
HERMES - Cognitive Care and Guidance for Active Aging
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D9.3c Periodical Dissemination Report (Iss. 3)

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HERMES

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Abstract

This dissemination report describes the activities that have taken place with regards to dissemination in the third year of the project towards (i) the scientific community, (ii) the industry and (iii) the general public. The third year has focused on both the scientific community as well as general public, through dissemination activities involving press releases, newspaper articles and interviews that have been published in general media.

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1. Introduction

1.1 Scope of this Document

The purpose of this document is to outline the dissemination strategy and to report performed dissemination activities. This report shows the dissemination approach and activities that were held according to the dissemination plan for years 2010 and 2011, an approach which was partly defined in D9.3b.

The dissemination report is updated every year, and provides an overview of the current status. The dissemination report is also accompanied by an exploitation plan (D.9.4) which highlights particular activities undertaken towards the industrial community and further uptake of the HERMES project results in further exploitation activities.

2. Dissemination Methodology

The first objective of dissemination is to make the scientific and industrial community aware of project developments and results presenting the project in terms of technologies and socio-sanitary benefits.

The second objective is to present and promote the HERMES platform to potential stakeholders and to network with third parties that can add value to HERMES services and support HERMES final users.

2.1 Dissemination and Exploitation Approach

The approach is to link the market analysis with dissemination actions, in order to keep dissemination focused and pave the road for exploitation, as well as get a feedback on the project that can help tuning activities.

Interactions take place between:

- Market analysis and Exploitation Plan (requirements, potential customers, potential competitors)
- HERMES platform functionalities (build something usable from potential customers, in other words: describe benefits)
- Dissemination actions (self explaining)
- Selling strategies (exploitation plan)
- Customer support (exploitation plan)

According to the market analysis and the exploitation plan we tune the dissemination strategy to involve:

- End users
- IT companies
- Socio-Sanitary and Psycho-Social partners

The approach is based on an iterative analysis of:

- IT companies in the different areas of technological domains which could distribute the services achieved by the finalised HERMES prototype.

- End users (focusing on elderly and people with memory impairments), identified with the support of INGEMA to check real needs, level of acceptance and target distribution.
- Competitors of the technological solutions, to better position the platform on the market.
- Universities and research Centres to support the monitoring of the market and the steps achieved in the research activities.

2.2 Target Users

End-users of HERMES will be older people suffering from (self-indicated) age-related decline of cognitive capabilities or age-associated memory impairments (AAMI), i.e. people who have identified their own need for using some means of additional safety mechanisms and support. As cognitive decline is initially observed, in the majority of population, between the 50 and 60 years old age range, this is the initial stage in which the HERMES system becomes of interest to the general public.

2.3 Channels of Dissemination

After the identification of the potential business stakeholders, the next step is to reach all of them to disseminate the project results.

Dissemination actions are targeted to:

- Direct contacts by means of:
 - The research community
 - Industries and governments
 - The general public (meetings/seminars with groups of users)
- Indirect contact (“rain approach”) by means of:
 - Publications/Articles on specialized magazines
 - Advertising on magazines, internet sites, newsletters, etc.
 - Leaflet, posters, DVD, etc. (dissemination package)

2.4 Potential Business Stakeholders

Concerning HERMES potential business partners, the Consortium identified a list of categories that could give a precious contribution to improve the platform during and after the project period, as well as receive benefits coming from the adoption of HERMES and the achieved research results. A detailed description of potential business stakeholders is provided in D.9.4, Exploitation Plan.

3. Dissemination Plan

3.1 Highlights

The HERMES project addresses two main issues:

1. Adoption of advanced technologies aimed at seamlessly supporting elderly people with memory decline problems in real life.
2. Increase knowledge, awareness and participation in ageing and cognitive care R&D initiatives by EU.

To reflect both issues, dissemination activities target to:

- Research Community: dissemination of scientific results achieved in HERMES, mainly handled by Universities and Research Institutes through publications at conferences and workshops.
- Developers/Technical Community: IT partners who support industrial oriented external dissemination towards technical events, targeted seminars, workshops and conferences.
- End-Users. User groups and health organizations attending public workshops and advertising project results.

