National AAL Initiatives

AUSTRIA

The ‘benefit’ program was the first Austrian mission-oriented thematic programme in the field of ICT. It was launched by the Federal Ministry of Transport, Innovation and Technology (BMVIT) in November 2007. The programme management is performed by the Austrian Research Promotion Agency (FFG).

The programme was set up as the national backbone programme for the Austrian participation in the Article 185-Initiative Ambient Assisted Living Joint Programme (AAL JP). Austria was one of the co-founders of the AAL JP. The first AAL Formn took place 2009 in Vienna and national experts’ workshops were organised in the federal states in the following years.

The initial phase of the programme benefit was dominated by activities to build up the community and create a common understanding and common knowledge base. The calls under the ‘benefit’ programme focused on “ICT-based Solutions for the Advancement of Active Ageing” and include social inclusion, comfort and security aspects as well as activities within and outside the home environment.

Now it is part of the ICT for Future programme and has initiated the first AAL test region in Austria in Burgenland which was launched by a press conference with the minister in 2013.

Up to now the ‘benefit’ program has funded some 69 national projects worth 12.8 Mio €. From call 1-5 under the AAL JP Austria has co-funded 92 Austrian partners in 49 projects. 11 of these projects have Austrian coordinators. Austrian partners are funded at the amounts to 11.3 Mio € national + 6.4 Mio € from the AAL JP. From the committed 11 Mio € of funding Austria was able to increase it 11,3 Mio €. All Austrian partners funded under the AAL JP are monitored by FFG.

Part of the success of the Austrian community in the AAL domain is the mix of the national and European programmes ‘benefit’ and AAL JP. The national programme took very specific measures to build up an AAL community in Austria and to raise awareness for critical aspects in the projects, as ethical issues, end-use involvement or business plans. The Austrian community can build up expertise on the national level and then cooperate on the European level and vice versa. The same is true also for the programme owner and the programme management. The interim evaluation of the benefit
programme in 2011 showed the contribution to additional activities and effects on employment rate. All benefit projects have a high participation of SMEs and enduser involvement.

The Austrian innovation platform AAL AUSTRIA was launched in 2012 for promoting the first project results and stimulating the interdisciplinary community and involvement of new stakeholders. So far it has 33 members. A vison paper will be released end of the year 2013.

Within the federal RTI strategy "Becoming an Innovation Leader: Realising Potentials, Increasing Dynamics, Creating the Future" quality of life and demographic change are one of the societal challenges. An inter-ministerial working group has been established to set up common activities in this area within the next years.
Flanders in Action Pact 2020:

Flanders in Action (Vlaanderen in Actie) is Flanders’ project for the future. By 2020, Flanders wants to stand out as an economically innovative, sustainable and socially caring society. The objectives have been laid down in the Pact 2020 by the Government of Flanders and all the major social partners.

a) Care - Flanders’ Care

The aim of Flanders’ Care is to realize innovative breakthroughs in all types of care. In this context, the challenge resulting from the social and demographic evolution is seen as an opportunity for the care sector to improve the care quality. Innovation and entrepreneurship are indispensable to achieve this goal.

The Care Innovation Platform. The innovation should be the result of cross-fertilization between care facilities, care providers, care users, knowledge centers and industry. Each of these parties is represented in the Care Innovation Platform which advises the inter-ministerial committee. Among other things, the Platform developed a vision on ICT in care, more specifically on the electronic sharing of care information.

Cooperation – care innovation living lab. The cooperation between care facilities, care users, entrepreneurs and knowledge centers is also revealed in the demonstration projects of Flanders’ Care, where innovative care products are tested and demonstrated with government support. Another example is the cooperation of all the actors in the care innovation living lab. The living lab is aimed at promoting innovation in elderly care.

Flanders’ Care Impulse Office. Entrepreneurs, care facilities and knowledge institutions can always call on the Flanders’ Care Impulse Office for assistance.

Flanders’ Care Invest. The Government of Flanders established the specialised seed capital fund "Flanders' Care Invest", in collaboration with the investment company PMV (Participation Company Flanders). PMV has created a new venture capital fund for young companies that have significant growth potential in developing innovative products, technology and services for the health care sector. The strategic objectives are: prevention, diagnosis, and monitoring – solutions to augment the quality, durability, and efficiency in homecare and primary care – solutions that augment the care recipient's independence and quality of life, so as to improve their social inclusion.

Flanders Investment and Trade (FIT). Flanders Investment and Trade is the government agency promoting sustainable international business, in the interest of both Flanders-based companies and overseas enterprises. Flanders Investment and Trade will help you establish contact with the Flemish companies you are looking for. This includes not only products or services you may be sourcing, but also various types of business relationships, from joint ventures to technology transfers.

IWT. IWT is the government agency for Innovation by Science and Technology. It encourages innovation in Flanders in different ways. It helps Flemish companies and research centers in realizing their research and development projects. They offer them financial funding, advice and a network of potential partners in Flanders and abroad. They also support the Flemish Government in its innovation policy.
Events. Care players, enterprises, knowledge institutions and the government gathered on February 13th 2012 at the ‘ICT in care’ Round-table.

b) Enterprise & Growth - Gazelle Leap

Supporting companies through growth and internationalization. Flanders boasts many competitive companies with a strong know-how and high-quality products or services. Nevertheless, it still lags behind where the number of fast-growing, internationally-oriented enterprises is concerned. Flanders in Action wants to boost their number by 2020.

c) Innovation - Streamlining of Targeted Innovation Policy

How can we respond to great societal challenges, such as the ageing population? The Government of Flanders has decided to use its long-term innovation strategy. They consider the promotion of innovation as having a societal and economic leverage effect.

Innovation hubs. By coupling Flanders’ scientific and technological strengths (targeted innovation policy) with the great societal and economic challenges, we create multidisciplinary innovation hubs. The purpose of these innovation hubs is to effect a transformation in areas such as care innovation and social innovation. This coupling allows science and innovation to contribute in a better way to remedying our societal problems and to valorizing economic opportunities.

Innovation pact. In order to realize this innovation and scientific progress, the Government of Flanders also needs partners. For this reason it will mobilize knowledge institutions, small and large companies, the non-profit sector and civil society and raise their enthusiasm for participating in the innovation process. A new innovation pact is to lay down the commitment of all the actors involved.

