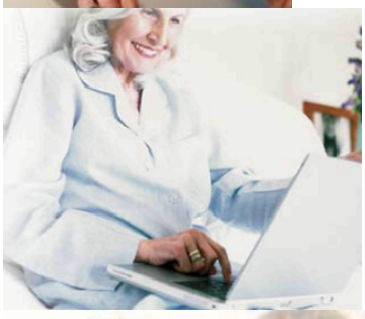
Independent panel report

Interim Evaluation of the Ambient Assisted Living Joint Programme

Unlocking innovation in ageing well



December 2010

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Foreword

by Meglena Kuneva, former EC Commissioner of Consumer Protection and Chair of the Evaluation Panel

"Smart use of technology and exploitation of information will help us to address the challenges facing society like the ageing population." Digital Agenda for Europe

When, with great honour, I accepted to chair the High-Level Panel tasked with the Interim Evaluation of the Ambient Assisted Living Joint Programme (AAL JP), I asked myself three questions: are information and communication technologies (ICTs) making life better for elderly people, also by fully involving them in R&D? Are we making sure that a truly European internal market is developing in this area? And are ICTs for ageing well contributing to the efficiency and sustainability of health and social care? The last question in particular being a very pressing one during this time of constraint on the public purse.

After completing the evaluation exercise, my answer to each of these questions is an unconditional "YES." I mean this "YES" in regards to both the potential of the AAL JP and, more broadly, ICTs for the ageing population. However, if our objective also is that these solutions become part and parcel of the daily life of all elderly citizens who could use them, my answer is "NOT YET."

Don't get me wrong: the AAL JP, along with related research and deployment programmes, is producing an excellent and very promising body of results, and the Panel recommends its continuation after the current cycle ends in 2013. Indeed, the evaluation put us in touch with the impressive array of inventive and forward-looking public and private innovators who are already testing and implementing in the field. We have learned, for example, of the use of video technology to enhance the social participation of the elderly in the Netherlands, innovation in care budget management in the UK, web-based health coach systems in Belgium, and business model innovation in care in Finland. We have heard about cross-border regional cooperation between Italy and Slovenia on long-term care, and the active participation of end-user organisations in AAL JP projects in Hungary. However, we also found that a significant challenge remains in ensuring that all this becomes available and accessible to all European older citizens, their carers, and service providers.

Now we must move from a "market of pilots" for using ICT to age well, to quote one of our interviewees, to a real, concrete and well-rooted market. How? Certainly not by imposing technologies upon reluctant and unaware users. The objective is rather to recognise and remove the barriers that are currently holding back the wide availability of these technologies so that the elderly people of Europe, the ultimate users, also as consumers, can really tap into the output of programmes like the AAL JP.

What are these barriers? Do users feel that ICT is too complicated? Then we should ensure their participation from the earliest possible stage of R&D onwards (several European projects mentioned in this report already provide good examples how to do so) and also in the elaboration of the vision and strategies underpinning innovation for ageing well. Are these barriers in the internal market? We should analyse and tackle them before this area makes it into the black list of future reports on the state of the Single Market. Are actors in the value chain not talking to each

other? A partnership approach may be the way forward. We recommend that these and other barriers are getting close attention by the AAL JP, its participating states and project partners.

In this spirit, along with the specific assessment of the AAL JP along the criteria defined by the EU legislation, the Panel has included a set of broad strategic recommendations addressing the links between the AAL and its wider policy, social and economic context. The emphasis put on ICT for ageing well in the Digital Agenda for Europe, the announced European Innovation Partnership on "technologies to allow older people to live independently and be active in society", and the AAL Investment Forum, for example, all go in the direction of a more comprehensive and politically relevant approach. We hope that this report will be a catalyst to accelerate our moves to tackle the challenge of demographic ageing in Europe with the help of digital technologies.

As a closing remark, I wish to congratulate the Members of the Panel and our rapporteur for their excellent work, and thank the individuals and organisations that contributed their very precious input to the evaluation. Finally, a word goes to the services of the European Commission, whose support has been invaluable throughout this Interim Evaluation exercise.

Meglena Kuneva
Chair

Executive summary

Introduction

The Decision of the European Parliament and the Council on the Community's participation in the Ambient Assisted Living Joint Programme (AAL JP) foresaw that the European Commission shall carry out an Interim Evaluation of the AAL Joint Programme two years after its start, but no later than 2010[1]. This report accordingly presents the findings of the Interim Evaluation of the AAL JP prepared by a High-Level Expert Panel, appointed by the European Commission/DG Information Society & Media and chaired by former European Commissioner Meglena Kuneva, between April and July 2010.

The Interim Evaluation addresses the first two years of operation of the programme and covers:

- the quality and efficiency of its implementation, including scientific, management and financial integration of the AAL Joint Programme
- progress towards the objectives set out in the Annex to the aforementioned Decision
- the appropriateness of the level of financial contributions by participating countries
- recommendations on the most appropriate ways to further enhance the Programme.

This report is timely as it comes when the European Commission is proposing new ways to address the demographic ageing challenge through innovation, notably with the recently announced European Innovation Partnership on Active and Healthy Ageing, seeking to maximise the benefits of ICT for ageing well solutions through research and deployment coordination, and cooperation with public health and e-health initiatives.

Background

Europe's population is ageing. Average life expectancy has increased from 55 in 1920, to over 80 today. With the retiring baby boom generation, the number of people aged from 65 to 80 will rise by nearly 40% between 2010 and 2030. This demographic change poses significant challenges to Europe's society and economy[2], and comes at the same time as public finances, growth and jobs are dwindling. Information and Communication Technologies (ICT) can play an important role in dealing with these challenges by improving the quality of life for elderly people and their carers, and by increasing the cost-effectiveness of care, thereby creating large new market opportunities in Europe and beyond. However, to succeed in this, a new approach to innovation and technology use is required, combining technological and social innovation. This new approach should be combined with innovation in service and business models in which elderly people and their carers and other relevant intermediaries play a direct part. It should also encompass a more general policy re-orientation which sees the demographic transition as an immense opportunity for European economy and society.

