "guide for devices."	Academic	NL	Philips

7.7 Conferences for dissemination activities

Dissemination of the results of the project will be carried out mainly through publications into internet, papers to international and national conferences and seminars, and also newspaper and technical magazines. Moreover Florence will be present at different national and international conferences. The following list provides an overview of possible conferences where the partners can potentially present the Florence results.

Conference / Workshop / Symposium	Web Link	Date / Location	Submission Deadline
Robot and automation related topics			
Robotica2012 - Humanoid and Service Robots	http://www.roboticaexpo.eu	07-09/11/12 Milano	Not yet available
ICAPS – 22nd International Conference on Automated Planning and Scheduling	http://icaps12.icaps-conference.org/	Atibaia, Sao Paulo Brazil	Passed this year, to be announced for 2013
Eurobot Conference 2012 - 5th International Conference on Research and Education in Robotics	http://www.eurobot.org/conference/	Not yet available	Not yet available
ICAR — International Conference on Advanced Robotics	http://www.icar2011.org	03-07/07/2012	**04/03/2011**
RSS 2012 - Robotics Science and Systems	http://www.roboticsconference.org/	09-13/09/12, Sydney, Australia	**30/01/2012**
ICORR2012 - 13th International Conference On Rehabilitation Robotics		Not yet available	Not yet available
ECMR – 5th European Conference on Mobile Robots		Not yet available	Not yet available

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RAM2012 - 5th IEEE International Conference on Robotics, Automation & Mechatronics		05-11/05/2012	Not yet available
IROS — IEEE/RSJ annual International Conference on Intelligent Robots and Systems	http://www.iros2012.org/	07-11/10/2011 Vilamoura, Portugal	**10/03/2012**
ARSO - IEEE Workshop on Advanced Robotics and its Social Impacts	http://arso2012.org/	21-23/05/2012	Passed this year, to be announced for 2013
ICIRA - Conference on Intelligent Robotics and Application		Not yet available	Not yet available
HRPR - International Conference on Human-Robot Personal Relationships		Not yet available	Not yet available
ECAI – 20th European Conference on Artificial Intelligence	http://www.lirmm.fr/ecai2012/	27-31/08/2012	**06/03/2012**
ICSR - International Conference on Social Robotics	http://www.icsoro.org/	29-30/10/2012	01/05/2012
HRI — 7th ACM-IEEE International Conference on Human-Robot Interaction	http://hri2012.org/	05-08/03/12 Boston, Massachusetts, USA	Passed this year, to be announced for 2013
ICRA — IEEE International Conference on Robotics and Automation	http://icra2013.org	06-10/05/2013, Karlsruhe, Germany	**16/09/2012**
Sensors and data fusion topics			
MFI — IEEE International Conference on Multisensor Fusion and Integration for Intelligent Systems	http://tams.informatik.uni-hamburg.de/events/MFI-2012/	13-15/09/2012, Hamburg, Germany	**20/05/2012**
EuroSSC - 5th European Conference on Smart Sensing and Context		Not yet available	**Not yet available**
Human-Machine interaction, Cognition			

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ACHI – 5th International Conference on Advances in Computer-Human Interactions	http://www.iaria.org/conferences2012/ACHI12.html	30/01/12 – 04/02/12 Valencia, Spain	Passed this year, to be announced for 2013
SSCI - IEEE Symposium Series on Computational Intelligence	http://www.ieee-ssci.org/	15/04/2013 - 19/04/2013, Singapore	Not yet available
HCI – International Conference on Human Computer Interaction	http://www.hci-international.org	21/07/2013 – 26/07/2013, Las Vegas, Nevada, USA	**12/10/2012**
ECCE – 28th Annual Conference of the European Association of Cognitive Ergonomics		28-31/08/2012, Edinburgh, UK	Not yet available
DIS – Conference on Designing Interactive Systems	http://dis2012.org/	11-15/06/2012, Newcastle, UK	Paper: **20/01/2012** Demo / doctoral consortium: **07/03/2012**
Ambient Intelligence / AAL related topics			
AAL Congress - 5th German congress on AAL	http://www.aal-kongress.de/	24-26/01/2012 Berlin, Germany	**31/08/2011**
PerCom – IEEE International Conference on Pervasive Computing and Communications	http://www.percom.org	19-23/03/2012, Lugano, Switzerland	Passed this year, to be announced for 2013
Pervasive Health - The 6th International ICST Conference on Pervasive Computing Technologies for Healthcare	http://www.pervasivehealth.org/	21-24/05/2012 San Diego, California, USA	**16/02/2012**
PETRA - International Conference on PErvasive Technologies Related to Assistive Environments	http://www.petrae.org/	06-08/06/2012, Crete, Greece	**15/01/2012**
IE11 - 8th International Conference on Intelligent Environments	http://www.intenv.org/	26-29/06/2012, Guanajuato, México	**14/01/2012**
UbiComp - 14th International	http://www.ubicomp.org	Not yet	Not yet