Consultation. In April 2012 the Government of Flanders organised a round-table meeting around social innovation. Two aspects thereof were highlighted: social entrepreneurship and the widely supporting social innovation.

d) iMinds: Connect – Innovate – Create

iMinds is an independent research institute founded by the Flemish government to stimulate ICT innovation. The iMinds team offers companies and organizations active support in research and development. It brings together companies, authorities, and non-profit organizations to join forces on research projects. Both technical and non-technical issues are addressed within each of these projects.

iMinds identified five vertical market segments in which ICT functions as an enabling technology. iMinds is working on different AAL projects. For example:

- **TV-kiosk** is an easy-to-use Internet service for elderly people designed by iMinds.
- ‘**I Can Help**’ allows a patient in need to find the caretaker he is looking for through a mobile platform.
- **Care4Balance (C4B)** system envisages improved and sustainable care provision by informal caregivers, optimized cooperation with formal caregivers and QoL (quality of life) improvement for the elderly.
- The **Little Sister** project will research, implement and demonstrate low-cost autonomous technology to provide protection and assistance to elderly citizens.
iMinds Strategy 2012-2016 will continue to put forward different tools and programs to respond to the challenge of ageing population.

e) Some numbers about Flanders

In view of the EU2020 strategy, Flanders strongly stimulates science and technological innovation to become one of the top5 EU knowledge regions and endorses the renewed objective of raising R&D investments to 3% of its GDP by 2020.

In 2010, Flanders spent 4,3 billion euros in R&D, of which 2,8 billion euros is private sector spending and 1,5 billion euros are spent by the nonprofit sector. With an increased total R&D spending up to 2,15% of its GDP in 2010, Flanders scores above the EU average (2%). Public budget in 2011 for science and innovation amounts 1,88 million Euros, of which 1,23 million euros strictly goes to research and development. The Flemish Government actively engages to growing R&D investments in the coming years: R&D budget is at 0,71% of GDP and situates around the EU27 average (0,70%). Including the federal outlays, total R&D public expenditures in Flanders represent nearly 2/3 of the Belgian R&D expenditures. Chemistry and pharmaceuticals represent with 38% the highest share in total R&D expenditures, followed by informatics and electronics (17%).

The Walloon Region and Brussels Capital.

In the Walloon and Brussels Capital region, many calls and programs may include AAL projects such as in ICT, ‘social innovation’, health… But none of those programs are clearly targeting AAL projects.
Cyprus

The Research Promotion Foundation (RPF) is the national funding agency responsible for the promotion and development of scientific and technological research in Cyprus. The RPF is pertinent for the management of the Ambient Assisted Living (AAL) Joint Programme (JP) in Cyprus.

Cyprus has been a founding member of the AAL JP since 2007 and has participated in four (4) AAL Calls so far. Currently three (3) projects with Cypriot partners are being funded by AAL with a total funding of €580,000. It is noted that a very significant increase has been observed in the Cypriot participation of the AAL Programme over the years. Specifically, 3 proposals with Cypriot participation were submitted in Call 1 (2008) whereas 12 proposals with 13 Cypriot partners and 3 Cypriot Coordinators were submitted in Call 6 (2013).

Cyprus does not have a national Programme specifically oriented to AAL, but related innovation and research projects can be financed through national R&D calls.

**Related National R&D Funding Instruments**

One of the main activities of the RPF is the financing of national research projects through the development and monitoring of competitive programmes such as the National Framework Programme (FP) for Research, Technological Development and Innovation.

AAL related national proposals can be submitted under the Thematic Area «ICT in Health and Quality of Life» of the Action “ICT Applications” and the Programme “Information and Communication Technologies” of the FP.

The main objective of the “Information and Communication Technologies” Programme is to increase productivity and enhance the competitiveness of the business world in all economic sectors and moreover to improve the services provided to citizens, communities, enterprises and the public sector services. Particular emphasis is placed on the dissemination of knowledge for the efficient use of ICT and their incorporation in other activities such as education, health, culture, governance, commerce etc.

**Impact of the AAL JP on National Level**

The AAL JP has filled a gap in R&D instruments available in Cyprus aimed specifically at demographic change, ageing, inclusion and e-health. More specifically, AAL plays a stimulating role in:

- Building international cooperation
- Public - Private cooperation and funding
- Promoting the role of SME’s and giving them the possibility to explore international business opportunities
- Connecting societal and economic added value
ANR - Technologies for Health and Autonomy (Tecsan)

AAL helped gear the national program to include ‘autonomy’.

From 2006 to 2013, the French National Research Agency (ANR), together with the Caisse Nationale de Solidarité pour l’Autonomie (CNSA) launched a call for proposals in the domain of "Technologies for Health and Autonomy".

This call aimed to promote research projects proposing innovative concepts and technological breakthroughs in the domain of health and autonomy. This call also intended to support excellence in research laboratories and to strengthen expertise and competitiveness of enterprises through public/private partnerships.

For the Edition 2014, a new action plan has been adopted at the ANR and reconfigures all the actions from the French National research Agency. The projects with a Tecsan thematic can now be fund in the Challenge “Health and well-being” axis 2 “ Improve health with personalized medicine, the diagnostic, the prevention and therapy, palliative strategies, the living in its environment” - sub-topic 12 “Pathologic and well-ageing, autonomy and life quality” and axis 4 “Biomedical innovation” - sub-topic 18 “Technologies for health”

Funding instruments proposed in that framework are: collaborative projects, public-private partnership collaborative projects (including at least one private company), research networks (this instrument aims to fund collective study by French and foreign laboratories, companies, institutions and associations. ANR's funding goal is to arrive at the definition and structuring of an ambitious research program or research strategy, in particular at European level, or at international level), Young researcher projects, and "Challenges" (Cups) (encourage several teams to work on the same issue, enabling them to put forward their respective approaches on a scientific application or matter).

Graph: Numbers of Fund projects from The National (Tecsan) and AAL JP programs from 2006 till 2012.

The CNSA

The CNSA supports research on the loss of autonomy to improve the solutions for the elderly and disabled people. Improving participation in social life, quality of life, living independently at home are some of the research interests of the CNSA participation in social life,
The three major goals in leading social-care policies are:

1. funding services and residences for people with autonomy loss and contribute to local authorities’ expenses for special allowances;
2. equal treatment for everybody in the whole territory
3. and a role of expertise and information towards its partners: in particular, the CNSA has a role of expertise towards MDPH network (services for evaluation of loss of autonomy and special benefits allowance for disabled people).

The **CNR SANTE** (National center of reference, autonomy and health at home), a dialog tool.

The CNR SANTE was launched at the end of the year 2009 by the Ministry of Economy and Finance in coordination with the Ministry of Health. The goal of the CNR is to foster innovation and the establishment of national network of expertise. The network is associating all the actors of the value chains: investors, users and funders.

For instance, the CNR SANTE is the major actor in the implementation of regional initiatives type « living lab » and the establishment of health information systems via a network city-hospital.

In France, AAL has helped create awareness of the ageing problem in Europe. It gives the issue of ageing a political dimension and helps with the communication. AAL has been a good instrument to unifying the existing structures to address the issue. It has also helped with the emergence of a real industrial community that develops ICT. In addition, AAL and the various national centers on autonomy are mobilizing the community.
The topic of Ambient Assisted Living is funded by the Federal Ministry for Education and Research since 2008. This focus is in line with the “High-Tech Strategy for Germany” and the “Research Agenda of the Federal Government for Demographic Change: The New Future of Old Age”. Initially it was strongly correlated to the funding programs of microsystems technologies and information and communication technologies. It then merged into the funding programme “Human-Technology-Interaction for Demographic Change”. The required research perspective implies an interdisciplinary interaction between technical competences and scientific work on the socio-economic framework and therefore also the linkage between technical and social innovations (ethical, legal and social issues).

