The European Next Generation Ambient Assistend Living Innovation Alliance – AALIANCE2

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Abstract: The AALIANCE2 project is a Coordination Action funded by the European Commission’s ICT Programme within the 7th European Framework Programme. Starting in September 2011, seven partners from six European countries continue the activities and extend the wide network already established in the AALIANCE innovation platform (2008-2010). This paper summarises project aims and results to be expected soon.

Keywords: 7th European Framework Programme, AAL, AALIANCE2, Ambient Assisted Living, business models, coordinated action, market review, networking, standardization, www.aaliance.eu.

Introduction
Subject of the AALIANCE2 Coordination Action will be Ambient Assisted Living (AAL) solutions based on advanced ICT technologies for ageing and wellbeing of older persons in Europe. The consortium consists of the partners AGE Platform Europe (B), Deutsche Telekom (D), Fundacion Tecnalia Research & Innovation (E), OFFIS e.V. (D), Scuola Superiore di Studi Universitari e di Perfezionamento Sant’Anna (I), Tunstall Healthcare (UK), Stichting Zuidzorg (NL).

Central aims of AALIANCE2 are:
- to form a European Technology Platform focusing not solely on technology but on integrated solutions for a societal challenge,
- coordinating the various industries of European industry and research institutions in the field of Ambient Assisted Living by building consensus upon research priorities in a AAL Roadmap and Strategic Research Agenda for the upcoming decades,
- providing recommendations for an overcoming market barriers and effective regulations in AAL markets,
- investigating the current state-of-the-art and market developments in AAL in North America and Asia,
- collect and consolidate standardisation requirements in the field of ICT and well-being (incl. care and healthcare standards).

AAL roadmap and strategic research agenda
The first AALIANCE project developed and delivered in 2010 a first AAL Roadmap [1] and AAL Strategic Research Agenda [2]. Both documents were well received by the international AAL community. However, due to the wideness of the AAL sector, which covers (a) numerous ICT applications as well as enabling key technologies and stakeholders; (b) the continuous evolution of the ICT sector in terms of technological development and new products in the market; and (c) the continuous demanding of technology for assistance and support from primary stakeholders (end-users and caregivers), roadmapping activities are still needed.

AALIANCE2 focuses on the most important social arenas of “ageing well”, including those applications in which older people are at home, on the move and in the community. In order to ensure that the technology roadmap will respond to the social needs, it will start from the social arena and move from (innovative technology-or technology/service-based) applications to the underlying technologies. On the time line, AALIANCE2 will consider the most relevant R&D corridors (short-, mid-, longterm with a 15 years’ horizon) to AAL for a number of research topics, such as micro and nano systems, embedded systems, mobile and wireless systems, eInclusion, micro-electronics, software, web & network technologies, human machine interfaces, energy generation and control technologies, new materials, and robotics.

Updating was performed due to expert contributions and excellence workshops in Pisa (February 2012) and Eindhoven (September 2012). Discussion groups were organised by comprehensive session topics for “sensing”, “reasoning”, “acting”, “interacting” and “communicating” in order to receive well-structured results. The updated versions of the AAL roadmap and the AAL strategic research agenda are available on www.aaliance.eu.

AAL market and business model review
As an industry-driven network, AALIANCE2 collects and presents best practise solutions in various AAL market segments, as well as business models that are considered worth of influencing the development of business models for similar products and services in other countries and regions and with other stakeholders involved. In this respect, the work performed is closer to highlighting selected findings that are considered of essential importance for deployment, rather than investing time and efforts into developing theoretical concepts of AAL related business models.

Market reviewing is focused on developments in the countries of the partners, analysing and interpreting the different infrastructures and societal and legal circumstances, comprehensively added by key indicators for market developments and trends in Europe. This exercise has identified gaps between current product and service

Unauthenticated
offerings, and missing activities required for the delivery of emergent market models. Business model analysis is based on inputs gained with interviews from stakeholders such as

- **policy makers** to capture current status and trends in relation to policy, law and regulation & reimbursement for AAL,
- **representatives of health & care organisations** to capture current status and trends in relation to policy, reimbursement, service delivery options and impact on business models for AAL,
- **healthcare professionals** to capture current status and trends in relation to emergent care models, clinical acceptance, outcomes and reimbursement,
- **consumer-representative organisations** to capture current status and trends in relation to AAL business model requirements. Here, identification and creation of selective ‘story-boards’ for emergent business and service models for validation with end-user focus groups is one of the key actions,
- **representatives of provider organisations** to capture current status and trends in relation to AAL provider business models, interworking and interoperability between providers.

The summary analysis of market and business models for AAL identifies trends in relation to commissioners, consumers and the professional healthcare community as well as market channel & partnership opportunities across public & private business and market barriers and gaps in service and product delivery. It finally provides recommendations for onward research and market/business model development.

**Standardisation**

One of the key market barriers is the lack of modularity and interoperability of different solutions, technical components and process models for AAL. Thus, one of the key targets for standardisation work in AALIANCE as well as in AALIANCE2 is to increase the awareness on existing standards in current R&D in order to “avoid inventing the wheel over and over again”. Furthermore, demonstrating the advantage of collaborative and integrated applications and services based on using standards, as well as development and promotion of design guidelines and a certification process for AAL products and services are results of this coordination action. AALIANCE2 established an on-line repository describing and referencing existing standards that are of relevance for system developers the field of AAL. These standards come from different disciplines such as home automation, information technology, medicine, electrical engineering, telecommunication and economics. They cover aspects like home automation field buses, software infrastructures for AAL, medical terminology, smart metering, communication protocols, and quality management systems. The repository focuses on European (CEN, CENELEC, ETSI) and international (ISO, IEC, ITU) standards but also includes relevant industry (IEEE, W3C, OASIS etc.) and national standards in those fields where no international standards exist yet. The goal of this work is to increase the awareness of system architects and developers for the large body of standards that is already available for use with AAL [3].

Meanwhile, four public expert workshops were organized and performed, focusing reviewing the existing landscape of standards relevant for AAL as documented by AALIANCE2, as well as identifying future needs for new standards, certification programmes and organizational structures for promoting better interoperability in the AAL sector. The AALIANCE2 repository of standards was made available for all registered participants of the workshops for review and contribution. The repository will be available to the interested community as an official deliverable of the project.

**Ready to contribute?**

The AALIANCE2 consortium created the AALIANCE2 network of AAL stakeholders working to develop, exploit and deploy AAL services and technologies able to improve wellbeing, quality of life, independence and sociality of European and worldwide older persons. The AALIANCE2 network provides the opportunity

- to connect stakeholders from different areas and countries,
- to be informed and updated about events and opportunities related to AAL sectors,
- to participate to workshops and studies for dealing with critical issues for the diffusion of AAL in real society and promoting innovative and effective solutions to the European Commission and AAL community.

More information how to join the AALIANCE2 network and to benefit from the work in AALIANCE2 is provided on the website [www.aaliance.eu](http://www.aaliance.eu).

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**Bibliography**

