IMPACTING INDIVIDUALS, SOCIETY AND ECONOMIC GROWTH

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Mediated Social Interactions: a Personal Assistant to Enhance the Social Life of the Seniors 103

INTRODUCTION: Social interaction evaluation during the testing of AAL solutions: NACODEAL case study 109

SESSION A3 111

Summary 113

The Capability Approach as an Evaluation Framework for ICT for Older Adults 119
Dynamic nutrition bEhaviour awareness sysTem for the Elders 123
HOST: Smart technologies for self-service to seniors in social housing 127

INTRODUCTION: Trust is the key to success 133

SESSION A4 135

Summary 137

A decubitus prevention system empowering care professionals and informal carers 141
Acceptance and Usability of a Technical Support System for Ambulant Palliative Care 145
INTRAODUCTION: Usability and feasibility of an interactive mobile phone application including a health measure, self-care advices and alarms 153
INTRODUCTION: eSenior - how to deal with chronic condition at home 155

SESSION A5 157

Summary 159

MyGuardian: A Pervasive Guardian for Elderly with Mild Cognitive Impairments 165
A multilingual web platform supporting informal carers in 27 EU member states 171
RelaxedCare - Unobtrusive connection in care situations 175
INTRODUCTION: Care4Balance: Balancing informal care through multistakeholder service design 181

SESSION A6 183

Adaptive Guidance for the Mobile Elderly 185
Getting routable data for indoor navigation used by rollator users 189
WayFiS: Personalized way finding service for seniors 195
ICT as a tool for maintaining older people’s mobility 201
ALICE - Assistance for Better Mobility and Improved Cognition of Elderly Blind and Visually Impaired 207
INTRODUCTION: T&TNET 213

TRACK B 215
SESSION B1 217
Summary 219
MyGuardian: A Pervasive Guardian for Elderly with Mild Cognitive Impairments 225
INTRODUCTION: Highlights from the four stage user involvement in the project SI-SCREEN/Elisa 229
INTRODUCTION: Connect - Design for an Empathic Society 231
SESSION B2 233
Summary 235
SESSION B3 241
Summary 243
TMGMT - A Translation Management Tool for Multilingual Online Communities 247
INTRODUCTION: Free assistive technology for immigrants 251
SESSION B4 253
Summary 255
Care Innovation Space Flanders: real-life experimentation and impact testing of innovative solutions for elderly care in large-scale living labs 259
Living Labs action activated in Puglia Region (Italy) 263
The Living Lab Schwechat as a base for AAL developments for the benefit of the ageing society 267
The iStoppFalls Living Labs: Putting fall preventive technology in older adults’ homes – lessons learned from our elderly co-creators 273
Social innovation in active and healthy ageing using living lab method 279
INTRODUCTION: The Great Northern Haven Living Lab - 3 years on 285
SESSION B6 287
Summary 289
Health care is coming home – but how to open the door? 297

TRACK C 301
SESSION C1 303
INTRODUCTION: Challenges and experiences from implementing AAL solutions in European care organizations
INTRODUCTION: Marketing or no marketing for my product
SESSION C2
Integration of AAL – Technologies and social work: Key to success? The social business case SmartCompanion – From applied science to first AAL products Business Model Analysis for AAL The AALOA exploitation model for AAL project results Assistive Technology and Housing for Older Persons INTRODUCTION: The technology shift for social alarms into IP is making way for AAL INTRODUCTION: How an AAL business model based on offering freedom of choice has turned into a great commercial success
SESSION C3
Summary How to optimize your product with a business case tool (BLoC): Impact for AAL projects - demo of the tool and results of its use - VHS – the VictoryaHome&SAGIO method for successful market orientation starting at the kick-off meeting FOOD: bringing AAL solutions to mainstream white-goods market Don’t blame everybody else! Third Age Online: Innovative Aging as a Business Model
SESSION C4
Summary
SESSION C5
Summary
SESSION C6
Summary
TRACK D
SESSION D1
SESSION D3 405
AAL4ALL: Integration of individual approaches into a national scale pilot 407
INTRODUCTION: Large Scale Integration and evaluation of AAL Technologies in Eastern Austria - the moduLAAr project 411
SESSION D5 413
Summary 415
OTHER EVENTS 420
EXHIBITION 421
POSTER EXHIBITION 422
POSTER SESSIONS 423
YOUNG RESEARCHERS WORKSHOP 424
FIELD VISITS 427
OPENING EVENT 429
CLOSING EVENT 431
SUPPORTED BY 433
NEW TOOLS FOR HEALTH 435
CITY OF NORRKÖPING 437
VINNOVA 439
COUNTY COUNCIL OF ÖSTERSUND 441
EAST SWEDEN CONVENTION BUREAU 443
CITY OF VÄSTERÅS 445
THE AALOA EXPLOITATION MODEL FOR AAL PROJECT RESULTS