Germany was one of the main driving forces in establishing the AAL JP. Since the beginning, a strong complement of national and AAL JP topics can be observed (e.g. the national and JP calls on “mobility” and “care”).

a) Transnational interactions

Installation of a Transnational “Info-Day” organised by Germany, Austria, Switzerland and Luxemburg.

The Federal Ministry for Education and Research has furthermore initiated the Joint Programme Initiative (JPI) "More Years, Better Lives - The Potential and Challenges of Demographic Change" in 2010 to streamline research activities in the field and to implement a transnational research agenda. By now there are 13 European countries involved.

b) Creation of new initiatives/national programmes, etc.

To promote the growing AAL-community an innovation-partnership between the German Electrical Engineering Association (VDE) and the Federal Ministry for Education and Research (BMBF) had been set up until 2012. A first initiative of this partnership was the start of the annual AAL-Congress in 2008. Since then it is the established forum for the active German-speaking AAL-community. Furthermore several working groups have been established by this partnership. They are now running under the umbrella of the German Societies for Biomedical Engineering (DGBMT) and Electric, Electronic and Information Technologies (DKE).

c) The budget size of the national programmes and the year of their establishment are of interest to assess the impact of the AAL JP.

The German AAL funding scheme is part of a national framework programme “ICT 2020”. First R&D projects that can be seen as national AAL activities resulted from the further development of activities in the field of microsystems technology and medicine technology around the year 2005.

The first AAL call was launched in the year 2008. Since then, the annual budget for AAL related R&D projects is up to 35 – 40 Million Euro.
Boosting ICT as an enabling technology in order to tackle the challenge of an ageing population, to enhance independent living and improve the quality of life of elderly people is a key priority for the Luxembourg ICT R&D community.

Luxinnovation is the National Agency for Innovation and Research. It’s role is to:

- **promote** R&D and innovation in Luxembourg
- **inform and support** innovative start-ups, companies and public research organisations and help them at any phase of their projects
- **assist and advise** the government in the area of R&D and innovation
- **raise awareness** about the various facets of R&D and innovation as widely as possible.

One of the key services provided by Luxinnovation concerns the ICT for a healthy and ageing population. We can find natural synergies between the activities on the national level (awareness raising, idea generation, projects follow-up, PPPs) and the activities in AAL JP. They consider the articulation between the national activities and activities run by AAL JP as an asset. For example, in terms of projects funding (AAL JP allows European cooperation while maintaining national procedures) or in terms of community building (Forum, communication strategy…).

a) **Cluster working group**

The Working Group “ICT for a healthy and ageing population”, launched by the Luxembourg ICT Cluster (Luxinnovation), gathers representatives from end-users, companies, research institutions and other stakeholders in order to tackle the challenge of an ageing population.

The Working Group pursues a shared set of goals and aims to boost ICT as an enabling technology in order to enhance independent living and improve the quality of life of elderly people.

The objective of this dynamic Working Group is to exchange know-how and share experiences to foster cooperation on a national as well as on an international level. Furthermore, the Group works together to showcase Luxembourg scientific and technological expertise to an international audience.

b) **Companies**

Various companies are involved in AAL JP. They include AAS (Ambient Activity Systems), ACTIMAGE SA, C-Services, Homesystem SA, Microsoft Luxembourg, MONITOR-it and Telindus Luxembourg.

c) **Public Research**

The **Public Research Centre Henri Tudor** is a Luxembourg autonomous institute of applied research. Essential link between research and society as a whole, its mission is to sustainably strenghten the economic competitiveness and the social fabric, at national, regional and European level.

Contributing to Ambient Assisted Living (AAL) is one of CRP Henri Tudor’s goals. To achieve this, they rely on the following competences in health care and in information and communication technologies. In healthcare technologies, they focus on the development of new technologies for healthcare and the analysis of their consequences for patients and the healthcare system. In ICT, they also investigate new technologies and methods through technology watch and technological proofs of concepts, they provide simulation tools and prototyping to support the creation of new information-based services and they support the implementation and the migration of IT architectures.
The Informatics, Systems, Collaboration (ISC) department of the CRP-Gabriel Lippmann implements R&D projects in partnership with the private and public sectors. The ISC department notably delivers innovative, production-grade ICT systems, providing added value compared to commercially available solutions.

The ISC department’s AAL related activities include: security audit for the Stëftung Hëllef Doheem, Human-Computer Interaction and Web-based multi-users tools for aged people.

The University of Luxembourg with its research unit and center in AAL. First, the Integrative Research Unit on Social and Individual Development (INSIDE) which focuses its research on technical aids to help to realise an autonomous and safe living at home, to compensate the consequences of functional and physical impairments or to provide telemedical support and care (eg. of AAL project: Virtual Coach Reaches Out "To Me" - V2me).

Second is the Interdisciplinary Centre for Security, reliability and Trust (SNT). The SnT Centre is committed to fostering the production of innovative ideas, increasing the depth and breadth of competence in the area of secure, reliable, and trustworthy ICT systems and services and to facilitating research in collaboration with the leading established external partners as well as new start-ups in the ICT industry. SnT proposes presently at least three main domains of competencies related to Ambient-Assisted Living (AAL): Empathic and Affective Smart-Home System, Secure Sensor Network for AAL, and AAL and Human Factor.

d) Users organisations

It is the mission of Stëftung Hëllef Doheem (Secher Doheem) “to enable people in need of nursing care and assistance to remain living in their own home, for as long as possible, as fully independent and autonomous citizens”.

Current projects include the ‘Community Nursing and Home Care’ and ‘Community Alarm and Telecare Service’. Stëftung Hëllef Doheem is interested in extending its offer of services provided by Secher Doheem. The main AAL fields of interest are new technologies. This way, both Secher Doheem (as service Provider) and end-users (as clients) will not need to juggle between several sets of technologies in order to meet client’s needs.

Conclusions

As stated before, there are strong synergies between the AAL JP and the activities undertaken at the national level and implemented in the ICT cluster. The working group ‘ICT for healthy and ageing population’ has been set up in 2011. It was constituted around stakeholders who were involved in AAL JP activities. Its main goal is to enhance R&D collaborations at the national level. There are currently some investigations with stakeholders the possibility to set up a ‘Living Lab’ in Luxembourg.
AAL was the main initiator for a structural approach and focus on ICT & eHealth in the policy and the programmes of ZonMw, the national funding agency for research and innovation in the healthcare sector. In all (new) ZonMw programmes and calls for proposals the role of ICT & eHealth is explicitly described.

