

## **Clustering Event Ambient Intelligence Advanced Technologies in Support of Healthcare and Assisted Living**

The REACTION Consortium organized a Clustering Event on *Ambient Intelligence Advanced Technologies in Support of Healthcare and Assisted Living*, that took place at the Foundation for Research & Technology - Hellas, in Heraklion, Crete, Greece, on 26-27<sup>th</sup> September, 2013.

The aim of the clustering event was to bring together European projects for demonstrations, presentations of innovative solutions, and discussions of potential synergies and cooperation. A total of 25 European projects were represented in the event. The titles of the projects are presented in Annex 1. The project presentations were clustered in five thematic areas (see list below), and each area was represented by 4-7 projects.

- 1) Personal health systems for Diabetes,
- 2) Personal health systems,
- 3) Social care through Robots,
- 4) Social care,
- 5) Falls.

The event attracted nearly 60 participants from 15 European countries, including two Project Officers representing the European Commission (EC) and particularly the Directorate-General Communications Networks, Content and Technology. Participants' organizations included 15 Universities, 8 Companies, 5 Research Centres, and 2 Health Care Organizations.

The event was an open meeting offering an opportunity to projects to present their progress and results and allowing participants to establish connections and exchange information about their activities. Best practices but also concerns about projects, research and collaboration were also exchanged. Participants had the opportunity to meet and discuss with people who were involved in projects in the same areas identifying complementarities and potential synergies. The presence of the two Project Officers was particularly important for participants, as they got an overview of EC activities and they were able to ask questions in an informal setting.

Several areas of complementarity among projects were identified. As one participant expresses "we have similar issues, it would be good to discuss what different projects do and combine the information." As a follow up towards this direction, the Commodity 12 project proposed a workshop on diabetes projects at the ATDD congress of February 2014 in Vienna, and invited the other four projects in the session to participate in the joint workshop.

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During the discussions, some common concerns were raised about the use of standards and mainly interoperability standards, impact evaluation and exploitation as issues that do not have straightforward or easy solutions. In general, it was agreed that the sustainability of implemented solutions is a major issue. Also, common methods for measuring impact need to be established, distinguishing long term and short term impact. In addition, the paradigm shift towards community and integrated care was discussed and it was agreed that it is important to assure and promote user involvement at an early stage of the project and even as early as the proposal design. The subsequent discussion addressed how to involve all stakeholders and ambassadors early on to develop a common language, but also how to find ways to reimburse clinicians and end users for their work in the context of EC projects.

Several needs were also identified in relation to promoting the use of projects' outcomes by clinicians after the end of the projects, effective sharing of knowledge and communication, and the importance to take advantage of complementarity of projects. For example, as one participant expressed it: "We all use similar methodologies to identify user requirements, so why not share these methodologies." Defining areas of collaboration will help organize the work within the project accordingly. However, it was suggested that collaboration should be on a voluntary basis and take into consideration resources and effort.

In general, it was agreed that knowledge should be shared and that events like the clustering event should be repeated in the context of concentration activities as foreseen by the EC. Suggestions also involved organizing meetings between projects on a regular basis and supporting spontaneous cooperation, establishing horizontal working groups for regulation, exploitation and impact evaluation studies, and also developing collaborations between the technical people per topic such as algorithms, low energy sensors, robotics, etc.

Overall, the participants were very enthusiastic about the event and were strongly in favour of organising a similar meeting next year.

ANNEX 1

<b>PROJECT</b>	<b>TITLE/DESCRIPTION</b>
1. Accompany	Acceptable robotics companions for ageing years
2. Antilope and Shared Care Platform	Adoption and take up of standards and profiles for eHealth interoperability and functionality to establish cross sector collaboration and continuity of care
3. AP@home	Artificial pancreas at home
4. BackHome and BrainAble	Brain-neural computer interfaces on track to home – Development of a practical generation of BNCI for independent home use Autonomy and social inclusion through mixed reality Brain-Computer Interfaces: Connecting the disabled to their physical and social world
5. Care@Home	Enabling empowerment, wellness and social care services to the home of the elderly through interactive multimedia SmartTV
6. Commodity12	Continuous multi-parametric and multi-layered analysis of diabetes type 1 & 2
7. Dali	A special walker for seniors with cognitive impairments
8. Dem@Care	Dementia Ambient Care: Multi-sensing monitoring for intelligent remote management and decision support
9. eHealthMonitor	A service-oriented platform used in the process of generating a personal eHealth knowledge space (PeKS) as an aggregation of all knowledge sources relevant for the provision of individualized personal eHealth services
10. Empower	Support of patient empowerment by an intelligent self-management pathway for patients
11. e-No Falls	European network for FALL prevention, intervention & security
12. Farseeing	Fall repository for the design of smart and self-adaptive environments prolonging independent living
13. Fate	Fall detector for the elderly
14. GiraffPlus	A complex system which can monitor activities in the home using a network of sensors, both in and around the home as well as on the body
15. GoCarb	A computational system which will support individuals with type 1 diabetes in automatically estimating the grams of carbohydrate in a meal in near real-time
16. Hobbit	The mutual care robot
17. I-Dont-Fall	Integrated prevention and detection solutions tailored to the population and risk factors associated with falls
18. inCasa	Integrated network for completely assisted senior citizen's autonomy
19. MobiGuide	An intelligent evidence-based system for patients with chronic illnesses; it analyses bio-signals from body-worn sensors and gives advice 24/7
20. MovingLife	Roadmaps for technological research, implementation practice and policy support with the aim of accelerating the establishment, acceptance and wide use of mobile eHealth solutions that will support lifestyle changes among citizens and improve disease management globally
21. p-Medicine	From data sharing and integration via VPH models to personalized

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<b>PROJECT</b>	<b>TITLE/DESCRIPTION</b>
	medicine
22. Reaction	Remote accessibility to diabetes management and therapy in operational health care networks
23. Rempark	Project is to develop a personal health system (PHS) with closed loop detection, response and treatment capabilities for management of Parkinson's disease patients
24. Saapho	Secure active ageing: participation and health for the old
25. Universaal	Universal open platform and reference specification for ambient assisted living