Hanke S.1, Furfari F.2, Lázaro Ramos J.P.3, Potortì F.2

Abstract
AALOA, the Ambient Assisted Living Open source Association, was born to create an environment to foster initiatives linked to AAL. AALOA offers an environment where people and organizations can start an AAL project. Most projects are expected to be software projects, to be released using a Free / Libre / Open Source software licence, but other types of activities, like research, conference organization, standardization and lobbying are envisioned as well. This paper illustrates the idea of the Ambient Assisted Living Open Association, the actions initiated by AALOA and those planned for the future. The main focus is on the exploitation possibilities which AALOA provides to the outcome of several European and non-European projects. A collaboration here would be a win-win situation. On one side, AALOA has already appropriate prominence and is linked to European strategies which can help to group people and associations around different project results and to position them in the right way and manner. On the other side AALOA is depending on the community and on the projects it hosts. To demonstrate this ambition and to give a demonstration for other European projects, the paper presents the identified exploitable results of the universAAL FP7 project and their planned incubation in AALOA.

1. Introduction

Production of software infrastructures supporting AAL (Ambient Assisted Living) is the core topic of a number of EU projects some already completed, some still running. The legacy of these projects should not be allowed to die; rather, there is the need to promote them and support their evolution and maturation. This can best be done through an independent, non-profit association open to individuals, institutions and industry. In this sense, AALOA has so far been the actor of several political and strategic activities in Europe.

[1] AIT Austrian Institute of Technology GmbH, sten.hanke@ait.ac.at
and IPN - Instituto Pedro Nunes - Laboratory of Automatics and Systems
[2] CNR-ISTI
[3] TSB Tecnologías para la Salud y el Bienestar
One aim of the Ambient Assisted Living Open Association (AALOA) is to fulfil its role by helping European research projects to exploit their results and to maintain them after the project lifetime. AALOA has already incubated some activities which follow now their own strategy including different stakeholders and interests. Prospective incubations in AALOA are based on exploitable results from the universAAL\(^1\) FP7 European project. These incubations will play a major role as the resources on which the ReAAL\(^2\) CIP project is built. ReAAL is committed to deploy the universAAL platform to 7000 houses all over Europe.

2. Ambient Assisted Living Open Association (AALOA)

So far AALOA has worked on some activities to build support around the ideas of the Manifesto which you can find on AALOA’s website at <http://aaloa.org>.

First to mention, we organized and set up the AMB’11 workshop in Brussels and the Lecce Declaration, which are natural continuations of the Manifesto. The AMB’11 workshop focused on the problems that have been experienced by companies trying to establish business in the young AAL market and discussed possible solutions. AMB’11 on June 7, 2011, was organized by AALOA and eInclusion and supported by AALA. The workshop brought together representatives from technology and service providers in the AAL ecosystem, representatives from AAL platform projects and representatives from European funding agencies, all in all 42 participants. The goal of the workshop was to identify topics for newly funded, joint projects that would lead to faster, cheaper or more flexible product development of AAL products and services, as well as obtain feedback from the industry on the form and content of possible new funding measures in the AAL area. Since the premise of this workshop was that all stakeholders in the AAL market would greatly benefit from a widely adopted platform, this workshop tried to achieve its goals by focusing on existing platforms suitable for AAL, analyzing the barriers for the widely adoption of a platform by the industry and trying to define measures to increase the adoption of at least one platform.

The Lecce Declaration was subsequently included in the Strategic Implementation Plan and Operational Plan of the European Innovation Partnership on Active Healthy Ageing, published at the end of 2011\(^3\). This led to the creation of the C2 action group focusing on interoperable and flexible ICT based solutions for independent living. AALOA submitted a commitment for participation and was active in the definition of the C2 action plan made official on 6 November 2012.

The action plan includes in particular the following deliverables:

- Interoperability process recommendation for EIP-AHA and recommendations for standardization
- Set of good practice documents for the implementation of independent living solutions

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\(^1\) universAAL: <http://universaal.org>

\(^2\) ReAAL: <http://www.cip-reaal.eu>

\(^3\) Strategic Implementation Plan of the European Innovation Partnership on Active and Healthy Ageing <http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=implementation-plan>
A self-sustainable repository of information, practice and evidence to promote the deployment of independent living solutions

Beside this there have been some activities in the standardization efforts. More concretely, AALOA established a liaison with ETSI and IEC for starting standardization process for AAL. After having organized the Track F of the AAL Forum 2010 in Odense, connections have been created with the ETSI department on New Initiatives. In the context of AAL Forum 2011, more concrete discussions took place about the creation of an ETSI Industry Specification Group (ISG) for AAL; however, at the same time news about the creation of a Strategic Group for AAL at IEC known as IEC SG5 were published, so that we decided not to initiate any competing group but try to get connected to IEC SG5. We will proceed by referring to their agenda for “a roadmap with a timeline that includes a reference architecture and prospective standardization projects” using the example of the universAAL project and its results in terms of AAL reference use cases and requirements, uAAL reference model, and uAAL reference architecture. We try to keep this link alive in the context of community activities, such as the C2 action of EIP-AHA above.