The AAL JP is an applied research funding programme aiming to support projects developing ICT solutions for ageing well with a 2-3 years to market time horizon. It has a minimum total budget of €600m, including €150m from the European Commission, and will run from 2008-2013. It is undertaken jointly by 20 EU Member States and 3 countries associated to the 7th Framework Programme for Research and Technological Development (FP7).

[1] Decision no 742/2008/EC of the European Parliament and the Council of 9th July 2008, in particular Recitals 12), 20), 23), 25), 27) & Articles 2, 3, 5, 12.2.
[2] COM (2005) 658; COM (2006) 57.

The AAL JP is executed by the participating countries through the AAL Association (AALA) which has set up a Central Management Unit (CMU) for daily programme operations. The AAL JP is financed by those countries, the EU, and participating organisations in the AAL JP projects (in a proportion of approximately 25%, 25% and 50% respectively). It aims to develop innovative ICT-based products and services which can address the above challenges through ICT and create new opportunities. Financial support by the EU is made possible through a Council and European Parliament Decision based on Article 185 of the Treaty on the Functioning of the European Union (TFEU). The European Commission's role in the AAL JP includes handling the EU co-financing in its contracts with the AALA, evaluation of the programme as a whole (annually as well as this Interim Evaluation), and participating as an observer in the AAL General Assembly of participating states with a veto on the AAL JP annual work programme.

Methodology used by the Panel

Given the early stage of development of the AAL JP, it is not possible to draw unambiguous conclusions about the longer term impact at this stage, given that it is still less than two years since the earliest projects started and most have only been launched very recently. The Panel used, as its inputs, background documents on ageing well and ICT, case studies, the available statistical information about the AAL programme, plus approximately 40 interviews with a variety of stakeholders (who were either currently involved or not in the programme). The Panel also invited external stakeholders to submit their views through an online public consultation, which received 39 submissions.

Headline findings of the Interim Evaluation

1. The overall finding of the Interim Evaluation is that the AAL JP has made good progress towards its objectives so far, especially in consideration of its short lifespan (two years), and that its overall direction is widely seen as positive. The programme should achieve its short-term objectives, provided a number of manageable shortcomings are addressed.
2. Given the growing importance of demographic ageing, which is a shared and urgent challenge across Europe, the AAL JP is very well justified as it provides both a new form of European collaboration and focuses on solutions for short and medium-term societal needs, by exploiting technological opportunities and fostering direct cooperation among participating countries.
3. It is a remarkable achievement that in just a few years the AAL JP countries have engaged in such close cooperation. It is strong evidence of their interest that they have increased their financial contributions significantly beyond the minimum required.
4. A high level of SME participation has been reached at about 40% compared with less than 20% in the first call of FP7 ICT & Ageing Programme.
5. The AAL JP should be continued into FP8.
6. As for its longer term prospects, the AAL JP can aspire to become a globally relevant major European flagship with increasing impact, through a number of targeted adaptations to its approach and the strengthening of the policy orientations that define its trajectory.
7. The recommendations made in this report focus on the actions needed to achieve this potential. Some of these reach beyond the AAL JP to the broader context of ageing in European society and economy.

Strategic principles

The following five strategic principles have been developed by the panel as part of the present Interim Evaluation of the AAL JP. They should guide future action in the AAL JP and in the wider area of ICT research and innovation to address demographic ageing.

Innovation for demographic ageing needs to be guided by a set of broad strategic principles. These are in particular applicable to the AAL JP which should be a key pillar and exemplary programme implementing and further developing these principles:

1. VISION: An enhanced vision for ageing in the 21st century and the immense opportunities this brings for Europe, embedded in a new agenda.
2. MARKET: An open dynamic European market for ICT and ageing, strongly contributing to growth and jobs.
3. SERVICES: Developing and delivering innovative world class ICT-based products, services and systems.
4. IMPACT: High social, economic and political impact through research, market and deployment activities.
5. PERFORMANCE: Operational excellence based on efficient and effective governance and structures.

These strategic principles derive from the present Interim Evaluation of the AAL JP, but have wider applicability. They provide a conceptual framework for the following recommendations on the progress of the AAL JP and for directing its future positioning, scope, and activities as part of an overall approach to addressing demographic change in Europe. Using these principles as a benchmark, the Panel wished to make clear that the AAL JP needs to be positioned as a key initiative to realise an enhanced, positive vision of ageing in 21st Century Europe. This vision is to be based on recognising the market potential and the need for innovative services, with significant real-life impact by means of integrated innovation with all stakeholders coupled with operational excellence.

Key findings and recommendations related to the progress of the AAL JP

The following provides a summary of key findings and recommendations of this Interim Evaluation. They are guided by the five strategic principles mentioned above. For each recommendation, the key responsible entity is indicated

Prime stakeholder(s) are the targets of the recommendations, i.e. who should act.
AAL = the AAL Joint Programme. A recommendation to the AAL JP means that it is addressed to its participating states and the Central Management Unit.
PS = Partner States (participating countries)
EC = European Commission
EP = European Parliament
EU = European Union Institutions, notably the EP, EC and Council of Ministers
NPMS = Non participating EU Member States

1. PROGRESS TOWARDS THE OBJECTIVES OF AAL JP

Findings

The AAL JP has brought substantial and recognisable progress to the development of innovative ICT-based products and services.

The network of actors involved in the AAL JP, which shows excellent participation of SMEs (over 40%), is a key factor in establishing a critical mass in research at European level.

The programme has improved the conditions for industry *participation*, in particular for SMEs. A similar effort targeting the *exploitation* of research in the AAL JP can enable a real European market to develop.

Key Recommendation

Ensure better involvement of users, service providers and the third sector, focussing on technology development in real life situations, in order to ensure the impact through exploitation of the programme results. (AAL)

2. LEVEL OF FINANCIAL CONTRIBUTIONS BY PARTICIPATING COUNTRIES

Findings

National financial contributions have increased substantially above the minimally required commitment, a major success of the programme.

The joint financing of projects by independent funding streams from the participating states shows that the Virtual Common Pot works well on the whole.