3.2 Events categories

	Event	Characteristics	Target group
1	Participation in international and national IT conferences.	Participation in scientific conferences on multimedia processing and knowledge extraction topics. Conferences can be international or national. Universities and Research Institutes take part in this activity. Reports are made in conferences and papers are published in conference proceedings.	Scientists, researchers, high quality designers and developers, representatives of well known IT companies.
2	Participation in international and national AAL-related conferences.	Participation in health-related conferences on ageing and memory decline and cognitive care topics. Conferences can be international or national. Reports are made in conferences and papers are published in conference proceedings.	Caregivers, experts in psychosocial topics, ageing, memory impairments, human interactions.
3	Submission of articles to scientific journals	Submission articles to scientific journals. The articles in international journals and magazines should be related to HERMES topics especially to multimedia processing and knowledge extraction. Universities and Research Institutes take part in this activity.	Scientists, researchers
4	Submission of articles to specific journals related to AAL thematic	Submission articles to health journals. The articles in international journals and magazines should be related to HERMES topics especially to elderly, cognitive care and memory decline.	Elderly, people with memory decline problems, caregivers, experts in psychosocial topics, ageing, memory impairments, human interactions.

5	International scientific workshops	International scientific workshops on multimedia processing and knowledge extraction.	Scientists, researchers, high quality designers and developers, representatives of well known IT companies
6	User-oriented dissemination workshops	User oriented workshops for bringing project ideas and results to users: workshops centered on the selected application domains in the countries where the test-beds are deployed.	Elderly, people with memory decline problems, caregivers, experts in psychosocial topics, ageing, memory impairments, human interactions.
7	Electronic advertising of project results through Internet	Electronic advertising of project results through Internet: distribution of Newsletter and other information through the Web; creation of a project's WWW server open to users and public; electronic mailing of information and announcements, etc.	Elderly, people with memory decline problems, HERMES business stakeholders
8	Presentation ideas and results in the mass media	Presentation ideas and results through public newsletters, magazines as well as radio and TV.	Elderly, people with memory decline problems, HERMES business stakeholders (including IT companies)
9	Presentation of results at the exhibitions and fairs	Presentation results at the national and international exhibitions, fairs and other expositions.	Elderly, people with memory decline problems, HERMES business stakeholders
10	Bringing project results to Expert Groups and other organizations	Bringing project results to Expert Groups and other organizations.	Caregivers, experts in psychosocial topics, ageing, memory impairments, human interactions.
11	Presentation of ideas and results via immediate and distance studies	Presentation of ideas, theoretical issues and results by lectures for students.	Academic community (students and professors).

Table 1 –Events categories

4. Dissemination activities report

4.1 Overview of Year 3

The dissemination activities in the third year of the project have been on the scientific dissemination of the developed system as well as on the networking activities among community.

Publications

For the first, scientific dissemination, all project participants have published project results on scientific workshops, conferences and journals. These publications target the technological developments with regards to audio and video capture and processing (mainly WP4 and WP5

in the project) as well as the insights about the cognitive games (WP6) and with respect to the graphical user interfaces (WP5). The list of currently published articles can be found in section 4.2. The list of submitted papers can be found in section 4.3.

EU and Clustering

In a similar vein, a number of events have been attended that focused on clustering and harmonization activities within the EU. An overview of attended events can be found in section 4.4 and other activities can be found in section 4.5. The activities and events can be grouped in following categories:



Figure 1: The HERMES booth at the ICT2010 in Brussels: The poster in the background summarized the basic idea of HERMES and an accompanying presentation showcased the usage. At the table in the foreground the multi touch monitor is ready for visitors to test the HERMES prototype.

- (i) Clustering within the domain of ambient assisted living within the EU, through participation in the support activities of the ICT & Ageing and SENIOR projects, as well as in the activities surrounding the Ambient Assisted Living Joint-Programme (i.e. the AAL Forum)
- (ii) The organization of own initiatives, including e.g. a workshop titled “Workshop on business models for elderly assistance technology”.

These activities are used to increase awareness for the HERMES project as well as focus on the more general aim of increasing visibility of the topic ambient assisted living within the scientific community.

