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D7.2: Report from Dissemination and Internal Communication Workshops

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Deliverable Summary

This documents describes dissemination activities of the ExCITE consortium until month 24.

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1 Introduction

1.1 Scope of the document

This document covers project dissemination activities until month 24 (June 2012). This deliverable summarizes achievements of the members of the ExCITE consortium in academic, industrial and general public areas.

1.2 Deliverable structure

The deliverable is organized as follows: Chapter 2 gives a brief overview of the project. Chapters 3 and 4 outlines dissemination goals and strategy respectively as they were defined in the D7.1M12. Chapters 5 and 6 provide detailed information about dissemination activities and results. The deliverable is concluded by Chapter 7.

2 Purpose of ExCITE

Telepresence has long been advocated as a means to enable virtual face-to-face communications for people located at different places. A newer variant of telepresence that has recently emerged proposes to integrate ICT technologies onto robotic platforms and enable actuation in a remote location. So far robotic telepresence has made a debut in the deployment of robotic systems in dangerous or unreachable environments. However, a number of systems are starting to emerge that advocate the use of robotic telepresence in a domestic or office environment. The use of such systems for the aging society as a tool to enhance social interaction for the elderly is still relatively novel. However, used as a device to increase social interaction, robotic telepresence could be particularly suited to an elderly audience for a number of reasons. Firstly, the elderly interacts with the robot in a natural and intuitive manner as little additional learning is required for the elderly. Secondly, the client connecting to the robot from a remote location gains a greater level of control which is currently not possible in desktop type telecommunication applications. This greater level of control allows the client to move in the environment. Thirdly, this particular type of technology is suitable for a diverse group of elderly including those who are very mobile (with multiple residences) who want to maintain contact with their family kin etc.; as well as those who are less mobile and want to connect to the device to gain a greater sense of mobility and access. Despite this potential, the number of existing system which advocate better social interaction have indeed only been subjected to either little or no end-user validation with an elderly audience. The main objective of ExCITE is to evaluate user requirements of social interaction that enables embodiment through robotic telepresence. This evaluation is performed in situ, on a Pan-European scale and with a longitudinal perspective. An existing prototype is deployed to the targeted end- users, and is refined by tightly involving the users in the development cycles of the prototype throughout the project. The importance of user evaluation should not be underestimated, nor should the science of eliciting user requirements. In fact, the end-users'

perspectives can only be truly understood if evaluation is performed in situ, on a reasonable scale and with a longitudinal perspective. The longitudinal aspect of the user based evaluation allows a better understanding of important parameters such as user acceptance, added value of social interaction, integration in a domestic environment, technical viability and scalability. A large scale study, outside the isolation of a laboratory setting, will allow better correlation of the above parameters to important social factors such as gender, cultural and lifestyle.

To perform the user based evaluations, a stage one prototype will be deployed to the targeted end-users (Fig. 1). The prototype is called the Giraff system and consists of a screen and web camera mounted on a simple robotic base that can be teleoperated. The camera and screen is a pan-tilt unit which enables a greater and controllable field of view and the height of the unit is easily adjustable. The elegance of the Giraff system is its simplicity and thus its affordability with a current estimated price tag of 5000 Euros and a possibility to reduce the price to as little as 2000 euros in the future as the product matures and manufacturing scale is achieved.



Figure 1: Giraff allows remote healthcare - elderly communications

The prototype exists and several units have been built. The current version of the Giraff contains a mobility subsystem and a remote interface for teleoperation. With this prototype in place at end-user sites, different interaction scenarios will be investigated. For example, the Giraff can be placed in the resident of the elderly and the requirements of the system will be assessed from the point of view of the elderly interacting with the device when embodied by a family member,

spouse or healthcare professionals. Alternatively, the Giraff can either be placed at a workplace, nursing home or place of organization, and it will be the elderly who then connects to the device, and as such the requirements will be assessed when it is the elderly who is embodied by the Giraff system. The key to the evaluation process is the cyclic evaluation approach where user input will be taken into account to make iterative changes to the prototype throughout the course of the project. At the end of the three year user studies, the results obtained from ExCITE will be:

1. Create an affordable product that is effective in promoting healthy aging and social well being as it is validated by the end-users throughout the lifetime of the project.
2. Allow researchers in clinical and academic fields to advance their understanding of acceptable forms for social interaction in the ageing process.