However, complexity arising from different countries' financial and national eligibility rules can affect participation.

There is some misalignment of national payment schedules with project timing, and thereby also with expenditure and liquidity.

Key Recommendation

Countries should broaden the base for funding so that all required types of project participants (including NGOs) can participate with adequate funding and timely payments to participants should be ensured. (AAL, PS)

3. PERFORMANCE OF AAL JP AS AN INTEGRATION OF NATIONAL PROGRAMMES

Findings

The AAL JP clearly provides a solid basis for good integration and cross-country synergies driven by national needs, so that scientific integration is well supported.

However, there is room for improvement in financial and management integration, mainly due to the significant differences between countries in financial and eligibility rules.

Key Recommendation

Harmonise, as far as possible, financial and participation rules across countries and ensure sufficient resourcing of National Contact Points to adequately perform their required tasks (PS)

4. OPERATIONAL PERFORMANCE OF AAL JP

Findings

The roll out and implementation of the three AAL JP calls has generally been very successful,
However involvement of end users in call specification and evaluation often only occurs in the final stages, thus reducing opportunities for input.
General programme communication and awareness raising efforts do not always reach their targets or meet their needs.
The most immediate challenge is to improve the operation of the Central Management Unit (CMU) while it is recognised that current management is already seeking to address these issues.

Key Recommendation

Reinforce the CMU and its staffing to allow it to respond adequately and timely to the programme needs, including an increased visibility and communication, internally and externally (AAL, PS)

5. EUROPEAN ADDED VALUE OF AAL JP

Findings:

AAL JP is necessary and provides real added value at European level.. The AAL JP can serve as a model for balancing international governance with national needs, by increasing critical mass and reducing duplication – particularly in the context of the Europe 2020 Strategy, the Digital Agenda for Europe and Innovation Union initiatives.
Countries participating in AAL JP have developed an important set of good practices in open coordination and cooperation.

Key Recommendations

Give the AAL JP sustained political support and continue and enhance AAL JP as a long-term investment, beyond FP7, as part of a coherent overall approach (PS, EC, EU)

Strengthen coherence and synergies between the AAL JP and relevant national and regional programmes and initiatives on the one side, and EU level initiatives on the other side (AAL, PS, EC)

Reinforce the programme's potential by putting in place wider measures to address key barriers to exploitation such as interoperability and standards, financing for innovation, market fragmentation, user acceptance, ethics, social and business innovation and impact (AAL, PS, EU)

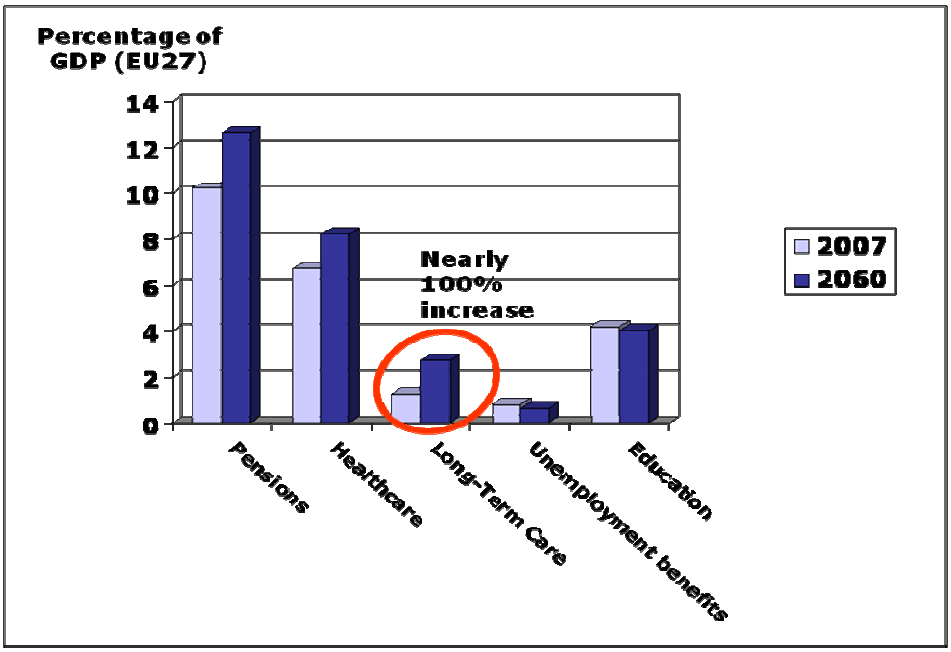
Extend the European base of the AAL JP to all EU Member States by **joining** the programme (NPMS)

1. Context and purpose

1.1. The challenges and opportunities of demographic change and technology development

Europe, like many other developed parts of the world, is in the middle of a demographic transition which is fundamentally transforming the ways in which our societies are structured and function. Very large numbers of the post-1945 baby boom generation are changing their lives from full-time workers to full-time pensioners, sometimes adopting part-time or flexible work as a transition step. At the same time, medical and health advances promise many years of active life after retirement, whilst the budgetary costs of ageing are set to rise sharply (see Figure 1). The numbers of people in work directly contributing to the economy are shrinking both in real and relative terms[3], and this applies in particular to the care workforce, whilst the human capital the elderly represent and the monetary wealth they possess is increasing. To add to this mix, Europe's public finances have come under severe strain in the last few years, with many commentators anticipating at best the prospect of only a slow recovery.

Figure 1: Economic costs of ageing[4]



Presented in these terms, the challenges are daunting. Until recently, indeed, most discussion has emphasised the negative implications of ageing, especially the budgetary squeeze and the prospects of a deteriorating quality of life for the rapidly rising number of older people. However, the Panel believes that, without detracting from the seriousness and the urgency of the challenge, the situation also presents immense opportunities. New forms of social innovation, including imaginative ways for the elderly themselves to use and benefit from their own life experience and talent, as well as participate in re-organising the services they need, can help solve or alleviate

[3] Since the 1970s, Europe's fertility rates have been in decline and the number of young people entering the labour market has become progressively smaller. As a result, in the EU, the proportion of people of working age is shrinking at the same time. http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Population_overview

[4] Source European Commission "2009 Ageing Report: economic and budgetary projections for the EU-27 Member States (2008-2060)".

many of the problems. This can also extend to elderly people's involvement in developing new independent living and active ageing products and services – particularly enabled through the use of emerging or widely available information and communication technology (ICT)[5] – and its application to reducing the constraints of location and mobility.