ICT 2010

The HERMES system was represented with an own booth at the major ICT event in Europe, the ICT 2010 in Brussels from September 27-29th (see Figure 1). We presented the second integrated prototype in a live demonstration to the professional audience that also had the possibility to test the revised user interface on their own. The prototype was fully functional and included recording functionality via a camera next to the stand, which resulted in videos that were able to be accessed from the MyPast interface. Both the multi-touch home terminal and the PDA were on display for visitors to test out. Additionally, a video depicting the various features of the prototype was projected behind the stand, and the HERMES brochures were available for visitors to take with them. The professional audience was very interested in HERMES and we received a lot of positive feedback (see Figure 2).

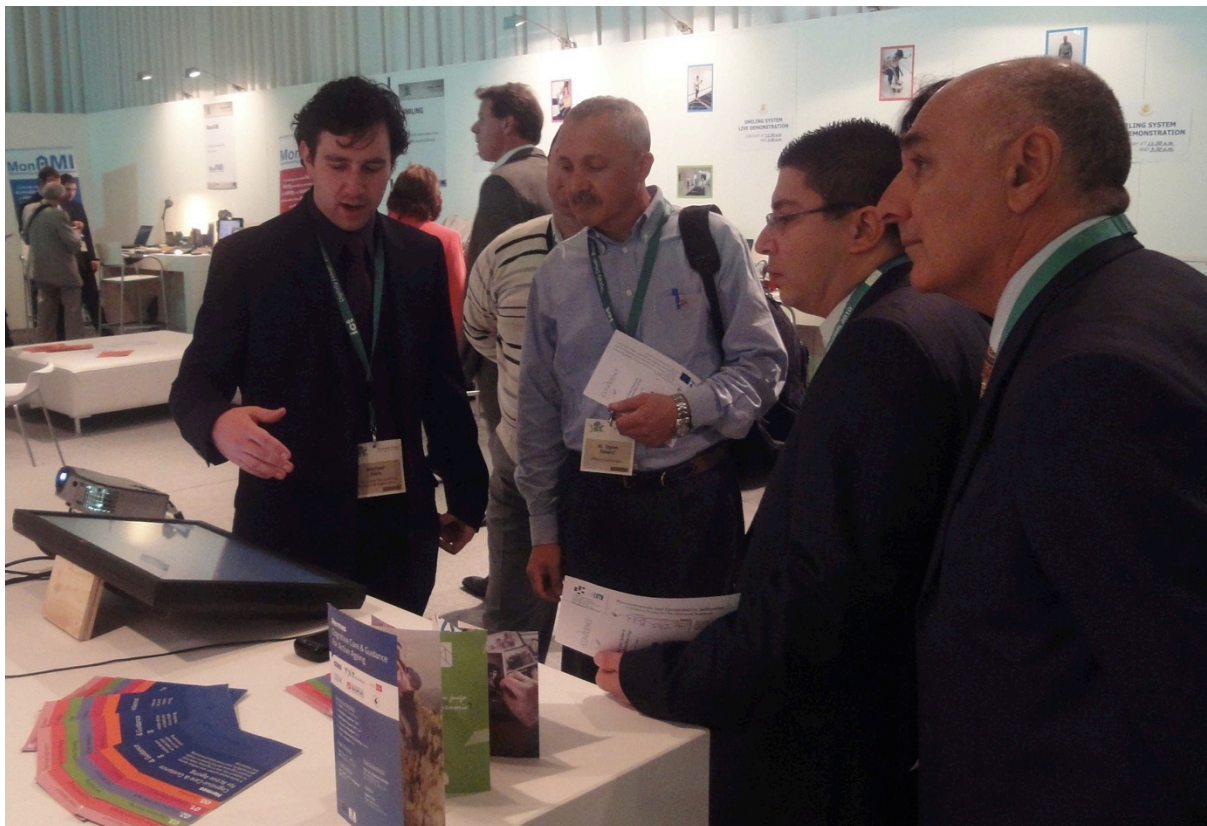


Figure 2: Michael Klein from CURE explains the revised HERMES user interface to an interested audience at the ICT2010.