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Conference on Ubiquitous Computing		available	available
AmI – 3rd European Conference on Ambient Intelligence	http://hiis.isti.cnr.it/ami2012/	14-16/11/2012, Pisa, Italy	Not yet available
Measuring Behavior – International Conference on Methods and Techniques in Behavioral Research	http://www.measuringbehavior.org/	28-31/08/2012, Utrecht, Netherlands	**01/04/2012**
CAT – Workshop on Context Awareness and Trust			Not yet available
Communication and Network related			
ICC2012 - IEEE International Conference on Communications	http://www.ieee-icc.org	09-13/06/2013, Budapest, Hungary	16/09/2012

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8 Conclusion

This deliverable provides the basis and the definition of main dissemination channels that have been and will be used within the project to ensure the visibility of the Florence project to the European community focusing on mobile robots, the ageing society, and AAL services. It also gives an overview what kind of scientific contributions and material has already been produced and will be used for the purpose of dissemination.

In order to achieve the best possible impact, the global project dissemination and demonstration actions, like the website, will be combined with individual specific initiatives undertaken by the consortium partners, like the demonstration in the Living Labs and house magazines.

At the time of delivery of this report several dissemination actions are already implemented. Examples are the web sites at the OFFIS and Novay server.

For the future we plan to intensify collaborative publications at several of the given conferences and update the publicly available material like a flyer and the newsletter.

Finally a collaboration plan has been developed, which comprises a prioritizing categorization of interesting projects and which also takes legal aspects into account.

Now where Wany has left the project, all partners' tries to take over a part from Wany to reduce the impact of leaving and reach the old disseminations goals.

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10 Appendix

10.1 Newspaper Article from Novay

Toekomstmuziek in Enschede

Technologisch instituut Novay werkt in het kader van een europees onderzoeksprogramma aan de ontwikkeling van een robot, genaamd Florence. Een aantal bewoners uit de Hortensiaflat uit Enschede is nauw betrokken bij dit langlopende innovatieve project. Het voornaamste doel van het **Florence project** is het vergroten van het welzijn van ouderen en het verbeteren van de ouderenzorg.

In het onderzoek met robot Florence gaat het om de vraag wat een robot kan bijdragen in de woonomgeving van ouderen. Twee factoren zijn daarbij belangrijk: (1) de acceptatie van de robot door ouderen, en (2) effectiviteit (ook in kosten) voor de maatschappij en de zorgverleners. De bewoners in Enschede staan aan de wieg van deze ontwikkeling. Hun ervaringen met robot Florence levert de onderzoekers informatie op om te komen tot een intelligent apparaat dat over een jaar of 5 daadwerkelijk op de markt komt en waarmee digitale zorg realiseerbaar is.

'Bekendheid met een computer was een voorwaarde om deel te nemen aan het project', vertellen mevrouw Boxem en mevrouw Van de Tol. Zij hebben ruime ervaring opgedaan met de computer, vooral ook omdat er in de recreatieruimte van de Hortensiaflat een internetcorner is met drie computers. Vrijwilligers maken daar de bewoners stap voor stap wegwijs op de computer.