The Panel has found a great deal of convincing evidence that combining these three types of innovation (social, technological and business) can lead to[6]:

- New models of service delivery and care that contribute to greater self reliance for elderly people and greater support for informal carers.
- Adapted living spaces that can improve the quality of their everyday lives.
- New ways for older people to remain active, including contributing as volunteers or providing mutual support.
- New ways of mobilising active and trusted networks, both formal and informal, professional and in kind, to provide all types of support.

A new vision for old age is emerging. The box below shows some of the changes already evident.

The emerging new vision for old age

- *From health to wellbeing*. A shift away from an exclusive focus on health and pensions to a more holistic focus on wellbeing.

From health to wellbeing

The a²e² project[7] is an adaptive, easy-to-use and "fun-to-be-with" virtual coach that empowers senior individuals to establish and maintain a healthy and rewarding lifestyle for longer periods of time. Building on existing infrastructures, a²e² combines elements of virtual avatar technology, bio and ambient sensors, as well as digital gaming. The functional combination of these elements are guided by state-of-the-art expertise in health communication and psychology.

From consumers to participants

The objective of the Express to Connect (E2C)[8] project is to transform the already proven concept of the Storytable® from the institutional context, to the private home setting. This is done by applying specific, relevant media-content and social media principles (as seen for instance in YouTube and Facebook), not broadly used by elderly people. Personal storytelling leads to social interaction and helps elderly people to live more joyful and satisfying lives.

- *From consumers/patients to participants/active citizens*, recognising elderly people as capable and valuable resources, not as passive consumers or simply as burdens. The new vision is not about doing things *to* elderly people, but instead about empowering them by providing opportunities to engage, participate, and gain the support they want and need. This means not only looking at how services can be provided *for* elderly people, though there will be times when this may remain the correct apporoach. Increasingly it means looking instead at how platforms can be organised for collaboration between the public, private and third sectors that can work *with* elderly people. These solutions enable elderly users themselves to participate in developing *their own* solutions and support, using ICT as an enabler rather than experiencing it as the driver. This means moving beyond an approach centred on technology innovation and seeing people as consumers, and towards one that focuses more on enabling people to participate in their own use of technology[9].

[5] In addition, developments in pharmacology and gene therapy, among others, are liable to offset many of the traditional debilitating effects of ageing in coming years, though these are liable to take a long time to be rolled out for mass use.
[6] See "Innovation and opportunity on an ageing society", Social Innovation eXchange, http://socialinnovationexchange.org/spring-school
[77] http://www.a2e2.eu/5
[8] http://www.express2connect.org/
[9] "Innovating better ways of living in later life", Carmel O'Sullivan, Geoff Mulgan and Diogo Vasconcelos http://www.youngfoundation.org/files/images/novating_better_ways_of_living_in_later_life.pdf

- *From invention to innovation*, moving beyond gadgets and gizmos, and seeing how new products and services can reflect elderly people's interests and respond to their needs. These include sustained, community-based training and support[10] given that technological invention alone is not innovation. Understanding what needs to be done and what could be done but is not there today, puts the panoply of devices and gadgets into practical use—changing what we do, not simply doing what we already do better.
- *From technological to social innovation*, including developing and supporting intermediaries who can empower elderly people by educating them about ICT and the benefits it can bring.
- *From a focus on products and tools to a focus on purpose, outcomes and services.* An example of this is moving attention away from the manner in which a new device can provide instant access to information, without considering whether this might not be socially isolating, to designing services that can use the technology to help elderly people renew or develop social contacts and actively engage in their communities.
- *From closed to open systems of innovation.* In a complex field like this, few entities are able to innovate on their own: almost all bodies will need to work with other organisations which have a leading role in service provision (health, social services, housing). Collaboration is central to innovation, and design thinking and ethnography (as well as other methods of social research) are two critical ingredients in this. Ethnographic research by both companies and the public sector is paramount to really understanding the lives of elderly people.

From closed to open

Intel and the Irish government are building the TRIL Centre[11], the largest research facility in the world dedicated to developing health-care technologies specifically for the elderly. Research addresses the physical, cognitive and social consequences of ageing, all informed by ethnographic research and supported by a shared pool of knowledge and engineering resources.

To new support platforms

The RGS, Rehabilitation Gaming System, project from AAL JP Call 1 has developed a virtual reality based system allowing an elderly person who suffered a stroke to manage their own chronic condition. The system deploys an individualized and specific deficit oriented game-based training regime that combines movement execution with observing the correlated action of virtual limbs displayed in first-person perspective.

- *From traditional public procurement* (buying goods and services*) to innovation procurement*, i.e. procurement which supports new ways of addressing the needs of senior communities.
- *From entrepreneurship to 'elderpreneurship'*. Third Age Entrepreneurs are responsible for over a quarter of the companies set up in the UK in recent years[12]. In the US, contrary to popularly held assumptions, the highest rate of entrepreneurial activity belongs to the 55-64 age group[13]. Such phenomena are likely to become much more widespread in the coming years.
- *From traditional, fixed to new, mutual support platforms*. For the first time, sociologists admit the relevance of online social support. "The electronic social network an online support group creates can provide the benefits of social support traditionally conveyed face-to-face without conventional limitations of material resources, proximity and temporality." This enables "not only information and advice but also emotional support and companionship among strangers"[14].