4.2 Published scientific papers

The following scientific publications have been delivered in the final year of the project:

- [1] Andersen, M., Andersen, R., Katsarakis, N., Pnevmatikakis, A. and Z.-H. Tan, "Three-dimensional adaptive sensing of people in a multi-camera setup", special session on Person tracking for assistive working and living environments, EUSIPCO 2010, Aalborg, Denmark, Aug. 2010.
- [2] Aronowitz H, "Unsupervised Compensation of Intra-Session Intra-Speaker Variability for Speaker Diarization", in Proc. Speaker Odyssey, June 2010.
- [3] Aronowitz, H. And Aronowitz, V., "Efficient Score Normalization for Speaker Recognition", in proceedings of ICASSP, 2010
- [4] Buiza, C., Navarro, AB., González, MF., Geven, A., Tscheligi, M., Prost, S. (2010). Assessing the usefulness and acceptance of HERMES MyFuture system in two European Countries. Proceeding of the International Symposium in Ambient Intelligence (ISAmI 2010). (Eds.) JC, Augusto, JM. Corchado, P, Novais, C. Analide., AISC. 72 pp. 205-208.
- [5] Facal, D., González, MF., Navarro, A., Oppenauer, C., Geven, A., Prost, S., Tscheligi, M., Petsatodis, T., Pnevmatikakis, A., Theodoreli, V., Urdaneta, E., Yanguas. J (2010). Qualitative assessment of computerized-cognitive games for elderly people. *Abstracts of the IPA international meeting*. (Eds.) R. Mateos, K. Engedal, M. Franco (pp 294-295). ISBN 978-84-9887 -529 - 4
- [6] Feng Y, Ren J and Jiang J "A mixed ranking scheme for video retrieval" *Electronic Letters, ISSN: 0013-5194*, 46 (24): 1600-1601, 2011
- [7] González, MF., Facal, D., Navarro, AB., Geven, A., Prost, S., Tscheligi, M. (2010). External memory support for cognitive care, results from the first Hermes user trial. Proceedings of Workshop of Ambient Assisted Living, (IWAAL2010) (Eds.) D. López de Ipiña, J. Bravo (pp. 17-24). ISBN: 978-84-92812-67-7
- [8] Khelifi F. and Jiang J. "k-NN regression to improve statistical feature extraction for texture retrieval" *IEEE Transactions on Image Processing*, 20 (1): 293-298, 2011.
- [9] Lu C., Jiang J. and Feng G. "A boosted manifold learning for automatic face recognition" *International Journal of Pattern Recognition and Artificial Intelligence*, World Scientific Publishing, 24 (2): 321-335, 2010.
- [10] Petsatodis, T., Boukis, C., Talantzis, F., Tan, Z.-H. and Prasad, R. "Convex Combination of Multiple Statistical models with application to VAD" *IEEE Transactions on Audio, Speech and Language Processing*, minor revisions pending.
- [11] Pnevmatikakis, A. and Talantzis, F., "Person tracking in enhanced cognitive care: A particle filtering approach", special session on Person tracking for assistive working and living environments, EUSIPCO 2010, Aalborg, Denmark, Aug. 2010.
- [12] Qing C. and Jiang J. "An EDBoost Algorithm towards Robust Face Recognition in JPEG Compressed Domain" *Image and Vision Computing, ELSEVIER*, 28 (12): 1659-1670, 2010.

- [13] Qing C., Jiang J. and Yang Z., "Empirical Mode Decomposition based Facial Pose Estimation inside Video Sequences" *Optical Engineering*, doi:10.1117/1.3359510, SPIE, 49. 2010.
- [14] Ren J. and Jiang J. "Activity-Driven Content Adaptation for Effective Video Summarization" *Journal of Visual Communication and Image Representation*, Elsevier, 21 (8): 930-938, 2011;
- [15] Ren J., Jiang J., Chen J. and Ipson S.S. "Extracting objects and events from MPEG sequences for video highlights indexing and retrieval" *Journal of Multimedia*, ISSN: 1796-2048, Academic Publisher, 5 (2): 95-103, 2010;
- [16] Sorin, A. et al, "Speech processing and retrieval in a personal memory aid system for the elderly". To appear in Proc. ICASSP 2011, May 2011.
- [17] Theodoreli, V., Petsatodis, T., Soldatos, J., Talantzis, F. and Pnevmatikakis, A., "A Low-Cost Multi-Touch Surface Device supporting Effective Ergonomic Cognitive Training for the Elderly", *International Journal of Ambient Computing and Intelligence*, Vol. 2, No. 3, pp. 50-62, July-September 2010.