3 ExCITE's Dissemination Strategy

The dissemination within ExCITE is critical as this projects goal is to introduce new technologies, specifically robotic telepresence, within traditionally non-technological sectors within eldercare. Consequently, the dissemination considers four aspects (1) dissemination towards caregivers such as municipalities (2) dissemination towards primary and secondary end-users which in this case are elderly users (private users) and elderly within larger residences (senior complexes) (see Fig. 2 as an example of dissemination towards end-users) (3) dissemination towards the scientific community specifically areas interested in the outcome of human robot interaction and (4) dissemination towards the general public.

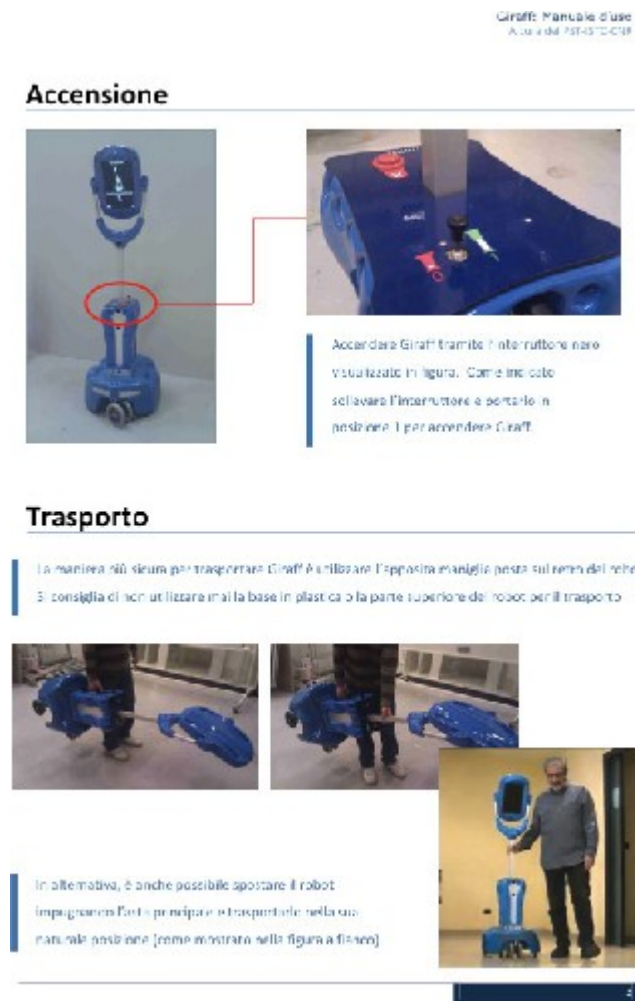


Figure 2: Giraff User Manual

As ExCITE adopts a broad definition of user groups, this is recognized in the different dissemination tools which are geared towards different audiences. This is recognised by ExCITE and reflected in the project's wide range of dissemination tools and activities. These range from an up-to-date project website, to scientific and professional papers. The mechanisms in place for stakeholder involvement also double as important dissemination and communication channels. As mentioned above, existing dissemination channels and instruments will be used when possible, in addition to more project-specific dissemination.

As resources are finite, it is central to have a targeted and coordinated dissemination strategy. Therefore, where possible, dissemination activities may be combined with key project milestones – such as training new personnel before a test site is deployed – as well as to connect existing communication activities and media.