[10] Older people, technology and community: the potential of technology to help older people renew or develop social contacts and to actively engage in their communities", Independent Age, 2010, available at http://www.independentage.org.uk/__data/assets/pdf_file/0013/5017/GulbenkianNewReport.pdf

[11] http://www.trilcentre.org/

[12] "The grey economy: How third age entrepreneurs are contributing to growth", NESTA, http://www.nesta.org.uk/news_events/press_releases/assets/features/the_grey_economy_third_age_entrepreneurs_critical_to_growth

[13] "The United States might be on the cusp of an entrepreneurship boom—not in spite of an aging population but because of it." ("The Coming Entrepreneurship Boom") http://www.kauffman.org/uploadedFiles/the-coming-entrepreneurial-boom.pdf

14 "Online Social Support: The Interplay of Social Networks and Computer-Mediated Communication", Antonina Bambina.

Evidence collected by the Panel indicates that the issues of greatest concern to older people are isolation, mental and physical health, loneliness and depression, with the very fear of these frequently compounding them. The underlying goal is to create an environment in which people can remain self reliant, active and fulfilled citizens for much longer periods of their lives. It is only towards the very end of most people's lives, if then, that full dependency on others becomes necessary for people other than those with very severe disabilities. Very important are resilience, self confidence and the feeling of remaining connected, of being in control and fully engaged with others. The issue of old age does not have to be fragmented, and most support does not come from professional services, although these are essential. The elderly person's networks of family and community are fundamental to well being, not so much to promote independence but to ensure self reliance and successful inter-dependence[15].

Clearly ICT has a central role in supporting inter-connectedness, access to information and services, control over living space and of wider environments. But there is a need to experiment with new models of how to do this well, and use social and organisational, as well as technological, innovation. There needs to be a shift in how the end user is empowered as much as possible to create their own networks and solutions through family, community and professional intermediaries where they themselves have more or less control.

The Panel also recognises that there can be a paradox, if only in the way ICT is perceived as being inhuman and cold when what elderly people want above all is warm social contact. However, this is largely a question of perception, as ICT can just as easily support and enrich such contact as impose isolation. To do this, elderly people themselves, or those closest to them, need to be the starting point of the creativity and experimentation necessary to delivery better solutions. Much ICT is already available which can contribute to such an innovative mix. However, new technical solutions are also necessary: above all, there is a need to improve accessibility[16], ease of use, reliability, versatility and price, without which even the best technology will not be used.

Netcarity[17] is an FP6 project investigating how new and existing technologies can be integrated cost effectively into people's homes, making them feel more comfortable about remaining in this familiar environment. It is developing and testing a new technology infrastructure for homes, with systems that enhance communication with friends, family and care givers; support everyday living and promote a sense of social inclusion. These include a smart microphone which uses sounds to identify users' activities and emotions. Different sound patterns can be associated with cooking, others with watching television or bathing. Should an incident arise, the smart microphone enables immediate identification of what a user was doing at the time. The project has found that the user gets so attached to their devices that they do not wish to give them up.

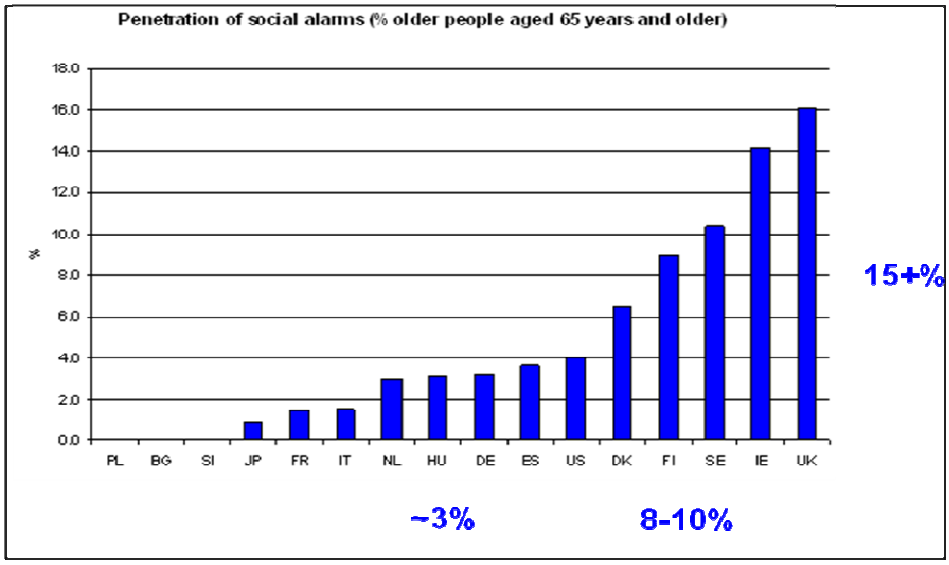
The contextual implementation of ICT in this way clearly offers the potential to redeploy scarce financial and human resources for public services. It can release staff from routine and bureaucratic tasks to frontline delivery, create internal efficiency improvements which can help to save money, and ensure better service targeting and outreach.

[15] A good example is the Canadian initiative http:/www.tyze.com, which provides secure, online personal networks of support that result in better health outcomes and full lives for people experiencing life challenges. Every network is created around a specific person and situation and designed to strengthen relationships.
[16] Accessibility in the sense of usability by persons with functional limitations (disabilities) such as reduced vision, hearing, dexterity, mobility or cognition.
[17] http://www.netcarity.org/About.11.0.html

Health and Care Partnership reported that better use of staff time was one of the outcomes to justify the business case of West Lothian Community Telecare. The overwhelming user response to the technology was positive, with users reporting an increased sense of personal safety and security and informal carers reporting increased peace of mind[18].

The Panel wishes to emphasise that ICT also offers huge opportunities for European industry, and especially SMEs, as ageing is a global phenomenon. (See for example the market potential for social alarms and telecare illustrated in Figure 2 if the penetration already achieved in the UK and Ireland is experienced across Europe.) However, there are serious barriers which need to be tackled in combining social, technological and organisational innovation at Member State level, not least concerning regulatory and reimbursement regimes (to overcome fragmentation, as well as to support a pro-innovation approach to elderly care).These barriers need to be addressed, not least because non-European countries also have their eyes firmly fixed on the huge potential market represented by a burgeoning global elderly population with money and time to spend.