4.3 Submitted scientific publications

In addition to the published papers, the following papers have been submitted to journals and conferences related to the HERMES project:

- [1] Conconi, A., Cattaneo, F., Pnevmatikakis, A., Soldatos, J., Prost, S., Tscheligi, M. HERMES: A pervasive system for memory support and ambient assisted living. Submitted to ICSOFT 2011, Sevilla.

4.4 Attended events

Event	When and Where	Who	Description
Workshop on Computer-aided Healthcare.	7-8 th of March, 2011, Beijing, China	UniBrad	A case study in HERMES: How intelligent video processing could help computer-aided health care? A presentation was made to introduce the HERMES project and part of the work on video content analysis, leading to memory aid technology and its potential roles for modern health care.
Workshop on business models for elderly assistance technology	21 st May 2010, Milan	TXT	TXT organised and hosted in Milan a joint workshop and panel discussion with the projects OASIS and PERSONA focused on exploitation and business models for elderly assistive technology. Representatives from industry, public organizations and research were invited. The panel discussion gave valuable input to HERMES exploitation plan definition.

Event	When and Where	Who	Description
II International Workshop on Ambient Assisted Living - IWAAL2010	7-10 th September, Valencia	INGEMA	IWAAL promotes the collaboration among researchers in this area, concentrating efforts and detecting quality of life, safety and health problems of elderly people at home. INGEMA presented the work titled: “ <i>External memory support for cognitive care, results from the first Hermes user trial</i> ”, in this congress receiving valuable input from the technological community.
AAL Forum 2010	15-17 th September 2010, Odense	CURE	The AAL Forum is an information and discussion platform for stakeholders, scientists and end users. HERMES had been successfully presented at this major European event about Ambient Assisting Living.
Wiener Forschungsfest 2010	18-20 th September 2010, Vienna	CURE	At this local scientific event Austrian research organisations and companies had the possibility to present actual projects to interested visitors. CURE presented the second integrated prototype of HERMES successfully and the audience was very interested in it. Many questions were asked and we received a lot of positive feedback.
International Meeting of the International Psychogeriatric Association (IPA) 2010	26-29 th September 2010, Santiago de Compostela	INGEMA	In this congress different healthcare professionals from all over the world discuss, learn, share, and research information about behavioral and biological aspects of geriatric mental health with the aim of promoting better geriatric mental health – across disciplines, across borders, and across geriatric issues. In this context INGEMA presented the work “ <i>Qualitative assessment of computerized-cognitive games for elderly people</i> ”, which received a lot of attention due to the novelty of the topic in the congress as well as feedback from the healthcare professionals.
ICT 2010	27-29 th September 2010, Brussels	CURE, AIT, TXT, IBM	The second integrated prototype of HERMES had been successfully presented at this major European event about ICT in Europe. The audience was very interested in HERMES and we received a lot of positive feedback (see section 4.1 above).
Aml 2010	10-12 th November 2010, Malaga	CURE, AIT, INGEMA	CURE, INGEMA and AIT successfully submitted a workshop proposal at the Aml’10 Conference (www.ami-10.org) on the subject “Designing Ambient Interactions - Pervasive Ergonomic Interfaces for Ageing Well”. Unfortunately, due to the lack of interest the workshop finally had to be cancelled.

Event	When and Where	Who	Description
HERMES-VitalMind Workshop about cognitive support technology for older people 2010	15 th December 2010, London	CURE, TXT	The EU funded projects HERMES and VitalMind organised a workshop about cognitive support technology for older people. In this workshop the state of the art of accordant technology was explored and it was discussed how technology can help the elderly to preserve their quality of life, describing which work several research groups have done and are doing in the area of cognitive training and assisting technologies.