4 Dissemination Quality Assurance and Monitoring

Monitoring and evaluation of the dissemination activities is continuous. The process assists to maintain track of the successes of the Dissemination plan, as well as provide feedback to shape future activities. Project partners should report about all of their dissemination activities, however small, to the project coordinator. They should provide details about the dissemination activity, and a copy of the product, if applicable. The project coordinator maintains an up-to-date list of dissemination activities and outputs and summarizes this list in a yearly report. Monitoring of dissemination activities per partner will also be done. This will allow for subsequent analysis, for example in terms of the ratio of specific dissemination products (e.g., scientific articles). The impact of different ExCITE dissemination products and activities needs to be monitored in different ways. Web statistics, for example, will indicate whether the project's website is satisfactorily used, as well as show trends, etc. Attendance at conferences and meetings also gives an indication of the success of the project. In particular evaluation of the dissemination activities will focus on the how well the activities match in relation to the project goals. Evaluation is done to assure a quality to the dissemination – so that the right message is communicated and the nature of ExCITE is clear, both when communicating to decision makers and other stakeholders. It should be made clear that ExCITE is about objective evaluation of social telepresence and that the findings are based on sound scientific work developed in collaboration with relevant stakeholders. Overall responsible for quality assurance and monitoring lies with the project coordinator i.e. Örebro University.

4.1 Measures of Success

The following measures for communication and dissemination have been defined:

1. Scientific Results
 - a. Journal, Conference and Workshop Papers
 - i. Total Number of papers published as part of 4CaaSt
 - ii. Number of papers with authors from different partners
 - b. Conference activities
 - i. Number of subject presentations (keynotes and invited speeches)
 - ii. Number of organized workshops
 - iii. Number of poster presentations
 - iv. Number of demos presented
2. Product-related Results
 - a. Number of published whitepapers
 - i. Number of supported projects
 - ii. Number of contributed lines of code
3. In General
 - a. Number of published press releases
 - b. Number of ExCITE website hits and visitors

5 Dissemination Activities According to the Quality Assurance and Monitoring Plan

This chapter summarizes dissemination activities according to the Dissemination Quality Assurance and Monitoring plan.

5.1 Scientific Results

Two directions of the scientific dissemination can be identified. These are publications and organizing scientific events.

Publications from the ExCITE project members until M24 are as follows:

- A. Cesta, G. Cortellessa, A. Orlandini and L. Tiberio (2012) Addressing the Long-Term Evaluation of a Telepresence Robot for the Elderly. In Proceedings of ICAART'12, the 4th Int. Conf. on Agents and Artificial Intelligence, Special Session on Intelligent Robotics. Vilamoura, Algarve, Portugal, February 6-8, 2012
- A. Kristoffersson, S. Coradeschi, A. Loutfi and K. Severinson-Eklundh (2011) An Exploratory Study of Health Professionals' Attitudes about Robotic Telepresence Technology. In Journal of Technology of Human Services, Vol 29:263-283, 2011. DOI: 10.1080/15228835.2011.639509
- A. Cesta, G. Cortellessa and L. Tiberio (2011) Long-term Evaluation of a Mobile Remote Presence Robot for the Elderly. In ERCIM News, Special Theme: Intelligent and Cognitive Systems, N. 84:20-21, 2011.
- A. Kristoffersson, S. Coradeschi, K. Severinson Eklundh and A.Loutfi (2011) Sense of Presence in a Robotic Telepresence Domain. In Proceedings of HCI (6)'2011. pp.479-487.
- L. Tiberio, L. Padua, A. R. Pellegrino, I Aprile, G. Cortellessa and A. Cesta (2011) Assessing the tolerance of a telepresence robot in users with Mild Cognitive Impairment – A protocol for studying users' physiological response. 1st Workshop on Social Robotic Telepresence held at HRI 2011, March 2011.
- A. Kristoffersson, S. Coradeschi, A. Loutfi and K. Severinson Eklundh (2011) Towards Evaluation of Social Robotic Telepresence based on Measures of Social and Spatial Presence. 1st Workshop on Social Robotic Telepresence held at HRI 2011, March 2011.
- S. Coradeschi, A. Kristoffersson, A. Loutfi, S. von Rump, A. Cesta, G. Cortellessa and J. Gonzalez (2011) Towards a Methodology for Longitudinal Evaluation of Social Robotic Telepresence for Elderly. 1st Workshop on Social Robotic Telepresence held at HRI 2011, March 2011.
- A. Cesta, S. Coradeschi, G. Cortellessa, J. Gonzalez, L. Tiberio and S. von Rump (2010) Enabling Social Interaction Through Embodiment in ExCITE. In ForItAAL. Second Italian Forum on Ambient Assisted Living, Trento, Italy, Oct 2010.
- A. Kristoffersson, S. Coradeschi, M. Lindén and A. Loutfi (2010) Robotic telepresence - a healthcare professionals' perspective. In proceedings of Medicinteknikdagarna 2010, Umeå, Sweden, Oct 2010.

