

4.2.4 Organization and participation at target events

The consortium members have participated during this first year in a number of target events. This activity has been carried out by presenting the project at related markets events, by visiting institutions interested in the project technology, and by giving presentations at Summer Schools, Workshops, e-health and ageing-well platforms conferences and meetings both at national and at European level. The main activities carried out are the following:

UNISI

- 1) Participation to the 2015 SIDRA PhD Summer School on Robot Control, July 13-15, 2015, Bertinoro, Forlì, Italy - Link: <http://www.automatica.it/RC.pdf>
- 2) Participation to the Workshop "Principles of Multi-Robot Systems" at the Robotics: Science and Systems (RSS) 2015 conference, July 16, 2015, Rome, Italy - Link: <http://mrs-rss2015.sciencesconf.org/>
- 3) BRIGHT 2015 - The UNISI unit participated at the the European Researchers' Night, which celebrated its 10th anniversary this year on September 25th, 2015. On this date, the researchers showed simultaneously their Lab research products in 280 cities across Europe and beyond. The Siena Robotics and System Lab-SIRSLab proposed live interactive demos in one of the main squares in Siena, Piazza Indipendenza. The wearable devices developed within the ACANTO project were greatly appreciated by the citizens and the general public. A flyer of the event is available [here](http://www.unisi.it/ateneo/progetti-di-ateneo/la-notte-dei-ricercatori-bright-2015/piazza-indipendenza/la-robotica). The official webpage of the event is available <http://www.unisi.it/ateneo/progetti-di-ateneo/la-notte-dei-ricercatori-bright-2015/piazza-indipendenza/la-robotica> (in Italian).
- 4) The paper M. Aggravi, S. Scheggi, D. Prattichizzo "Evaluation of a predictive approach in steering the human locomotion via haptic feedback" has been presented in the 2015 IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS 2015, September 28 -October 03, 2015, Hamburg, Germany - Link: https://ras.papercept.net/conferences/conferences/IROS15/program/IROS15_ContentListWeb_2.html#tuct15_06
- 5) Domenico Prattichizzo was invited speaker on Robotics at the cultural event "BIT CHIP WEB – La rivoluzione digitale" (the digital revolution) organised by the Italian Cultural Foundation "Niels Stensen" during the event "Novembre Stenseniano 2015", a series of conferences, round tables and films on socio-cultural topics related to the new challenges of the contemporary human being , October 24, 2015, Florence, Italy. The focus of the event has been on how the digital revolution and the social networks have changed our ways to communicate and to relate to each other. This evolution is able to impact not only the research world but also our society and our lifestyle with many consequences to be evaluated - Link: <http://www.stensen.org/?p=10705>
- 6) Talk given by Nicola Vitiello from Scuola superiore di studi universitari Sant'Anna, Pisa, Italy on "Wearable robotics for the social innovation" in Siena Robotics and Systems Lab of University of Siena, October 12, 2015, Siena, Italy.

FORTH

- 1) FORTH co-organized the IEEE Computer Society Workshop on "[Observing and understanding hands in action](#)" (HANDS 2015), in conjunction with CVPR 2015 in Jan 2015.

- 2) Co-organized a special session on “[Computational Intelligence applied to Vision and Robotics \(CIVR\)](#)”, in conjunction with IJCNN 2015.
- 3) Organized the special track ST3, “[Observing Humans](#)”, in conjunction with the International Symposium on Visual Computing (ISVC 2015), Las Vegas, USA in Dec. 2015.
- 4) Antonis Argyros gave a number of invited talks in conferences, where he disseminated the project objectives and work. More specifically:
 - a. Keynote talk at the **International Conference on Man Machine Interactions** (ICMMI 2015, <http://icmmi.polsl.pl/>), Beskids, Poland, October 6-9, 2015.
 - b. Keynote talk at the **8th ACM International Conference on “Pervasive Technologies Related to Assistive Environments”** (PETRA 2015, <http://www.petrae.org/>), July 1-3, 2015.
 - c. Invited talk at the IEEE workshop on “[Vision meets cognition: Vision meets Cognition: Functionality, Physics, Intentionality and Causality](#)”, in conjunction with IEEE **CVPR 2015, Boston, USA**, June 11, 2015.