On-going and future tasks in AALOA are divided into different working groups. The overall goal is to involve more supporters and promoters actively in the tasks of AALOA. One group is working on incorporating AALOA, which includes registering it as a legal entity with an official statute and bylaws. Together with this there will also be a renewal of the AALOA steering board. Another working group is working on the relationships with EIP-AHA, the ReAAL project, the Engaged project and the standardization groups. Also dissemination and exploitation of the work AALOA is doing is something which has to be improved. Dissemination and Exploitation is always a critical task for research projects. AALOA may contribute by creating synergies among the research groups participating to European projects and willing to disseminate their work beyond the natural end of a project. The visibility acquired by sharing and maintaining research results help to create links with other groups and to be involved in other projects. A new campaign should begin to bring new resources in AALOA from European projects like FP7, AAL JP projects. It is important that AALOA gets better known as an organization which is a powerful unity of AAL stakeholders and can coordinate initiatives, influence politics and funding strategies and can be a powerful tool for the exploitation of AAL results and developments.

3. The AALOA exploitation model for exploiting EU project results

Exploitation of EU project results is about adoption and use of project results to the benefit of individual partners, groups of partners and/or also to the benefit of non-members of the project consortia. The benefit can take on different forms: improving the skills of researchers in such a way as to enable new research business in the future; improving or extending the scope of teaching in a university; producing or contributing to some product a partner has/wants to make (coordinated exploitation); or joint ventures (joint exploitation).
Industries are especially important in the first phase mostly as counsellors and providers of development forces. Industries have the need for clear business models about how the exploitable results can bring them return of investment which is important for the survival of the joint exploitation. AALOA can help to be a tool for joint exploitation and has already incubated and demonstrated some success stories.

In fact, AALOA is organized to be a **confederation of projects**, where a **project**, in classical Open Source parlance, is an independently managed activity inside AALOA with its own rules and responsible persons, which abides by AALOA’s ideas, that is those explained in the AALOA Manifesto, and that uses resources provided by AALOA, such as web space, mailing lists and community tools.

![Diagram](image)

**Figure 1 Closed loop of demand and supply side for an open AAL platform**

Figure 1 shows the closed loop of demand and supply of open platforms. The market is stimulated in different ways as there are SMEs which can take both roles or respectively on or the other role.

Three successful projects that are alive so far are the **EvAAL competition** (<http://evaal.aaloa.org>) started by the universAAL project, **ZB4O** (<http://zb4o.aaloa.org>, formerly Zigbee4Osgi) started by the FP6 PERSONA and the universAAL projects and **HOMER** (<http://homer.aaloa.org>, HOMe Event Recognition System) started by the Austrian project NovaHome. These three **AALOA projects** are based on the results of funded European projects and initiated by groups of former consortium and non-consortium members, from both research and industry, which are committed to participating and contributing to the incubated projects because of common interests.
Of these three projects, ZB4O and HOMER are software projects. More software projects are expected to be incubated in AALOA when the universAAL project will start to officially release its results. This could encourage other parties to choose AALOA as the place of choice for releasing their software, by creating further projects.

In the second phase of life, AALOA’s will strive to include members from a wider range of stakeholders: policy makers, industrial associations, service providers, caregivers and society groups will need to be involved, from as much European countries as possible.

National regulators will need to be contacted or involved, in order to harmonize legislative requirements across Europe and allow a single market to be born. AALOA could serve as a lobbying centre, and could seek the status of European Technology Platforms (ETP).

The above planning sees AALOA as the centre of AAL initiatives in Europe. This might not probably be the case, but it is not possible now to foresee which other entities are going to gain importance in the field. Most likely, AALOA will try to get in touch and associate, incorporate or merge with other initiatives with similar aims.

Figure 2 Exploitation options based on OSS ecosystem

Figure 2 shows the overall relationship and the AALOA role in the exploitation of project results or exploitable project through the incubation of projects, being AALOA the container where different OSS (open source software) projects are hosted.

The supply stakeholders can contribute to the open source ecosystem and most of all use the resources that fulfil the needs of the demand side. In between the demand and the supply side there can be a business established (based on the resources of the ecosystem) which provides some products or certified modules for the market (not necessarily anymore as open source projects).