Een aantal bewoners nam deel aan het Florence project. Mevrouw Rekers: 'Ik hoef zo'n gek ding niet in huis te hebben', dacht ik van te voren, ' maar ik vond de robot echt geweldig'. In een testomgeving werd gekeken hoe de bewoners op de robot reageren en wat hun wel en niet aanspreekt. Er waren een aantal testmodellen maar het was duidelijk dat Florence meer in de smaak viel als de robot met het uiterlijk van een stoer mannetje of de japanse dame. 'Florence is echt een leuk robotje, met lieve oogjes', aldus mevrouw Rekers. Florence reageert op stemmen en op gebaren. Er zijn video-opnamen gemaakt van bewoners om te zien wat goed gaat en wat nog verder ontwikkeld kan worden. Florence herinnert de bewoner bijvoorbeeld aan oefeningen voor fysiotherapie. De bewoner moet dan de oefeningen doen en Florence maakt er opnamen van en stuurt deze door naar de therapeut, deze kan van afstand zien of het beter gaat. Ook voor dokter en apotheek zijn er mogelijkheden om mensen te helpen. Florence kan de gebruiker herinneren aan medicijnen maar ook bewoners die wat vereenzamen tips geven. "Hij zegt bijvoorbeeld dat het mooi weer is, en adviseert je dan om een wandelingetje te gaan maken', vertelt mevrouw Van de Tol. Zij heeft samen met haar man meegedaan aan het project en is positief over de toepassingen die er op termijn gaan komen. 'Zeker bij ziekte kan Florence behulpzaam zijn. Mijn man is ziek en ik kan hem niet meer lang alleen laten, en dan kan een robot wel helpen, die signaleert als hij valt en slaat alarm. Volgens mij kan een robot voor mantelzorgers ook echt veel betekenen'.

'De ontwikkelingen gaan zo snel, ik ben nu 78 en de komst van de televisie en de telefoon weet ik nog goed', herinnert mevrouw Wetterling. Zij heeft er dan ook alle vertrouwen in dat het robotproject geen toekomstmuziek blijft maar straks echt toepasbaar wordt. "Ik hoop van harte dat ik dat nog zal meemaken, er is zoveel mogelijk om slimmer te wonen'.

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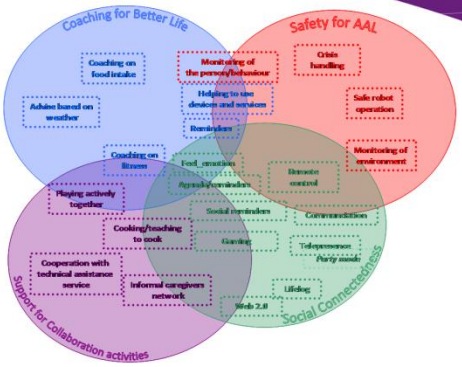
10.2 Florence Poster for Project-Day at Novay in Enschede

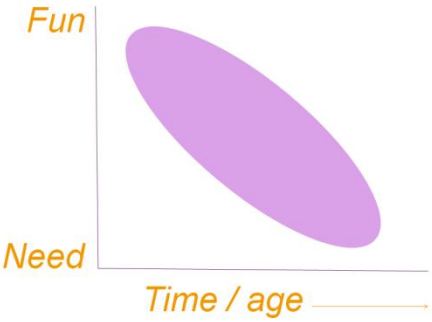
Florence

Multi-purpose robot for ambient intelligence



The aim of the Florence project is to improve the well-being of elderly (and that of their beloved ones) as well as improve the efficiency in care through Ambient Assisted Living (AAL) services, supported by a general-purpose mobile robot platform. The Florence project will investigate the use of such robots in delivering new kinds of AAL services to elderly persons and their care providers. Florence will put the robot as the connecting element between several stand alone AAL services in a living environment as well as between the AAL services and the elderly person. Through these care, coaching and connectedness services, supported by Florence, the elderly will remain much longer independent.

A key aspect for Florence is user acceptance. Florence aims to improve the acceptance of AAL (robotic) services by providing both assistance and fun oriented lifestyle services via the same means. The ambition of Florence is that the elderly should be proud of having a Florence robot. This increase of user-acceptance will greatly alleviate the need for personal care for elderly, and therefore provide for significant cost-savings.



SEVENTH FRAMEWORK PROGRAMME

novay

10.3 Florence Rollup AAL Kongress (OFFIS)

10.4 Datawork articles (OFFIS)

GESUNDHEIT

Mobile Roboter bereit für Feldtest

Das Projekt „Florence - Multi Purpose Mobile Robot for Ambient Assisted Living" will die kommende Situation, die sich durch den Wandel in Familienstrukturen, erhöhter Mobilität und der demographischen Veränderung ergibt, durch die Bereitstellung von Pflege, Anleitung und Unterstützung durch einen mobilen Roboter im heimischen Umfeld erleichtern.

Mit einem Review-Meeting bei OFFIS hat das Projekt am 16. Februar 2012 auch das zweite Projektjahr erfolgreich abgeschlossen. Dazu waren alle Partner nach Oldenburg gekommen. Beteiligt sind Philips (NL), NEC (UK), Novay (NL), Telefonica (ES), Tecnalia (ES) und ASSDA (ES).