- A. Kristoffersson, S. Coradeschi and A. Loutfi (2010) User-Centered Evaluation of Robotic Telepresence for an Elderly Population. Accepted for 2nd International Workshop on Designing robotic artefacts with user- and experience-centred perspectives held at Nordi-Chi 2010, Oct 2010.

At the same time, members of the ExCITE consortium participated and organized a number of events, which are listed below:



Figure 3: Talk at HRI2011 Workshop on Social Robotic Telepresence

- 2012-04-03. ExCITE at Elmia Äldrekongressen. Giraff Technologies AB presented Giraff and the ExCITE project at the Elmia Äldre kongressen in Jönköping, March 21-23 2012. They exhibited to over 2 000 attendees and made two stage presentations.
- 2012-03-09. Presentation at HRI 2012, Boston March 7th. Stephen von Rump was in person doing a presentation at HRI 2012 in Boston, MA, USA on March 7th. He talked about Giraff itself but also discussed ExCITE as being the major source of contribution for user feedback.
- 2012-03-09. Embodied participation at EU Robotics Forum in Odense March 6th. Stephen von Rump from Giraff Technologies visited the EU Robotics Forum in Odense via a Giraff robot. He mainly discussed the results of ExCITE project so far.
- 2012-01-18. ExCITE Review Feb 7th 2012. The ExCITE project will have a midterm review in Malaga, Spain on February 7th 2012.
- 2011-11-11. ExCITE at meeting about the Digital Agenda. Annica Kristoffersson presented thoughts about how the need for a good care system that can support the elderly will increase in the future. In the presentation, also information about current collaborative research was presented including the ExCITE-project. Among the other speakers were three people working for the EU Commission, a representative from the Swedish Ministry of Enterprise, Energy and Communications, the Örebro County Governor and the upcoming head of SVT's (the Swedish Public TV Channels) newscasts. The audience also consisted on various local stakeholders.

- 2011-10-01. Robotdance at Researchers Night. ExCITE and in particular the Giraff participated in a robotdance at Stortorget, Örebro, Sweden on Sep 23rd. The Giraff made a show with two teenage girls.
- 2011-09-30. ExCITE wins competition for AAL JP most promising project. The Award was given to the project that demonstrates great promise in terms of innovation, human-centric approaches to development and market potential.
- 2011-09-12. ExCITE at Technology for Independent Life. ExCITE was presented at the Swedish national conference Technology for Independent Life which will be held at Örebro University on October 13th 2011. The conference highlights needs and demands in society regarding new solutions in healthcare, what is new in the technology field regarding development and manufacturing of such products. Invited speakers share their experiences and thoughts regarding the possibilities to develop long-term and long-lasting care solutions for elderly and disabled people. Companies present solutions and tools aimed to increase independence and quality of life for the individuals. The participants of the conference will also visit the research- and innovation apartment at healthcare center "Ängen".
- 2011-03-14. Workshop on Social Robotic Telepresence. Four members of the ExCITE project team: Silvia Coradeschi, Gabriella Cortellessa, Annica Kristoffersson and Amy Loutfi organized the workshop "Social Robotic Telepresence" together with Kerstin Severnson Eklundh. The workshop was organized on March 6th in conjunction with HRI 2011 and was a success. The two invited speakers were Stephen von Rump, from Giraff Technologies and Brian Scassellati from Yale University.
- 2011-02-11. ExCITE at Tunstall marketing days. ExCITE will also participate in Tunstall's marketing days on March 30-31st in Örebro, Sweden.
- 2010-09-28. ExCITE at Research Night. Giraff, along with other robots from AASS were present at Research Night held at Marieberg, Örebro on Sept 24th 2010.
- 2010-09-16. ExCITE in Odense, Denmark. The Excite team were present at the AAL Forum held in Odense on Sept 15th-17th 2010.