UNITIN

- 1) Participation to the National Congress of the “Gruppo Misure Elettriche ed Elettroniche (GMEE)”, September 9-12, 2015, Lecco, Milano, Italy
- 2) The work “Ubiquitous Technologies for Older People” (Cozza et. al), accepted in Personal & Ubiquitous Computing, special Issue on “Histories of Ubicomp” (listed previously), has been used as teaching material for the HCI course of European Institute of Technology Master of Science in HCI, and for two thesis (BSc and MSc).
- 3) Organization of the 2nd Workshop on Computer Vision for Affective Computing (CV4AC), in conjunction with International Conference of Computer Vision (ICCV’15), Santiago, Chile, December 2015 - Link: <https://sites.google.com/site/wcv4ac2015/>

UNAN

- 1) The British Society of Gerontology Annual Conference (2015) was held at Newcastle. The Northumbria team were an active part of this conference, with Lynn McInnes on the program committee and her PHD student presenting a poster on why older adults wont exercise any more. Andrew McNeill presented work which over laps between Dali and Acanto on whether or not the design of artifacts can remove the stigma of using assistive walking technology.
Coventry, L. & McNeill, A. (2015) Stigma and assistive walking devices. British Gerontology Conference, July 2015

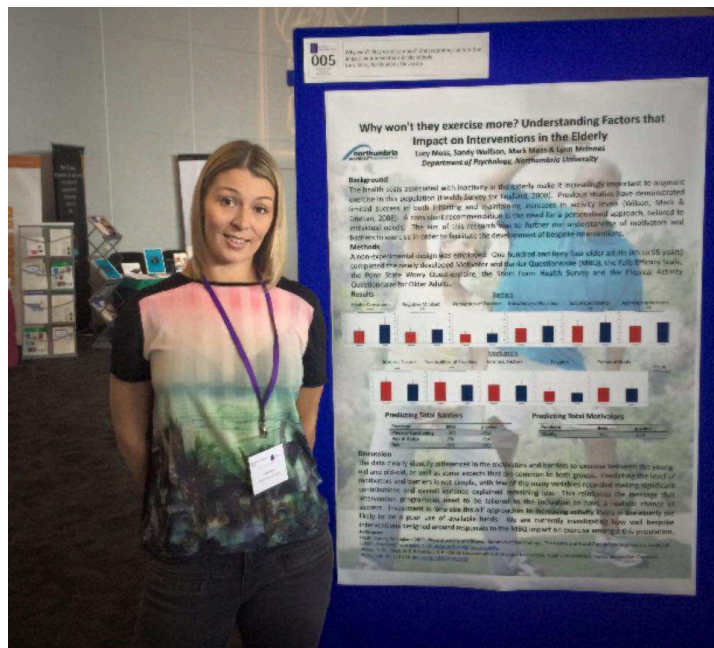


Figure 8. Lucy presenting her poster.



Figure 9. Poster session at British Society of Gerontology annual conference

ENVITEL

- 1) Envitel participated and co-sponsored the V annual conference Protecturi (<http://congresomadrid2015.protecturi.org/noticias>). Protecturi was held in Madrid during 29th and 30th of October of 2015 and was targeted at analysing the value of cultural properties as engines for the development of the countries. During this conference ACANTO project ideas were presented to selected representatives from national and international Museums and to the Spanish Cultural Assets Government.
- 2) At the II Port Security Sector Conference held the 11th of November of 2015, Envitel has the opportunity to hold a face to face meeting with security and safety cruise corporations representatives, who exposed their concern about the safety of old age passengers during their vacations in their ships, as the type of passenger is a

common client of theirs. ACANTO ideas and benefits were presented and we received a positive feedback from this market.

- 3) Envitel has participated in the Annual Axis Solution Conference, which is an excellent place to make presentations to clients regarding new activities and to check if the ideas and results of the innovative projects will have an interesting reception in the market. Some discussions were held regarding the concepts of safety and autonomy for older adults and how computer vision solutions can address them.