Figure 2: The market potential of social alarms and telecare[19]



The Danish government has allocated €400m to a dedicated programme[20] between 2009 and 2015 directed towards developing and improving public sector services through the implementation of labour-saving technologies, intelligent reorganisation of service delivery processes and more efficient working processes. In particular, the programme recognises that the public sector will be experiencing increasing demand for supportive services over the coming years due to ongoing demographic developments and a significant increase in the elderly population. The programme aims to:

- Increase productivity and efficiency in the public sector.
- Improve current working conditions for public employees, thus making jobs in the public sector more attractive to a shrinking labour force
- Provide the choice of more flexible, user-centred services to citizens, empowering them to remain independent for as long as possible and to take responsibility for their own lives.

Thus, ultimately the programme will result in a 'triple-win situation' for the public sector.

[18] Bowes, A., and McColgan, G (2006) Smart technology and community care for older people: innovation in West Lothian, Scotland, Edinburgh, Age Concern Scotland.
[19] Source: empirica market study based on Eurostat demographic projection.
[20] http://www.fm.dk/sitecore/content/abtfonden/Home/Om_Fonden/English.aspx

The current crisis creates a sense of urgency: growing social needs, ageing population, high unemployment and budgetary discipline all require new solutions, not just the fine tuning of current policies. The big political priority of a sustainable recovery is to unlock new sources of growth and jobs. As well as economic and social challenges, it is important to understand to what extent an ageing population will also present economic opportunities for business as well as for society as a whole.

The **"silver markets"** will probably be one of the fastest growing markets of the next decade. Market research into these markets is extremely relevant to speed up the incentives for innovation in this space. The UK study "*Economic Opportunities and Challenges of Ageing*"[21] states: "The growth in the number of older households over time, combined with a continued rise in their spending power relative to other households, may be expected to lead to increasing expenditure for certain categories of goods and services. Surveys of household income and expenditure show that:

- Elderly households devote a greater proportion of their total expenditure to necessities like food and drink, housing, fuel and power. Luxury items related to recreation and culture are also areas of significant expenditure for these households.
- Net incomes of pensioner households increased by 25% between 1998/9 and 2007/8, compared to real earnings growth of 11%.
- However, elderly people are not a homogeneous group and there are significant numbers who are in low income and even poverty cohorts. For example in EU15 the elderly (aged 65+) have a higher risk-of-poverty rate than both children and the working age population (20% against respectively 18% and 15% between 2005 and 2008).[22]
- The ageing of the population, combined with the potential increase in relative spending power of older consumers, may create growth in markets for health products and services and in recreation and cultural activities. Market-based research also points to significant business opportunities within these areas.[23]

Many of the practitioners interviewed by the Panel underlined the need to develop new infrastructures, new services and business models. "Every major recession of the past has been followed by radical changes to the industrial structure, with the surging growth of new industries often supported by new infrastructures"[24]. Services and products to improve the autonomy and wellbeing of elderly people are likely to emerge as a growing industry. If the right mix of standards, policies and incentives is in place, hundreds of thousands of new, knowledge intensive jobs would be created in the coming decades. Such jobs are in direct care and daily support as well as in home adaptation, ICT-enabled training for balance, cognition and medication use, ICT-enabled remote assistance and support, etc. While many of these can be realised on existing infrastructures, at the same time Europe is calling for pervasive high speed broadband as one of

[21] http://www.bis.gov.uk/policies/new-industry-new-jobs/opportunities-for-an-ageing-population

[22] Interim EPC-SPC Joint Report on Pensions 2010: http://ec.europa.eu/social/main.jsp?catId=752&langId=fr&moreDocuments=yes In contrast, in 2005 in the EU10 Accession Member States pensioners experienced much lower risks of poverty than children and the working age population (8% against 25% and 17% respectively). This reflects partly the age orientation of social protection in these countries where pensions used to appear relatively generous compared to weak support to families with children. However, between 2005 and 2008 the relative situation of the elderly in the EU-10 has evolved rapidly, with the elderly at-risk-of-poverty rate increasing by 4 percentage points.

[23] The AAL JP objectives as stated in the co-decision are threefold: improve quality of life, create critical mass in R&D, improve industrial conditions, so this industrial dimension is reflected in the programme which is also co-funded by private money by up to 50%. There may be some debate whether the wealthier part of the elderly population should be supported first in order the create economies of scale and create critical mass, which would then reduce prices for other elderly persons, or whether AAL JP should focus mainly on where the market is failing to become established.

[24] "Reinventing Europe Through Innovation", report by the Business Panel on EU Future Innovation Policy http://ec.europa.eu/enterprise/policies/innovation/files/panel_report_en.pdf

the key infrastructures of the future. This will enable new quality of life, jobs, and economic growth opportunities. Technology could be used to put elderly people in touch with family and friends, e.g. using mobiles, tablets and video-conferencing in centres and in their own homes. Video interactions, particularly, are seen as a potential "killer application" of high speed broadband[25] and some examples are already being realised or emerging as experiments testing the potential of video to address the needs of elderly people.[26] [27]

MediNeuvo: is a leading health and homecare company in Finland with a sister company in Sweden, aiming to create a new, high quality, accurate and cost efficient service concept. It is doing this by merging together the previously achieved experiences of homecare, telecare, healthcare and independent living at home through piloting a set of different levels of Digi-TV, IPTV, mobile TV and videoconferencing techniques appropriate for various groups of elderly people according to their individual social needs and health situations to guarantee safe, socially rich independent life. The approach makes use of results from T-Seniority, an EU-funded project from the CIP programme (i.e. innovation downstream from AAL). The technology, both for the home care team and in the homes of the elderly, is combined with the reorganisation of work and upgrading of the home care team's competencies. Effective work time spent in the homes of the elderly has increased from about 35% to 60% over six months. This is very important from a cost and resource availability point of view, particularly as these are becoming increasingly scarce.