5.2 Product-Related Results

In terms of popularization of MRT technology the number of publication have been made in non-scientific sources. The complete list of these publications is as follows:

- 2012-03-05. Ett klipp för äldreboende med den senaste tekniken. The opening of "Månstrimman Trygghetsboende" in Töre, Sweden was attracting the local newspapers attention. Read article, Source: Norrbottens-kuriren Feb 16th 2012
- 2012-02-16. Hatten av för tryggt boende. Article from grand opening of Trygghetsboende Månstrimman in Sweden. Go to article Source: Norrbottenskuriren, online Feb 15th 2012.
- 2012-02-09. La magia de telepresencia.
- 2011-12-15. SFIDA TECNOLOGIE Dall'AAL Forum 2011 le innovazioni europee. An article on the AAL Forum written by a journalist for the magazine "Assistenza Anziani" (Elderly

Assistance). The article essentially talks about ExCITE and NetCarity as examples of AAL results. The magazine has a wide distribution in Italy.

- 2011-10-13. Excite: un robot al servizio degli anziani. The news about ExCITE winning the AAL Forum JP Award has also been recognized in the CNR Newsletter (Almanacco della Scienza) N. 16 - 12 oct 2011.
- 2011-10-03. Robotikforskare vann förstapris i EU-tävling. ExCITE winning the AAL Award for being the most promising project (see Fig. 1). Official pressrelease, Sep 30th, 2011 The pressrelease has also been posted at for example the following websites: Elektronik i Norden, Oct 3rd, 2011 Örebro Guiden, Oct 1st, 2011 Presskontakt, Sep 30th, 2011.
- 2011-10-03. Mobile Telerobot wins European AAL Forum Award 2011. Robotland blogpost about the AAL Award, Sep 30th 2011. Read the blogpost in Robotland.
- 2011-04-29. Giraff on RAI 3 TV-show. On March 11th 2011, Amedeo Cesta, Andrea Orlandini and Lorenza Tiberio participated in a RAI 3 TV-show with Giraff.
- 2011-02-11. "Roboten sköter snacket". Nerikes Allehanda Nov 4th 2010.
- 2011-02-11. "Giraff Technologies på internationell innovationsturné".
- 2010-09-11. "Hur mår du idag Aina". Aftonbladet Sep 11th 2010
- 2010-09-27. User-manuals online. The first user-manuals are coming online. So far they are available in Swedish at User-manuals with more.
- 2010-09-6. "Vill du ha en robot hemma?" Elektronik i Norden Sep 6th 2010
- 2010-09-6. "Kan robotbesök vara framtidens kommunikation?" Presskontakt.se Pressreleases Sep 6th 2010
- 2010-09-6. "Snart kan vi besöka varandra - digitalt". Nerikes Allehanda Sep 6th 2010

There is also a strong collaboration on the technical level between platform developers (hardware designers and software developers at Giraff Technologies AB) and contributors from the academic organizations. Particularly, entirely new software architecture with plugin system support has been developed by GRF with help of ORU in order to ease integration of third party code into Giraff platform. As a result, several new plugins are being actively developed by the members of the ExCITE consortium in order to be publicly released along with the newest Giraff platform software.