4.2.5 Collaboration with universities and the scientific community

Our ACANTO-specific scientific results are still preliminary at this stage, hence some activities have been carried out with other scientists. Our principal dissemination has been through discussions, seminars and talks, as listed below:

- 1) The habilitation (HDR) seminar held at Inria Rennes – Bretagne Atlantique on 18/11/2015.
- 2) Antonis Argyros, from FORTH, gave a number of invited talks in Universities, and research labs, where he disseminated the project objectives and work. More specifically:
 - a) Invited talk given at the **University of Surrey**, CVSSP, Guiford, Surrey, UK, January 21, 2016.
 - b) Invited talk given at the **Imperial College London**, EEE Department, London, UK in November 10, 2015.
 - c) Invited talk given at the **University of Cambridge**, Engineering Department, Cambridge, UK in November 9, 2015.
- 3) The work done during this first year has been used by UNITN and UNAN as teaching material for the HCI course of European Institute of Technology Master of Science in HCI, and for two thesis (BSc and MSc).

4.2.6 Face to face information

During this year we have worked with over 50 older adults in both Trento and Northumbria. This has provided exposure of the project to the intended user community.



Figure 10. Photo of participant exploring her social network with Andrew.



Figure 11. Photo of discussion group for design aesthetics for walking assistants.

In Madrid, SERMAS and ENVITEL have been in contact with different stakeholders and potential users explaining ACANTO concept, making sure of the understanding of the whole project idea and acquiring users requirements, though two main channels; by having individual problem interviews with geriatricians and occupational therapists and by observing and presenting ACANTO approach to older adults with different profiles in terms of age, gender and disabilities.



Figure 12. Interviewing and trying the prototype with old adults at Hospital of Getafe

Additionally, SERMAS made a presentation about ACANTO to all the staff of the Biomedical Research Foundation of the University Hospital of Getafe.

4.2.7 Summary of dissemination activities in Year 1

The following table summarizes ACANTO the most relevant measurable dissemination activities carried out during the period comprised between M1 and M12.

Activity	Outcomes of Y1
Publications	<ul style="list-style-type: none">- 11 papers in top conferences- 1 journal
Events and seminars	<ul style="list-style-type: none">- 1 participation in Summer School- 5 participation in Workshops- 3 participation and co-organization of Conferences- 7 talks as invited speakers at different events and Universities- 2 seminars/courses
Face to face meetings	<ul style="list-style-type: none">- Interviews and workshops with more that 60 old adults- Interviews with more than 10 stakeholders
Social Media	<p>Setting up of the Social Media infrastructure (Twitter, LinkedIn, Facebook, YouTube channel). ACANTO has started generating content in the social media in M10, as the first results had been achieved.</p> <p>Twitter:</p> <ul style="list-style-type: none">- 43 twits from ACANTO- 115 followers <p>Other social media: No relevant activity yet, but planned for Y2.</p>
Web Portal	Web portal has been created. Some interesting content about ACANTO has been published although it is still under development.
Clustering (collaboration with other projects)	ACANTO has been in contact and arranged some meetings with RAPP project (funded by FP7 of EC).
Presence in the media	<ul style="list-style-type: none">- 2 radio interviews- 3 press releases

4.3 Dissemination plan for Year 2 (M13 – M24)

With the objectives described in section 3.2, and based on the project milestones and deliverables, a dissemination plan has been developed for Year 2.

During the first year of the project, the partners have focused dissemination activities on raising awareness among users, stakeholders and policy makers/institutions while studying the potential of ACANTO in different market domains depending on its intrinsic problems and needs. Use cases have also been defined in order to extract the requirements and features that the ACANTO must address. Target users have been involved in the design process to ensure the development of usable, effective and acceptable devices, both from a social and from a market perspective, which will facilitate adoption.

The upcoming activities in Year 2 will be driven by MS5 with the release of first prototype and the MS8 that will report the user validation. The first prototype release and the foreseen validation activities will allow us to better understand ACANTO's project potential in the market place. In this evaluation phase, we will not only work with final users but will also engage other stakeholders to consider also their own evaluation on the second concept/prototype. Additional, the increasing maturity of the different modules will be shared with the community in different Workshop, conferences, events and collaborations with Universities or related projects.