In diesem zweiten Projektjahr konnten bereits erste Szenarien innerhalb der kontrollierten Laborumgebungen von OFFIS (IDEAAL) und Philips (ExperienceLab) in direkter Zusammenarbeit mit Senioren und Profis aus dem Bereich der Pflege evaluiert werden. Die Ergebnisse der Evaluation fließen direkt in die Verbesserung des Systems ein, so dass im Herbst die Endevaluation des Systems in spanischen Haushalten durchgeführt werden kann. Neben dem Fortschritt des Projektes wurden besonders die Organisation und der Ablauf des Reviews im Haus von OFFIS vom Project-Officer der EU und den ausgewählten Gutachtern positiv erwähnt.

Das Projektkonsortium mit den Roboter (Pekee II von Wany, Turtlebot von Willow Garage) in verschiedene Zwischenstände

KONTAKT:
Dr. Melina Brell
www.florence-project.eu

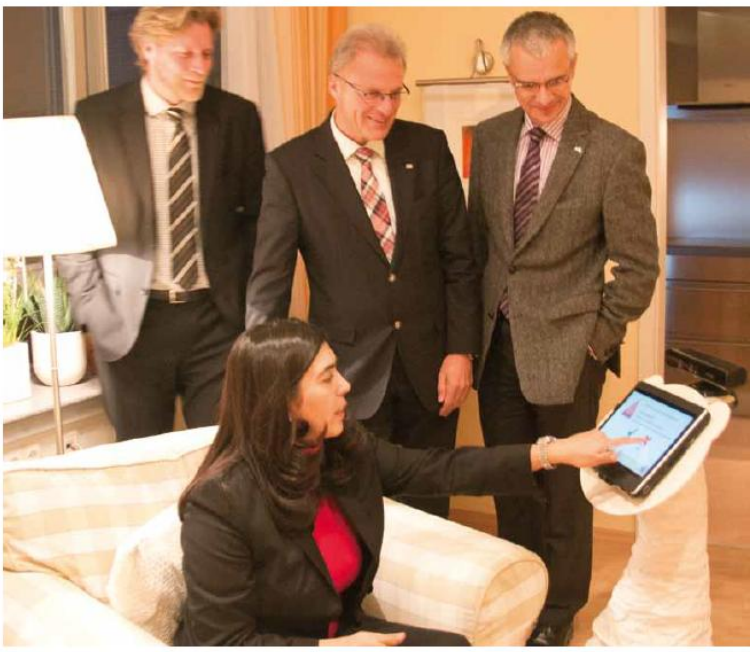
GESUNDHEIT

Ministerin Özkan informiert sich über Gesundheitsthemen

Die Niedersächsische Ministerin für Soziales, Frauen, Familie, Gesundheit und Integration, Frau Aygül Özkan, besuchte am 08. Februar 2012 das Informatik-Institut OFFIS, um sich zum einen über das Institut ganz allgemein und zum anderen über die aktuellen Arbeiten des FuE-Bereichs Gesundheit im Besonderen zu informieren.

Nachdem der Vorstandsvorsitzende Prof. Wolfgang Nebel einen Überblick über das Institut gegeben hat, führte Prof. Andreas Hein als Sprecher des Bereichsvorstandes Gesundheit in die Arbeiten dieses FuE-Bereichs ein. Hierbei betonte er insbesondere die beiden Querschnittsthemen Versorgungsforschung (z.B. regionale Prognose von Fallzahlen) und Ambient Assisted Living. Diese wurden der Ministerin im Anschluss im IDEAAL-Seniorenappartement in ihrer praktischen Umsetzung von Dr. Melina Brell (Gruppenleiterin Medizinische Gerätetechnik) präsentiert. Aktuelle Forschungsaktivitäten aus den Projekten GAL (Gestaltung altersgerechter Lebenswelten), Florence (Unterstützung ältere Menschen mit Hilfe von mobilen Robotern) sowie PAALiativ (Technische Unterstützungsmöglichkeiten in der häuslichen Versorgung für Menschen in ihrem letzten Lebensjahr) wurden vorgestellt.