To facilitate implementation and up scaling of (successful) ICT & eHealth project results, evaluation criteria are developed and integrated from perspectives of end users, payers, (policy) governance and interoperability. Development and application of business models is introduced in the healthcare sector.

ZonMw now has the lead in building a Research & Innovation Agenda on ICT & eHealth. Specific attention will be paid to the types and methods of research that are appropriate for different objectives relevant in ICT & eHealth solutions (cost-effectiveness, user acceptance, etc.).

AAL plays a stimulating role in different domains of R&D&I for ICT & eHealth:

- Building alliances
- Public - Private cooperation & funding
- Promoting the role of SME’s
- Connecting societal and economic added value (in the health care sector)
- User driven innovation and end user involvement
- Business cases en business models
- Competences of multidisciplinary teams

At the same time, the experiences of AAL are – as yet – hardly embedded in the visions on elderly care in the future (the role of technology). Chances for improvement are waited in policy, sector organisations in long term care, organisations for long term care and knowledge institutes.
On behalf of the Norwegian government, the Research Council of Norway (RCN) operated different programs related to AAL JP.

a) **IT Funk – IT for the disabled**

The IT Funk programme has been active since 1998. The purpose is to contribute to accessibility for all - to ICT and to society at large - through the use of ICT. IT Funk supports research, development, innovation and standardization of accessible ICT-based products and services and assistive ICT-based technology.

IT Funk targets businesses and institutions that research, develop, produce and distribute ICT-based products and services of importance for accessibility in society. In collaboration with other R&D-programs, IT Funk provides financial support to projects based on universal design-principles and to projects on assistive technologies. Enterprises in the ICT sector are in charge of most of the projects, so that the products and services developed will be updated and available on the market.

The Norwegian contribution to the AAL JP is organized by the IT Funk programme. The long history of the IT Funk programme with a great number of good and relevant projects has been continued with several AAL projects with Norwegian partners with experience and successful projects within the IT Funk programme. The strong focus on user interaction in the IT Funk programme overlaps very well with the same focus in the AAL projects.

b) **VERDIKT - Core Competence and Value Creation in ICT (2005 - 2014)**

VERDIKT is a large-scale programme in RCN. VERDIKT's vision is that Norwegian ICT research will put Norway at the forefront of the development and application of knowledge to enhance interaction, innovation and value creation in the ICT-based network community.

Several of the calls in the VERDIKT programme have addressed topics relevant to the AAL JP, e.g. ICT for health care and welfare technology.

c) **BIA - User-driven Research based Innovation (2006 - )**

BIA funds industry-oriented research and has no thematic restrictions. This broad-based programme supports high-quality R&D projects with good business and socio-economic potential.

The project portfolio in this programme also include projects with high relevance to the main topics of the AAL JP.

d) **HELESEOMSORG - Health and Care Services (2011 – 2015)**

The programme continues the efforts in health services research. The research findings are intended for a wide ranging target group - the need for dissemination of information is great. The programme will generate knowledge that provides a better basis for decision-making in health and care policy.

The project portfolio in this programme also include projects with high relevance to the main topics of the AAL JP and complements the core topics of the AAL JP with a broader research on the health care services.
e) **Program for Regional R&D and Innovation (VRI) and the Regional Research Funds (RFF)**

VRI is the Council's main support mechanism for research and innovation in Norway's regions. The primary goal for VRI is to encourage innovation, knowledge development, and added value through regional cooperation and a strengthened research and development effort within and for the regions. In 2010 Norway established a new funding mechanism for regional research (RFF) in addition to the national research funding system. A fund of EUR 0.8 billion was set aside for this purpose. An annual interest of about EUR 28.1 million is divided between seven research regions, each with its own independent research board.

The research projects funded by these two programmes cover the whole range of research topics. The projects are based on local or regional research and innovation needs and utilizes regional R&D resources. The AAL JP research topics are very relevant for the two regional programmes.

Active and healthy ageing is targeted as one of the important upcoming research topics in Norway. RCN has proposed topic “More active and healthy years” among the RCN Initiatives to meet national research priorities. Based on this, they expect increased research activities and funding within this field in the years to come. This includes increased focus within existing programmes together with establishment of new targeted programmes.
Portugal

Portugal does not have a national Programme specifically oriented to AAL, but innovative research projects can be financed thorough other national R&D calls or European programmes calls for proposals.

At a European level, one strong example of the Portuguese community activity is the participation of several Portuguese organizations in EIP AHA - European Innovation Partnership on Active and Healthy Ageing.

At a national level, Portugal built on an active AAL community that has been evolving and continuously involves in several initiatives and projects:

a) AAL4AAL - Portuguese Health Cluster mobilizes actors on AAL - Ambient Assisted Living

AAL 4 AAL is a major project mobilized by the Portuguese Health Cluster, which comprises relevant actors, is based on the idea to develop an ecosystem of products and services for AAL associated to a business model and validated through a large scale field trial that covers the whole country.

Ambient Assisted Living for All (AAL4ALL) has as the main objective the development of an ecosystem of national interoperable products and services for AAL, that will be subject to a program of certification, including conformance testing against standard AAL4ALL models, specifications and for interoperability, associated to a series of innovative business models and validated through a large scale field trial, along with a series of user studies carried in the framework of a network of living labs, established in key partners of the consortium.

The definition of reference AAL4ALL models for different usage scenarios of AAL reduces the investment risk and time-to-market of the products and services. The competitive advantage of being a First Mover, coupled with the standardization and conformance testing products of and service, will enable the broad development, dissemination and adoption of AAL solutions and technologies in Portugal, and will raise the potential for national exports of technological solutions that exist today or are being developed in this area, to other countries, particularly in Europe.

b) Ageing Well Thematic Network – Promoting the market uptake of ICT solutions

ICT-AgeingWell is a Thematic Network with a strong Portuguese coordination by INOVA+. The Ageing Well Network is promoting the Market Uptake of ICT Solutions for Ageing 4

Well since January 2012. Several European organizations are building and animating the AgeingWell Network focusing on improving the quality of life of Elderly People by promoting the market uptake of ICT solutions for Ageing Well. Coordinated by INOVA+ (www.inovamais.pt), the AgeingWell Network has 16 founding members covering the industry, user organizations, public authorities, investors, housing and insurance companies and ICT solutions providers from 11 EU countries. These organizations share a common vision about the importance of leveraging the market uptake of new solutions for the benefit of the elderly population, and contributing for a longer independent living of the elder citizens.

Besides raising awareness of the European community of ICT & Ageing stakeholders, the AgeingWell Network is working to enhance a closer dialogue between the various stakeholders, namely between innovative ICT & Ageing enterprises (in particular SMEs) and the investment community, and to increase the deployment and sharing of best practice between key competence
centres. One of the main tools being developed within the AgeingWell Network consists of a Knowledge Centre composed by the latest information on the ICT & Ageing sector regarding initiatives, projects, good practices and key documentation related to these fields.