1.2. The AAL Joint Programme

As part of its overall action plan "Ageing Well in the Information Society"[28], the European Commission proposed in June 2007 a co-decision of the Council of Ministers and European Parliament, based on Article 169 of the EU Treaty (now Article 185 of the TFEU, designed to strengthen research cooperation between Partner States' own initiatives and those of the EU[29]) to financially support the Ambient Assisted Living Joint Programme (AAL JP) of 23 European countries[30]. In June 2008 this proposal was adopted by Council and Parliament. Up until 2013, the AAL JP aims to join together national research activities in the area and complement EU-funded activities within the 7th Framework Programme (FP7). Total investment over this period

[25] TV-centric video communications is a service using the TV (preferably HDTV monitors) to offers one-to-one (and ultimately one-to-many) video quires roughly 15 Mbps to 20 Mbps symmetric bandwidth, which only fibre colutions can deliver today. It is envisaged communications in real time. The quality of the experience is held to be much superior to current PC-based Skype interactions. The service requires optical fibre access - a two-way HD stream with low enough latency re that third parties will pay for access to the video communications platform to deliver high-value services to the end-customer, such as telemedicine and remote patient care. See "Video Communications Will Be the Killer App of FTTx", Benoit Felten, Yankee Group, 2009.

[26] "Video will take a far bigger role, it will give us more mobility, in different ways ….for ageing people it's a very helpful means", explains the mayor of Almere, fastest-growing city in the NL, Chair of the Association of Dutch Municipalities, former National Minister of Economic Affairs, explaining Almere's Ageing Well program http://www.almerekennisstad.nl/verzilvering/ . Created by Waag Society, StoryTable uses video to help people share their own stories which decreased the feelings of loneliness amongst the elderly. According to the Centre for Research on Aging (CVO) of the Free University of Amsterdam StoryTable sessions seemed to lessen feelings of loneliness amongst the elderly, had a positive effect on feelings of depression and increased self confidence and the sense of control over life, see http://www.waag.org/project/verhalentafel

[27] The social impact of next generation networks – namely on personalized care, independent living and sustainable ways of work - was highlighted in a recent initiave on "The next generation services initiative" developed by the Portuguse ICT and Telecom Associacion. It paved the way for a €70 million public fund, backed by Portuguese and EC Structural Funds, to create new social solutions enabled by fibre and high speed wireless networks). See http://www.apdc.pt

[28] http://ec.europa.eu/information_society/activities/einclusion/policy/ageing/action_plan/index_en.htm

[29] Article 185 of the Treaty on the Functioning of the European Union: "In implementing the multiannual framework programme, the Union may make provision, in agreement with the Member States concerned, for participation in research and development programmes undertaken by several Member States, including participation in the structures created for the execution of those programmes."

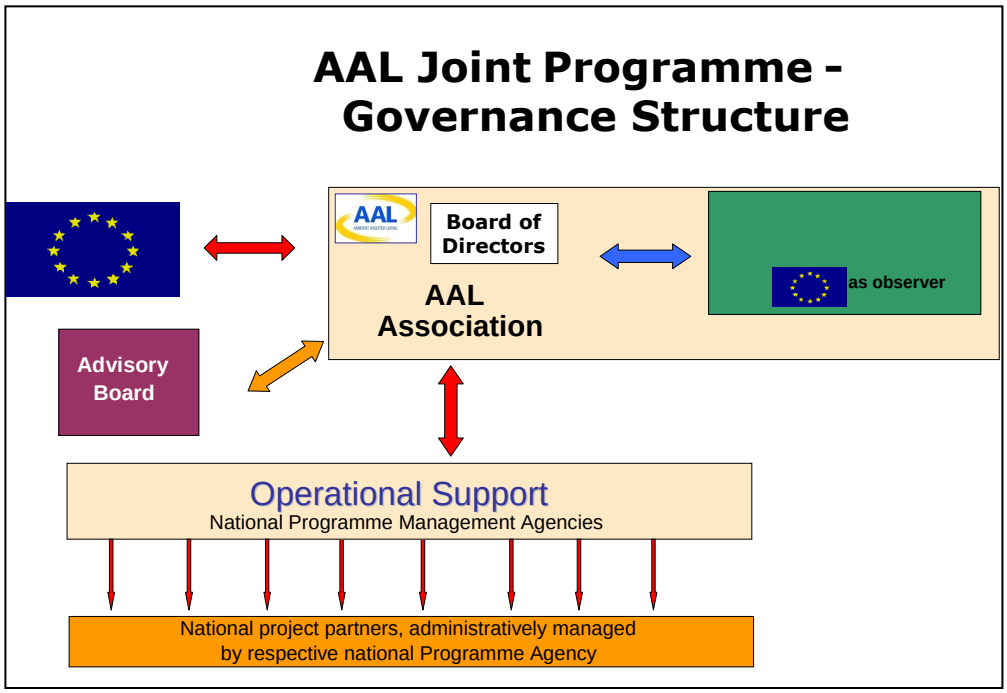
[30] 20 Member States and 3 countries associated to FP7 (Israel, Norway and Switzerland), hereinafter referred to as "Partner States". Currently Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Malta and Slovakia are not participating in the AAL JP.

is planned at minimally €600m contributed in the ratio of about 25% from the Commission, 25% from Partner States and 50% from programme participants.

EU funding is only committed once Partner States have made their clear political and financial commitment to the programme, and EU payments are only made once Partner States have made theirs (thereby overcoming one of the problems of the earlier 'clinical trials' ECDTP[31] Article 169 initiative). The intention is thereby to increase overall investment in line with the EU's objectives of boosting growth and jobs.

The AAL JP is executed by the participating countries through the AAL Association (AALA) which has set up a Central Management Unit (CMU) for the daily programme operations. (See Figure 3). A joint research work programme is agreed each year by the Partner States together with the European Commission. This invites proposals for joint projects with participants from different Partner States but subject to a common evaluation procedure and co-funding from national budgets. The AAL JP thus aims to join together national technology research activities focused on applied research in order to encourage participants to establish the conditions for market acceptance and future technology uptake.