Die Ministerin zeigte sich beeindruckt von den Entwicklungen, der dabei stark forcierten interdisziplinären Zusammenarbeit (z.B. zwischen Medizin, Geriatrie, Gerontologie, Ökonomie und Sozialwissenschaften) und insbesondere von der Umsetzung der Forschungsarbeiten in die tägliche Praxis. Die Rolle des IDEAAL-Seniorenappartements einerseits als Testumgebung für entwickelte Technologien, aber andererseits insbesondere als Showroom, in dem Technologien gezeigt werden können und mit Fachexperten hinsichtlich der praktischen Nutzbarkeit diskutiert werden kann, fand Ministerin Özkan besonders begrüßenswert. ■



GESUNDHEIT

AAL-Kongress fokussiert Technik für ein selbstbestimmtes Leben

Vom Bundesministerium für Bildung und Forschung und VDE Verband der Elektrotechnik Elektronik Informationstechnik gemeinsam ausgerichtet, bot der Deutsche AAL-Kongress vom 24. bis 25. Januar 2012 bereits zum fünften Mal Wissenschaftlern, Entwicklern, Herstellern sowie Anwendern und Vertretern aus Politik und Wirtschaft die Möglichkeit zum fachlichen Austausch.

Dr. Melina Breil und Myriam Lipprandt zeigten verschiedene Projektszenarien in der Industrieausstellung

der unterschiedlichen Lösungen. In diesem Jahr war OFFIS erstmalig auch in der Industrieausstellung mit einem Stand dabei. Gemeinsam in einer Reihe mit Bosch und der Johanniter Unfallhilfe, welche aktuell ein gemeinsames Projekt in Beantragung haben, belegte OFFIS das Zentrum der Ausstellung. Vorgestellt wurden das EU-Projekt Florence mit seinem mobilen Roboter zum Einsatz im häuslichen Umfeld und das BMBF-Projekt PAALiativ zur technikgestützten Palliativversorgung gemeinsam mit der Johanniter Unfallhilfe.

Ein besonderes Highlight war auch in diesem Jahr der Senioren-Technik-Tag, bei dem Senioren Dienstleistungen, Prototypen und Produkte ausprobieren und anschließend bewerten konnten. So auch das bereits auf der Industrieausstellung vertretene Projekt PAALiativ, das den interessierten Senioren durch die Johanniter Unfallhilfe präsentiert wurde.

KONTAKT:
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www.florence-project.eu

Articles from OFFIS in-house magazine Datawork, No. 54, June 2012

10.5 Florence Project Flyer

Social motivation

The background for the developments within the Florence Project is the slow but constant demographic changes within our population, with an increasing number of elderly people, a constant and declining number of younger people and the transformation of deadly diseases into chronic ones. This leads to an increasing demand for long-term health care.

In addition to that, the new family structures and the rise in work-mobility make it difficult to rely on volunteer care by family members.

Hence, costs for both the society and the care provider are growing, which may lead to potential undersupply of health care, an increasing lack of social inclusion, and a negative impact on health and safety.

Our vision

The aim of the Florence project is to improve the well-being of elderly as well as to improve the efficiency in care through Ambient Assisted Living (AAL) services, supported by a general purpose mobile robot platform. Florence will use the robot as the connecting element between several stand-alone AAL services and the elderly person. Through these "care, coaching and connectedness" services, supported by Florence, the elderly will remain independent for much longer.

Expected results

The Florence system works across four different areas: coaching, safety, social connectiveness and collaborative activities.
It will allow us to communicate with family and other Florence users through a complete and easy to use home control interface. Florence users will form a user group of coaching, allowing experienced elderly persons to help newcomers to know Florence. It will also allows us to keep in touch with our relatives by videochatting or telephone for instance.

Safety is a priority in the program. It will manage such risky situations as sudden falls by contacting telecare services for emergencies, offering immediate support. User medication will no longer be forgotten, as Florence will remind you when it's time for you to take it, using the home interface. Overall, Florence will be key to improve your lifestyle, gaining independence and life quality.

User acceptance

Florence aims to improve the acceptance of AAL (robotic) services by providing both assistance and fun lifestyle services via the same means. The ambition of Florence is that the elderly should be proud of having a Florence robot.
The project will adopt a highly user-centric approach by executing quick design cycles that start with focus group sessions, interviews and Wizard-of-Oz experiments. After the development phase is closed, evaluations at the partners' sites and living labs will be held with real users.

11 Glossary

AAL	Ambient Assisted Living
BAN	Body Area Network
CPU	Central Processing Unit
DoW	Description of Work
EC	European Commission
ICT	Information and Communication Technology
IDEAAL	Integrated Development Environment for Ambient Assisted Living
FP7	Seventh Framework Programme
LAN	Local Area Network
R&D&I	Research & Development & Innovation
SME	Small and Medium-sized Enterprises
WAN	Wide Area Network
WP	Work Package

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