In addition, the AgeingWell Network is promoting several events where key actors within ICT & Ageing sectors are able to discuss relevant topics and establish important synergies. These events are important moments to promote the network and also to attract new members, contributing to widen the benefits of the AgeingWell activities. So far, 23 associate members from 9 EU countries entered the network and are contributing for achieving the AgeingWell Network objectives. This is an open network and therefore more members are expected to join in! All information on how to do it is available at the network web portal: http://ict-ageingwell.net

The AgeingWell Network is co-funded by the European Commission, Information Society and Media Directorate-General, under the ICT Policy Support Programme (ICT PSP) as part of the Competitiveness and Innovation Framework Programme.

c) **Ageing@coimbra - A European Reference Region in the Center Region of Portugal**

Ageing@Coimbra results from a collaborative effort between major regional stakeholders, acting in concert, with the focus on the senior citizen and the need to stimulate innovation, entrepreneurship and economy growth through the ICT and e-health sector. Ageing@Coimbra emerges as a regional bottom up structure, involving different players willing to build a real partnership. Acting together, the partners in Ageing@Coimbra launch a new vision for Active and Healthy Ageing in the Center Region of Portugal, revealing and promoting excellence and innovation in health and social care, active and healthy ageing, innovation and entrepreneurship that ultimately will justify the recognition of the status of this region as an EIP-AHA reference site.

Five major regional stakeholders founded Ageing@Coimbra: the University of Coimbra; University of Coimbra Hospital (CHUC); Regional Network of Primary Health Units (ARS Centro); Instituto Pedro Nunes (IPN) Business Incubator; the Municipality of Coimbra. A significant number of regional institutions including University Faculties, Research Centers, High Schools and Universities, Care Providers, Health Providers, Municipalities, ICT and e-health developers and private companies, further support Ageing@Coimbra creating and disseminating good practices towards active and healthy ageing at regional level.

Partners at Ageing@Coimbra are committed to collaborate with other European partners to face the main EIP-AHA challenges, including: a) prescription and adherence action at regional level; b) personalized health management, starting with falls prevention initiative; c) action for prevention of functional decline and frailty; d) replicating and tutoring integrated care for chronic diseases including remote monitoring at regional level; e) development of interoperable independent living solutions, including guidelines for business models; f) innovation for age friendly buildings, cities and environments.

As a Reference Region, the Center Region of Portugal, through Ageing@Coimbra partners, offers excellence in three main horizontal pillars: 1) prevention and diagnosis, 2) care and cure, 3) active ageing and independent living. Acting in concert, we implement an innovative and holistic ecosystem of stakeholders and replicable good practices to support active, healthy ageing and independent living.

Three clusters excellence of innovative good practices are organized across the following areas:

a) Cluster for early diagnosis and management of brain ageing, dementia and vision impairment
b) Cluster for human kinetics and mobility in senior people
c) Innovation model for ICT technological transfer in health and wellbeing
SLOVENIA

Slovenia has been a full member of the AAL JP since February 2009. Its national funding body for AAL is the Ministry of Education, Science and Sport. With 9 funded AAL projects with Slovenian participation so far, one of these project has Slovenian Coordinator.

Slovenian enterprises, public universities, public research organisations and end – user organisations are eligible for funding.

Slovenia does not have a national AAL Programme.

Regarding the impact of AAL on national level:

a) Impact on policy highlights linked to the program

- Resolution of the National Social Assistance programme for 2013 – 2020
- Action programme for persons with disabilities 2007 – 2013
- Modernization of the pension system in the Republic of Slovenia – safe age for all generations

b) Main national projects to promote the development of the e – inclusion

- Information Society day – promote the development of the information society.
- National AAL Information day – presentation of the AAL program and information of the call for proposals.
- Large number of projects in local communities, businesses, civil public, NGOs to increase e – literacy (financed by their own budget).
- Festival of the third age – Each year the Festival creates a space for cooperation between the generations, civil society, voluntary organizations, as well as business, academic and political spheres. This way it contributes to sustainable intergenerational solutions to the best of its ability. The Festival opens the door to intergenerational harmony, creativity and the exchange of ideas.
- Simbioz@ / eLiterate Slovenia – Considering the intergenerational gap as an outstanding issue of the contemporary society, the Ypsilon Institute, in 2011, carried out a project called Simbioz@, with the main purpose to:

  - promote lifelong learning and in this regard to enable the elderly community to acquire the much needed basic computer skills, so to improve the e – literacy of the targeted population;

  - raising awareness and reaffirm faith and importance in solidarity and volunteering;

  - and by such means, make an important contribution towards bridging the intergenerational gap.

In 2011, the project Simbioz@ won the outstanding European Citizen's Prize, given by the European Parliament.
AAL domain has consolidated as one of the most active areas on ICT applications research and innovation in Spain. It is attracting the interest of technological institutes, academic groups, SMEs, telecoms, health and social researchers. This communication offer an overview of the national funded AAL research in Spain showing its role for the emergency of the sector and its evolution before and after the AAL JP become active.

Spain also participates to “More Years Better Lives – The Potential and Challenges of Demographic Change” (MYBL) since the inception of the programme in 2010. The initiative seeks to enhance coordination and collaboration between European and national research activities related to demographic change. Research fields include: health, social welfare, education and learning, work and productivity, housing, urban and rural development, mobility. MYBL brings together research programmes and researchers from various disciplines in order to provide solutions for upcoming challenges. A common strategic research agenda is currently being developed.

The AAL Research and Innovation World in Spain

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Introduction

Along last years, research activity on Ambient Assisted Living (AAL) field has become increasingly relevant in Spain. Certainly, it has gained more visibility after the European AAL Joint Program (AAL JP) entered in action. However, projects in the AAL domain have been performed under National Programs since more than ten years ago. This R+D+i, launched by the Ministry of Industry, Energy and Tourism (MINETUR), has been mainly promoted and supported by the public sector through different programs and instruments under the common framework of the successive National Plans of Research, Development and Technological Innovation (PNIDi). The last PNIDi (2008-2011, extended to 2012 too), has provided coverage to AAL matters through four main action lines:

a) The Strategic Action on Health Research (AES), managed by the ISCIII (National Institute of Health Carlos III, a body with its own legal personality of the Ministry of Economy and Competitiveness – MINECO - via the Secretariat of State for Research, Development and Innovation - SEIDI), coordinated with the Ministry of Health, Social Services and Equality.

b) The Strategic Action on Telecommunications and the Information Society, managed by the SETSI (Secretariat of State for Telecommunications and Information Society) of the Ministry of Industry, Energy and Tourism (MINETUR).