Figure 4: AAL forum award

5.3 General Results

ExCITE web site is currently accessible in 24/7 mode and is regularly updated with new information. Screenshot of the website's front page can be found on Fig. 2



Figure 5: ExCITE website's front page

According to ExCITE website visitor statistics, more than 8000 pageviews have been made in the period from September 2010 till June 2012. Please, see Fig. 3 for monthly statistics.

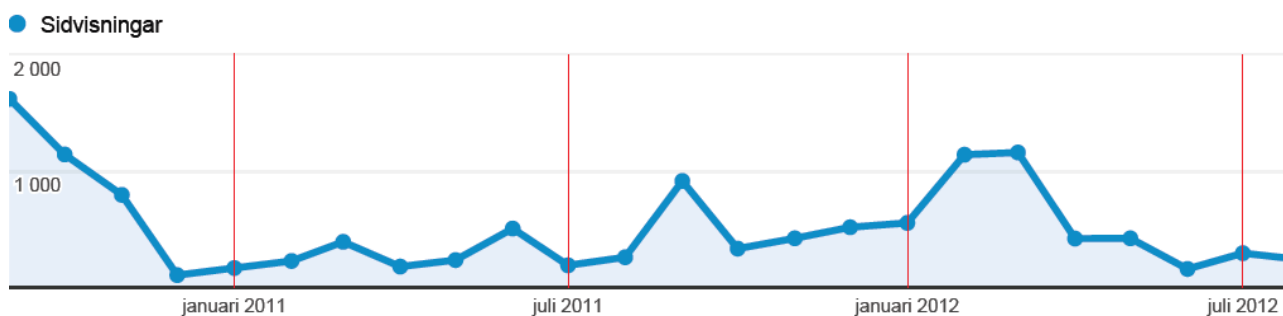


Figure 6: ExCITE website monthly statistics

6 Activities Overview

This chapter summarizes activities overview by the participants of the ExCITE project until June 2012 (Tab. 1).

Project participant	Activity	Date	Medium	Indicative coverage
UMA, ORU (Spain)	Presentation at the AALIANCE conference	11-12/03/2010	event	User, researchers industry
ORU (Sweden)	Press release	6/9/2010	press	General public
ORU, Giraff (Denmark)	Presentation at the AAL Forum	15-17/09/2010	event	User, researchers industry
ORU (International)	Project website ready	30/10/2010	webpage	User, researchers industry general public
CNR, ORU (Italy)	Presentation at the AAL Italian Forum	6-8/10/2010	event	User, researchers industry
ORU (Sweden)	Exhibition at Research Night	24/9/2010	event	General public
CNR (Italy)	Presentation at Italian Workshop on Aging Society	3/12/2010	event	Researchers, industry
Giraff (Sweden)	Swedish Handicap Institute presentation on ExCITE project and Giraff, Stockholm	17/11/2010	event	User, researchers
Giraff (Sweden)	Robotdalen Day presentation of ExCITE and Giraff, Örebro	7/09/2010	event	Researchers, industry
ORU, Giraff (Italy)	Presentation at the AAL Forum	16-28/9/2011	event	User, researchers industry
CNR (Italy)	Presentation and tutorial at Comunità di Sant' Egidio	27/04/11	event	Researchers, charity organization
CNR (Italy)	Presentation and tutorial at ASL/Roma A	19/07/11	event	Researcher/ nurses
ORU, Giraff AB, Oru Mun (Sweden)	Exhibitor at Tunstall marketing days	30-31/3/11	event	Organizations