4.5 Other activities

Event	When and Where	Who	Description
IBM press-conference on HERMES and Smart Home technologies	17 May 2010. Press teleconference.	IBM	HERMES project has been presented to British media people at a phone press-conference organized by IBM. The conference attracted a mixture of journalists and bloggers with 19 people live plus downloaded by at least 86 unique users following the call.
Athens Digital Week	7-10 Oct. 2010, Athens, Greece	AIT	For the third year in a row AIT participated in this public technology event, showcasing the HERMES video tracking systems. The general public had the opportunity to learn about the HERMES objectives and to try the HERMES monitored space themselves.

5. Planned activities

Planned activities are categorized by the same event categories that have been highlighted in chapter 3 (Dissemination Plan). The events planned for 2011 are described in the table below.

5.1 Scientific Dissemination Planning

Event	When and Where	Who	Description
AMI 2011	16-18 th November 2011, Amsterdam	CURE / AIT / INGEMA	The conference aims to bring together researchers from academia and industry from various disciplines that constitute the field of Ambient Intelligence to present the latest results, discuss the state of art and think about the future. Starting as the European Symposium on Ambient Intelligence in 2003 the conference has grown to an annual international event that brings together researchers and serves as a forum to discuss the latest trends and solutions. Following the publication of early scenarios on Ambient Intelligence in 2001 by the European Commission's Joint Research Centre, the theme of AmI-11 will focus on the "The Road Ahead, Shaping the Next 10 years". The consortium plans to submit a paper about the outcomes and implications of HERMES.
ASSETS 2011	24-26 th October 2011, Dundee	CURE	The ASSETS conference explores the use of computing and information technologies to help persons with disabilities and older adults. ASSETS is the premier forum for presenting innovative research on the design and use of both mainstream and specialized assistive technologies. CURE plans to submit a paper on the topic of User Interfaces for Assistive Technologies.
Ubicomp 2012	tbd	CURE	Ubicomp is a premier venue for presenting research in the design, development, deployment, evaluation and understanding of ubiquitous computing systems. Ubicomp is an interdisciplinary field of research and development that utilizes and integrates pervasive, wireless, embedded, wearable and/or mobile technologies to bridge the gaps between the digital and physical worlds. CURE plans to submit a paper about Technology Acceptance of HERMES.

Event	When and Where	Who	Description
CHI 2012	5-10 th May 2012, Austin	CURE	The ACM CHI Conference on Human Factors in Computing Systems is the premier international conference of human-computer interaction. CHI 2011 focuses on leveraging our diversity and connecting people, cultures, technologies, experiences, and ideas. CURE plans to submit a paper on User Experience and Technology Acceptance.

Table 2: Planned Scientific Dissemination Events for 2011

5.2 Awareness of AAL and Clustering Planning

After the end of the project, HERMES will continue clustering activities through 2011, and all HERMES partners will participate in these activities as much as possible when deemed useful for harmonisation and exchange of HERMES results with other European AAL projects.

In particular, HERMES partners plan to attend the following events:

Event	When and Where	Who	Description
AAL Forum 2011	26 th -28 th November, Lecce, Italy	CURE	The AAL Forum's workshops, exhibition, poster sessions and social events will offer a broad variety of opportunities to get an overview, to exchange views and discuss controversial perspectives and ideas on the domain of ambient assisted living.
European eHealth Week 2011	10 th -13 th May, Budapest	CURE	The eHealth Week 2011 will focus on the cost and quality benefits of IT solutions for healthcare in Europe. It will not only offer an insight into how our leaders are planning and investing for the future, but will also present an exhibition which will showcase leading industry partners, offering innovative solutions for our future. The four-day event will feature educational sessions, an exhibition, workshops and many networking opportunities.

5.3 Public Dissemination

Public dissemination in 2011 will continue with frequent media awareness in the national press about the project and its results. Furthermore, the project website will remain online and updated. It will provide all insights achieved for further projects or publications in the domain of AAL and/or memory support systems. After the final review meeting in Brussels we will publish a press release in order to inform about the major achievements of HERMES.