c) The dedicated calls on “Dependency, universal accessibility and improvement of wellness and quality of life of the citizens” of the Strategic Action on Health, managed by the IMSERSO (Institute of Aged Persons and Social Services, a legal body with its own legal personality of the Ministry of Health, Social Services and Equality).

d) The Innovation Programs managed by the Secretariat General for Science, Technology and Innovation (SGCTI) and the CDTI (Centre for Industrial Technological Development, a body with its own legal personality of this Secretariat General attached to SEIDI).
e) INGENIO 2010 which includes the Plan Avanza, started in 2005 (called Avanza2 since 2011). It promotes the implementation of projects and research-development-innovation which help to achieve three objectives: to respond to the internet of the future by developing the ICT sector; to develop ICT technologies for Social Welfare; to promote the internationalisation of the ICT sector. (The annual amount use to be around 50 M € in grants and 350 M in loans with better conditions than loans on the market.) The participation of Spain in AAL should help to promote the internationalisation of SMEs which is currently not enough promoted. Plan Avanza also funds Technological Platforms, one of them on e-health and ICT&ageing. In this platform, a subgroup was created to deal with AAL issues.

The ISCIII and the SETSI are actually the Spanish co-funding agencies for the AAL JP. Today, there is a new PNIDI programme for the 2013-2016 period.

The resulted national scientific and technological ecosystem generated around AAL is quite complex and dynamic resulting from the convergence of different actors from different sectors. This communication offers an overview of AAL research activity in Spain along the 2001-2011 time framework. It allows a first view of the evolving situation before and after AAL JP projects started to run in 2009.

Methods

We have based the study on research projects in the AAL field, during the 2001-2011 time framework, in Spain.

The collected projects were classified in three groups:

a) National: Projects funded only by national (public or private) entities
b) EU: Projects co-funded by EC (except AAL JP)
c) AAL JP: Projects funded under the 1, 2, 3 AAL JP Calls

The Information Services of the General Under Directorate of Research Evaluation and Promotion at ISCIII has provided us data on funded projects for the 2009-2011 calls under the Strategic Action on Health Research at the National Plan of Research, Development and Innovation (2007-2011) including AAL JP.

Detailed information about national projects was gathered using the data base of research activities on ageing at the Observatory of the IMSERSO-CSIC (www.imsersomayores.es)

Other information sources have been the Statistical reports on AAL JP Calls available at the AAL web site (http://www.aal-europe.eu/)

The initial row set included 352 projects for analysis. They were reviewed and filtered to identify properly labelled “AAL” projects. The final selection resulted in a set of 126 Projects, distributed as: 75 National; 21 EU, and 30 AAL JP.

Results

Research activity

Fig. 1 shows the evolution of the number of active projects in the 2001-2011 framework, for the three categories of National, EU and AAL JP projects. The evolution of global research activity shows how most relevant research activity emerge in 2006 and growth in 2007 and 2008 to reach a plateau in
This growth, before 2009, was mainly supported by projects funded under National and EU FP. After 2009, AAL JP appears to play a growing role in leading the AAL research activity in Spain.

Fig. 1.- Graph showing the number of active projects each year from 2001 till 2011. The National, EU, AAL JP and Total number are displayed by separate bars.

Research actors’ profile
The analysis of the participants in National funded projects shows a profile (Fig. 2) that differs significantly when compared with the participants profile at the AAL JP funded projects (See Fig. 3).

Fig. 2. Spanish participant’s profile in AAL projects funded under National calls

Fig. 3 Spanish participant’s profile in projects funded under calls 1 to 3 of AAL JP
The University groups are clearly dominant in the National Programs (40 %) as compared with only 6% in AAL JP. Even the addition of University plus Research Organizations results on 47 % in AAL JP against the 62 % in National programs.

On the other hand, total industry (SME plus big industry) account for the 42 % of participation in AAL JP, whereas it is only 28 % in National funded projects.

It is interesting to note that “Users Organizations “group shows the same low level (10 -11 %) of participation in both type of projects

**National Projects Key Words**
The key words used as label descriptors for the content of the National projects have been ranked following their frequency of use. Table 1 shows the top key words for the subsets of the projects funded at 2001-2008 and at 2009-2011 periods, i.e. before and after AAL JP.

It can be observed a clear shift on projects from technology to a needs oriented labeling.

Regarding the 2001-2008 group, technology related key words (ICT, New technologies, Telecare) are highly ranked, whereas descriptors like Aged persons, Handicapped, and Quality of life, are at lower posts. For the 2009-2011 projects, Technology is maintained in first place but Personal Autonomy, Dementia, Handicapped and Quality of life have climbed to high places over ICT that go down to lower levels.

**Discussion and conclusions**

National support to AAL research in Spain has been most relevant in the period 2006- 2008 raising a plateau at 2009. Then, global research intensity has been maintained in the same level but moving to the AAL JP environment. It was reflected on the high level of participation at the AAL JP calls. Linked to that, there was a change in the profile of major research actors, from academic to industrial whereas user organizations remained in a low level of participation.

Also it can be noted a clear shift in the focus of the research projects from technology to needs drive, as denoted by the type and frequency key words used for content descriptors by the own projects.

The above analysis reflects major changes on AAL research scenario in Spain before and after AAL JP was running. However, it remains open the question about the real impact of the AAL JP on national AAL research community and the mutual interaction with National Programs. It would require further analysis after AAL JP projects completion, and to consider the new emerging research and innovation context in Europe but also the particular economic and social environment.
Switzerland has been a full member of the AAL JP since October 2010, and previously participated in AAL calls as an associated country. Its national funding agency for AAL is the State Secretariat for Education, Research and Innovation SERI. With 38 funded AAL projects with Swiss participants so far, it is an increasingly active country in this field. Particularly over the last two years, the number of Swiss project participations has experienced a significant increase.

Swiss research institutions, companies and end-user organisations are eligible for funding. Research institutions, SMEs and end-user organizations are funded 50%, large enterprises 25% of their eligible project costs. Switzerland allocates an annual budget of EUR 2-4 Million to fund Swiss participations in AAL projects.

**Impact of the AAL JP at the National Level**

As Switzerland does not have a national AAL Programme, the AAL JP has closed a gap in providing a specific R&D instrument for innovative collaborations in this field. It has also led to an increase in collaboration among the numerous AAL stakeholders. Over the years, this created a network which otherwise would not have been developed. Furthermore, direct economic benefits can be derived from the programme: AAL projects let SMEs and end-user organizations create international contacts and explore business opportunities abroad. For the universities of applied sciences which actively participate in AAL projects, the AAL JP contributes to their objective (and mandate) to work more internationally.

**Joint Programming Initiative “More Years Better Lives - The Potential and Challenges of Demographic Change” (MYBL)**

Switzerland participates in MYBL since the inception of the programme in 2010. The initiative seeks to enhance coordination and collaboration between European and national research activities related to demographic change. Research fields include: health, social welfare, education and learning, work and productivity, housing, urban and rural development, mobility. MYBL brings together research programmes and researchers from various disciplines in order to provide solutions for upcoming challenges. A common strategic research agenda is currently being developed.