Milestones	Actions		
	M13 – M16	M17 – M20	M21 – M24
MS5 (M15): Release of first prototype	D6.5 FriWalk prototype construction and FriTab interface release (first version)	Start testing prototype version of the FriTab and FriWalk Start presentations and product interviews with stakeholders	
MS6 (M15): Release of the first software components and definition of the real time issues for the cloud infrastructure	D7.2 Cloud infrastructure (preliminary) D7.4 Real-Time components for the cloud (preliminary)	Dissemination of results in Workshops and Conferences	
MS7 (M20): User requirement refinements after prototype testing		D1.7 User Requirements refinement report Dissemination to user groups	
MS8 (M24): User validation report to be used for the second prototype release	Review Analysis of ACANTO potential users and markets	Engagement of stakeholders for validation	D1.8 Design Workshop Report D9.2 Second annual dissemination report D9.5 Exploitation plan (preliminary) Press releases Dissemination of results in Workshops and Conferences
MS9 (M27): Final release of the components to	Planning interactions with related research projects	D3.5 Interpreting the social context (preliminary) D4.1 User profile repository	D2.2 Human motion Models (M24) D2.4 User, activity and

be integrated in the second prototype and preparation of final clinical validation		(preliminary) D4.3 Social activity repository (preliminary) D5.3 Activity planning (preliminary) D5.5 Activity monitor (preliminary)	environmental description (M24) D3.2 User state modelling and collaborative platform localization D4.6 User Communities creations based on user's profile matching (dynamic and adaptive profile) D4.4 Social activity Recommendations (M24)
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Table 5. Planning according to ACANTO's Milestones

5 Conclusions

The present document summarizes the dissemination project plan and the dissemination activities developed during the first project period (from February 2015 to January 2016). During the reported period, project partners have shown a high commitment regarding these activities, which are in line with the specifications detailed in the DoW. There are no major areas of concern; efforts will be maintained during the second year to increase the impact of the ACANTO project and contribute to its full success.

Primary conclusions / results include the following:

- A Dissemination Plan is essential to build awareness of a project results and maximize its commercial exploitation potential. The objective of this Dissemination Plan is to lay down the foundations for effective external communication of ACANTO concept and potential benefits to the interested stakeholders at an international level.
- To align appropriately the interests of all parties within the consortium and the fact that the external communication strategy depends on well-organized internal coordination.
- For dissemination to be effective it must evolve in parallel to project development.
- ACANTO results will be disseminated to a broad audience including private and public organizations, research community, industries, through activities such as workshops, conferences, journal publications and the internet.
- During the 1st year the framework for disseminating project activities has been setup.
- The ACANTO dissemination has been carried out in multiple forums that cover both academic and public awareness dissemination.
- In the following 30 months to come and as the project will be generating results that can be communicated to external audience the project dissemination activities are expected to multiply.