ORU (Sweden)	Presentation at HCI International, Orlando, Florida, USA	13/7/11	event	Research
ORU, Giraff AB, OCC (Sweden)	Ängen (large complex for elderly) Opening	26/05/2011	event	Users, Community
CNR (Italy)	Presentation of ExCITE Meeting CNR- MIUR (Ministero Istruzione Universita' e Ricerca)	16//09/2011	event	Researchers, Representative from MIUR
ORU (Sweden)	Researchers Night Örebro/Sweden, ExCITE poster and Giraff dancing on stage.	23/9/2011	event	Community
CNR (Italy)	Presentation and tutorial at daycare center "Casa Sirio" in Rome	17/10/2011	event	Health workers
CNR (Italy)	Presentation and tutorial at daycare center "Casa Blu" in Rome	26/10/2011	event	Health workers
CNR (Italy)	Project presentation and tutorial at Italian Forum on "Non Autonomous People", Bologna, Italy	9-10/11/2011	Conference	Health care professionals
ORU (Sweden)	Presentation at meeting about EU's and Orebro County Administrative board's Digital Agenda. Several representatives from EU Commission in audience.	11/11/2011	Event	Organizations
CNR (Italy)	Project presentation and tutorial at ANIARTI	16-18/11/2011	Conference	Nurses
ORU, OCC (Sweden)	Information about the ExCITE project to politicians and elderly.	24/8/2011	Event	Organizations /Users
OCC (Sweden)	Exposure of the Giraff and the ExCITE project at a Senior Festival with more than 4000 guests in Örebro, Sweden.	8/10/2011	Event	Community
ORU (Sweden), Giraff (Sweden), ISTC-CNR (Italy)	Three presentations and a key note speech at the 1st Workshop on Social Robotic Telepresence held at HRI 2011	6/3/2011	Event	Researchers
CNR (Italy)	Participation with a Giraff robot on Tv-show at RAI 3	11/3/11	Event	Community
CNR (Italy)	Project presentation and tutorial at	3/12/2011	Workshop	Nurses

TANGRAM				
Giraff (Sweden)	European Network of Social Authorities	22/11/2011	Event	Organizations
Giraff (Sweden)	Hjälpmiddelsinstitutet opening ceremony	8/11/2011	Event	Organizations
ORU, Giraff, OCC (Sweden)	Technology for Independent Life (Organization and participation)	13/10/2011	Workshop	User, researchers industry
Giraff (Sweden)	Visit of King and Queen of Sweden	12/10/2011	Event	General public
Giraff (Sweden)	China Business Forum	2/10/2011	Event	Industry
Giraff (Sweden)	Mimer Framtids Lagenhet	19/07/2011	Event	Industry
Giraff (Sweden)	Almedalen Conference	5-7/07/2011	Conference	User, researchers industry
Giraff (Sweden)	Västerås äldre seminarium	30/05/2011	Workshop	User
Giraff (Sweden)	Mälartinget	25/05/2011	Event	User
Giraff (Sweden)	Visit Norwegian Centre for Integrated Care and Telemedicine	5/05/2011	Visit	researchers
Giraff (Sweden)	euRobotics Forum	2/04/2011	Forum	Researchers industry
UMA (Spain)	Paper presentation at 2012 IEEE RO-MAN: The 21st IEEE International Symposium on Robot and Human Interactive Communication	11/09/2012	Event	Research
UMA (Spain)	Web news	25/03/2011	Web	In Spanish
UMA (Spain)	Press article	09/03/2012	Press	National (Spain)
UMA (Spain)	Press article	09/03/2012	Press	Regional (Spain)
UMA (Spain)	Press article	09/02/2012	Press	National (Spain)

ORU and Giraff (Sweden)	Grand opening of @home - Danderyd Hospital Giraff demonstrated a Giraff live and visitors could connect to our Giraff at Ängen in Örebro.	01/06/2012	Event	National
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Table 1: Activities Summary

7 Results

The large number of activities up till month M24 shows good exposure of the project to target groups which are defined in the D7.1M12. Those target groups are: caregivers and municipalities, primary and secondary users, scientific community and general public. As it might be seen from Tab. 1 all target groups were addressed in the reported work.

During the period from the start of the project until the M24, the number of scientific papers were published and a number of events were attended by the members of the project consortium. This allows to state a good level of exposure to the scientific community and expect a good overall level of citations in the following several years. The same can be said about our activities in dissemination of the project to general public and end-users and it can be confirmed by the website visitors statistics.