**Activities in the Field of Active Ageing at the National and Cantonal Level**

Innovative national AAL collaborations may be funded by CTI (see next section). In addition to the Confederation, the cantons, municipalities, and non-profit organizations representing the interests of older adults are also important players at national level. One example of a major project in the field of active ageing is “Via – best practice health promotion for older adults”, a cooperation of 11 cantons managed by “Health Promotion Switzerland”, a public, semi-autonomous foundation established by an Act of Parliament.

**Main National R&D Funding Instruments**

- The main funding agency for market-oriented R&D projects is the Commission for Technology and Innovation CTI (www.kti.admin.ch). The CTI funds innovative project collaborations between Swiss research institutions and industrial partners.
- The main funding agency for scientific research projects is the Swiss National Science Foundation SNSF (www.snf.ch).
AAL Related National Policies in Switzerland

National policies with a thematic link to AAL:

- public health policy, including such challenges as the strengthening of the health systems, tackling the effects of the demographic change and the social aspects of health
- employment and education policy in the health sector, tackling the shortage of qualified health personnel and rising costs
- the Information Society Strategy (security and confidence in the use of information and communication technologies and promoting digital integration, = e-Inclusion)
- Strategy “eHealth Switzerland” (integration of ICT in the health sector)
- economic policies (especially in regards to SMEs and in promoting access to the growth markets in the health domain for Swiss companies

Policy documents:

- Features of Swiss Old-Age Policy: An overview by the Federal Social Insurance Office FSIO
- “Strategy for a Swiss Policy on Old Age” (Federal Council Report of 29 August 2007)
- This Federal Council Report was complemented by a survey of the old-age policies in place at cantonal level by the Swiss Federal Social Insurance Office FSIO (2010)
The Technology Strategy Board’s Assisted Living Innovation Platform (ALIP), is responding to the exciting and unprecedented phenomenon of population ageing. By 2021 half of the UK’s adult population will be over 50 years and by 2025 almost 1.5 million people will be living with a disability. The aims of ALIP are to foster technological, business and social innovation, ensuring people continue to live independent lives the way they choose in the future. ALIP is about making the future brighter for people in later life and for the wealth creation capability of the UK.

The dallas programme (delivering assisted living lifestyles at scale) is thinking beyond traditional health and social care to consider how new ideas and technology can be used to improve the way people live. By summer 2015, dallas aims to impact the lives of 169,000 people across the UK, benefiting from new and innovative products, systems and services redesign to transform their choices as they age.

Here, we would like to provide more detail about their programmes.

a) Year Zero

The Year Zero project will design, develop and deploy a range of digital services and applications which will allow users to take control of their own health information and through the use of these services take a more active role in the self-management of their health and wellbeing.

As these services are based on Personal Health Records (PHRs), users will be able to choose who to share this data with, from health or social care providers in the statutory sector to carers, third sector agencies or their friends and family.

These PHR based services are distinct from current moves to providing access to Medical Records held by the NHS in that they are entirely under the user’s control. Year Zero in that sense is citizen rather than provider focused. In addition, Year Zero believes that an added advantage of creating digital healthcare services centred on the user is that a whole series of the interoperability issues that have proven insoluble as regards providers can be removed if the citizen is put at the centre, allowing the redesign of services around them rather than configuring the user in terms of the services that are provided.

Year Zero intends to demonstrate the benefits of PHR’s across all age ranges. Our core products are:

The eRedbook – a digital service emulating the current paper based Personal Child Health Record issued at the birth of every child, held by parents and unique in that the data is not owned by the Department of Health but by the citizen.

A Personal Care Plan – an online, secure, shareable care plan created and owned by the citizen which can be shared with providers but also with carers, family, friends and other agencies to record, organise and coordinate care as well as become the basis for citizen recorded health information.

Good Neighbours – a secure social networking application that allows the creation of a circle of support and the sharing and allocation of tasks and diaries within the circle.

Each of these products will be rolled out through our NHS partners (Liverpool NHS Community Health Trust, Moray Health & Social Care Partnership/NHS Grampian, South Warwickshire NHS Foundation Trust and Rotherham NHS Foundation Trust) and developed in an iterative fashion using co-design principles and working toward connecting to statutory systems and services.
In addition we are working to offer these services direct to consumers in a free and sustainable fashion with brand and media partners. The project will also be integrating and developing digital applications to support behaviour change in connection to specific health and wellbeing needs.

At present a parental version of the eRedbook is being deployed across our NHS partners to be followed in the summer by a version that can be used by health professionals. Our personal care planning app is in the advanced stages of development and has just completed a series of workshops with staff and clinicians from across all of our partners. A prototype will be rolled out to partners in the spring.

b) Living it up (LIU)

Living it Up (LiU), the Scottish element of the UK-wide dallas programme is funded by a consortium led by the Technology Strategy Board, the Scottish Government, Highlands and Islands Enterprise and Scottish Enterprise in partnership with other key stakeholders. NHS 24 has been appointed by the Scottish Government to provide overall leadership, coordination, programme management and financial governance for the project.

LiU has entered its first recruitment phase of an initial 1500 people by Spring 2013. It is initially aimed at the over 50s but will also be of benefit to people living with long term conditions, care givers and those who just want to keep happy, healthy and safe. The programme aims to reach a community of 55,000 in Scotland by 2015 and to deliver economic benefit to Scotland through innovation.

The 3 year project will deliver innovative and integrated health, care and wellness services, information and products via familiar technology enabling them to care for themselves and others. These technologies will include TV, mobile phones, games consoles, computers and tablets.

Each of the five LiU Project Areas – Lothian, Forth Valley, Highland/Argyll & Bute, Moray and the Western Isles – are running a series of community engagement and recruitment events throughout February and March as part of this process.

These events are an extension of previous community engagement activities, designed to actively engage the local communities to better understand their needs and how they would like to participate in the developing project.

The initial community engagement events, ‘Hidden Talents’, took place in Spring 2012 and reached approximately 250 people. At these ‘pop up’ events, in diverse locations such as shopping centres and hospital foyers, the community engagement team asked participants to reveal their ‘hidden talents’ and how they could share their skills with others. Finally participants were asked: “What, if anything, would make life better for them?”

The second wave of community engagement pop-up events, ‘A little birdie told us’, took place Summer/Autumn 2012 and asked around 500 participants to reveal the ‘assets’ in their communities and identified the services, support and people valued most locally. In addition 50 in depth interviews and focus groups with NHS staff and unpaid carers were conducted.

The key themes were then developed into service ideas through co-design workshops attended by members of the community, service providers, technology experts and innovators (illustrated in the above photos).