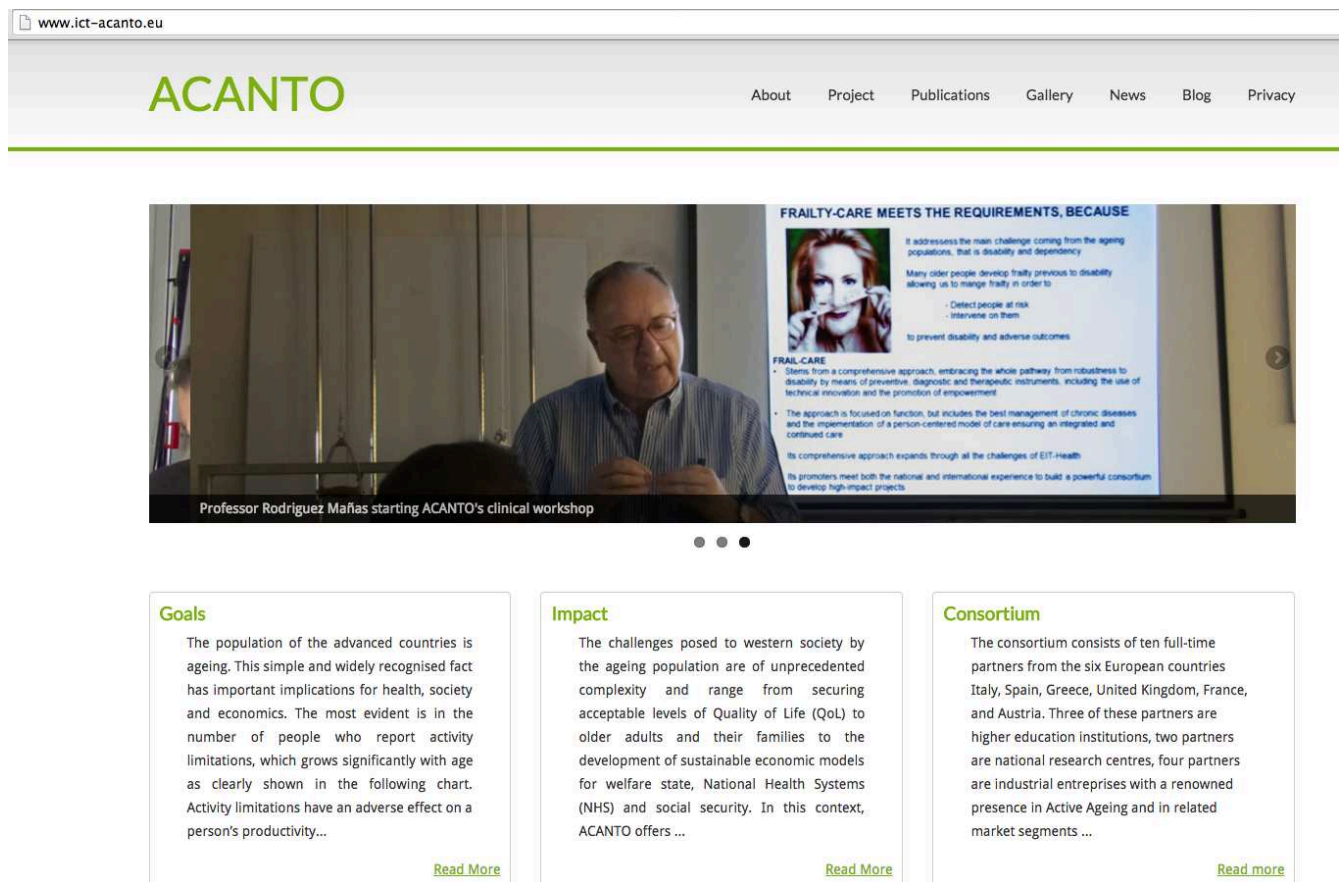
Appendix A: Project Logo

ACANTO

A CyberphysicAI social NeTwOrk
using robot friends



Appendix B: Project Website



Appendix C: Project Leaflet

www.ict-acanto.eu



A project supported by the European Commission under the Horizon 2020 program

01-Feb-2015 - 31-Jul-2018



www.ict-acanto.eu



ACANTO
A Cyberphysical social NeTwork
using robot friends



ACANTO
A Cyberphysical social NeTwork
using robot friends

The **ACANTO** project aims to increase the number of older adults who engage in a regular and sustained physical activity.

This result is sought by developing a **robotic friend** that supports the execution of everyday activities that entail a controlled physical effort in public spaces and an intelligent system that produces activity recommendation considering the habit and the preference of the user observed through the robot.

Our long term objectives are a 50% reduction of falls and traumatic events in the adults age class 75+, a reduction of the occurrence and of the impact of chronic diseases and a general **improvement of physical conditions and well-being**.

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OBJECTIVES

Development of a robotic friend (FriWalk) and the audio-visual interfaces (FriTab)



Development of a recommendation system for user activities.



Development of a cloud of supporting service in the environment.



Constant involvement of the different stakeholders.

INNOVATION

ACANTO will produce innovation in the following areas:

- a) **Sensing Technologies**
- b) **Interfaces**
- c) **Clinical practise**
- d) **Social Networks for user recommendation**




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