This process resulted in a set of service principles to guide LiU; brand and identity guidelines; and informed development of the key LiU services - Hidden Talents, Market Place, My Care and Keeping Connected through video conference.
LiU has now entered phase 2 (Jan – Dec 2013), which is focussed on developing working LiU service prototypes in partnership with the local communities. Community engagement work has been further refined to take into consideration the aims of this phase, and is developing new tools to assist in co-design, co-production and recruitment. Members of the 5 LiU communities will be encouraged to sign up on the Living it Up community engagement website as 'test users' during this phase, and will be invited to share their ideas, try the prototypes and feedback their views.

c) More Independent (MI)

Like many other parts of the UK, Liverpool has a number of well-being challenges. Health & care interventions are as good if not better than other areas in the UK and we have moved forward at an equal pace to other areas in relation to the deployment of technology to the well-being challenges. Liverpool’s dallas community, Mi[1] the consumer brand for the FeelGood Factory, has approached the challenge of achieving transformation within health and social care not from a technological perspective but from a people perspective.

Our starting point has not been “the technology doesn’t exist or work” – we believe it does but rather that:

- people do not have the information or confidence to use the technology and as a result retain traditional views of what to expect when they become vulnerable (a care home/home care/day centre) or ill (hospital/doctor). This insight is taken from Whole System Demonstrator.
- “practitioners” don’t fully understand the technology and/or fear it takes away employment opportunities and/or power (and therefore don’t maximise its potential)

Mi partners believe that individual demand for good health and consumer demand for technology to support well-being will drive the transformation of health and care (and remove any organisational or cultural inhibitors). So although Mi Liverpool is working across a spectrum of need we believe that real change will only occur at scale if we change the mindset of those people not in receipt of care and health services i.e. when they are fit, healthy, and able and in control.

Liverpool is asset rich and Mi is committed to taking an approach which builds upon those assets to achieve its aims. We are engaging with communities and individuals through the things they need and like to do, their lifestyles. To get Mi messages out to people at scale, we are working for instance, with Liverpool and Everton Football Clubs, National Museums Liverpool, Merseytravel and local retailers to piggy back upon their current successful engagement of 1,000s of local people.

To engage with those people that are harder to reach, generally people who are less economically active, we are building upon existing volunteer assets to develop an army of Mi Champions able to:

- raise the profile of community activity, resources and assets
- encourage people to get involved to build local assets and resilience
- provide information, advice and signposting about things that are happening in the City

Mi Champion activity is community driven and covers a range of areas e.g. education, learning, employment and training, housing and health. Our messages about well-being, life planning and technology will be taken out to the community by Mi Champions.

d) I-focus

The dallas Interoperability Conference in Leeds in November 2012 tackled some priority issues for i-focus and for dallas as a whole. Delegates with a wide range of expertise, across the health and
wellbeing sector in the UK, gathered for a day to consider some key topics of interoperability in the emerging Assisted Living domain, including NHS, third sector and industrial partners.

i-focus has prioritised four areas of importance:

- Consumers’ Own Devices and the Medical Devices Directive
- Personal Health records and statutory Information Systems
- Identity and Consent
- Delivery of Services to Multiple platforms

Consumers’ Own Devices

To achieve Scale (the ‘S’ in dallas), Communities are expecting to be able to leverage the low cost and ease of use of mass-market products. David McGirr of the Year Zero project said: ‘Consumers’ Own Devices are key because it’s about health and well-being being part of your everyday life. It’s not about being ‘tech-savvy’; it’s about how people use communication and digital technology in their lives’. One of the perceived barriers to the use of “low-cost” or consumer-grade devices is that the Medical Devices Directive may restrict freedom to deploy. i-focus will be looking at this together with MHRA in some detail in the next quarter, and will publish their findings.

Personal Health Records

All the dallas projects are considering the use of Personal Health Records in some form, and there is perceived to be real value in making their data available to the statutory sector (and vice versa), so that people can be encouraged to take more responsibility for their own wellbeing. Understanding the human factors is essential before deploying technology in this area. Neil Tierney said: “so much of dallas is about trying to open up health records, we have to make absolutely sure that’s what people want”.

Information Governance

With regard to the sharing of information between systems, interoperability can be hampered by non-technical issues: “almost everything else is a technical issue. Information governance can knock dallas off the rails: all you need are enough jobs-worths to say that the walls between health care and social care can’t be breached,” adds Andrew Michaelson. This affects dallas firstly in the area of PHRs, where some of the i-focus scenarios involve moving personal health data between privately-held records and GP systems, for example.

Identity and Consent

When online services begin to emerge across the sector, people will begin to need to access systems deployed by a range of service organisations. The last thing they want is a vast array of diverse login methods with multiple passwords. Yet reliably identifying people is key to gaining confidence, and knowing for certain that only authorised people have access to data is crucial. This area looks at the deployment of new developments in federated identity schemes such as those being promoted by the Cabinet Office.

Multiplatform Service Delivery

As dallas is about scale, it must be possible to deliver services to devices that consumers already have available to them, or are prepared to purchase for themselves. Just as one consumer may be happy to use tablets and PCs, another may only be comfortable using their TV or a more traditional mobile phone. It must be possible to deliver services across this wide range of platforms, and this presents
development challenges and architectural choices both in the organisation of the server-side or cloud-based services and also for the user-interface experience.

**Warm Neighbourhoods® pilot proving popular!**

The Warm Neighbourhoods® pilot service ‘AroundMe’ running over this winter is proving very popular. ‘Around Me’ service is a simple proposition combining ambient temperature, electrical usage, and activity monitoring sensors in the home to provide reassurance messages to an elderly or vulnerable end customer, and their informal care network.

The pilot commenced in December 2012 with 12 end customers and their ‘neighbourhood’ of friends and family informal carers. The Health Design & Technology Institute (HDTI) at Coventry University has held mid-point interviews with the pilot participants and feedback has been very positive.

**Evaluating dallas – Benefits to the Individual, the System and UK Economy**

In parallel with the work being undertaken by the communities, Databuild and the University of Glasgow have been conducting research to establish a baseline prior to considering the impact that the dallas programme has made to individuals, carers, systems and the wider economy in 2015.

Databuild are in the process of finalising a pioneering report which describes the current market for products, services and systems to support independent living. The report draws together existing evidence with findings from interviews with dallas community members, leading market experts and representatives from the wider industry, describing the current state of the independent living sector and barriers to growth, and summarising the data available to inform an estimate of the market size in 2011/12. The baseline estimates presented in the report will be reviewed and refined as the project progresses and will provide a basis for examining the economic impact of dallas activity in 2015 and beyond.

The University of Glasgow has developed a novel and pragmatic overarching evaluation framework which aims to provide methods and tools for evaluating both evidence based impact and outcomes relating to health, wellbeing and lifestyle and also implementation processes such as how technologies and services are co-designed and developed and ultimately integrated into peoples’ daily lives and working practices.