Figure 3: AAL Joint Programme governance structure



The AAL programme is designed to complement longer-term research in the upstream FP7 which focuses on advanced research with a time to market of 5-10 years. AAL addresses applied research in the areas of independent living systems and applications with a short-to-medium term horizon and a time to market of 2-3 years. In turn, the AAL programme provides one of the inputs for activities in the field of downstream innovation and market validation under the Competitiveness and Innovation Programme (CIP, and within this specifically its ICT Policy Support Programme ICT PSP), thus completing a large part of the chain from basic research to market uptake, as recommended by a number of independent assessments on EU research and

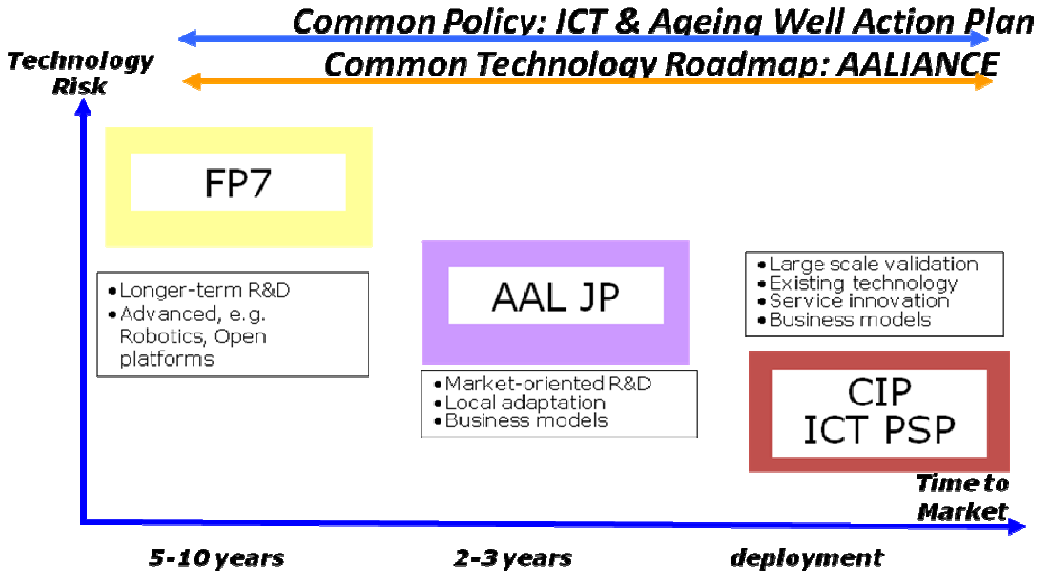
[31] European & Developing Countries Clinical Trials Partnership, as assessed under the chairmanship of former MEP Van Velzen in July 2007.

innovation programmes as well as EU policy documents[32]. (See Figure 4) There are two important binding elements in place for these three programmes: the ICT & Ageing Well Action Plan, adopted by the European Commission in 2007, provides a policy framework to interrelate and bring coherence to this range of activities. The 2009 AALIANCE roadmap provides the technology vision gluing together the three programmes. This was developed by a wide range of industry and other actors in a support project in FP7.

The specific objectives of AAL JP are to

1. **Foster the emergence of innovative ICT-based products, services and systems for ageing well** at home, in the community, and at work, thus increasing the quality of life, autonomy, participation in social life, skills and employability of elderly people, and reducing the costs of health and social care.
2. **Create a critical mass of research, development and innovation at EU level** in technologies and services for ageing well in the information society, including the establishment of a favourable environment for participation by small and medium-sized enterprises (SMEs).
3. **Improve conditions for industrial exploitation** by providing a coherent European framework for developing common approaches and facilitating the localisation and adaptation of common solutions which are compatible with varying social preferences and regulatory aspects at national or regional level across Europe.

Figure 4: ICT for Ageing Well – a comprehensive EU approach



The AAL JP supports two types of activities:

- Technological research, demonstration and dissemination activities, implemented via shared cost trans-national projects. These involve partners from at least three different Partner States. Projects should be targeted at market-oriented research, should be of short to medium-term

[32] Such as the EC Communication COM(2009)116 "A Strategy for ICT R&D and Innovation in Europe: Raising the Game" of 13 March 2009.

duration, and should demonstrate the capability to exploit project results within a realistic time frame.

- Brokerage, programme promotion and networking activities. These are implemented through dedicated events or in combination with existing events.

1.3. Purpose and scope of this Interim Evaluation of the AAL Joint Programme

The Decision of the European Parliament and the Council required that the Commission would carry out an Interim Evaluation of the AAL Joint Programme two years after the start of the Programme but at the latest in 2010[33]. This evaluation should cover the quality and efficiency of the implementation, including scientific, management and financial integration of the AAL Joint Programme, and its progress towards the objectives set out in the Annex to the aforementioned Decision; the appropriateness of the level of financial contributions by participating countries, and provide recommendations on the most appropriate ways to further enhance integration.

This Interim Evaluation, as outlined, should:[34]

1. Assess the progress towards the objectives of the AAL Joint Programme.
2. Assess the level of financial contributions to the Programme by participating countries in view of the potential demand from national research communities.
3. Assess the performance of the AAL Joint Programme as an integration of national programmes in the spirit of Article 185 of the EC Treaty (Art. 169 of the former Treaty) and recommend the most appropriate ways to further enhance scientific, management and financial integration. In this context, the role of the European Commission should also be addressed.
4. Assess, with a focus on improving the future operations and results, the AAL Joint Programme performance as an operational structure, taking into account the quality and the efficiency of the implementation. In this context, the role of the European Commission should also be addressed.
5. Assess the European added value of the AAL Joint Programme, using Article 185 of the EC Treaty, compared to other forms of support to R&D (via the Framework Programme, via ERA-Nets, via National & Regional programmes).

and subsequently:

6. On the basis of this assessment, draw possible lessons to be learnt and recommendations for adjustments, where feasible of the current AAL JP.
7. On the basis of this assessment, make recommendations for a possible continuation of the AAL JP beyond FP7 (if applicable).
8. On the basis of lessons learnt, provide possible recommendations for future joint programmes involving Member States and the European Commission.

This Interim Evaluation is a programme level and European level evaluation, but also takes account of and has messages for the national level, where the European added value of the programme is particularly important. It does not systematically examine individual projects. Due to the short elapsed time of the programme, the emphasis of the evaluation is not on impact assessment as such, but rather on the progress towards principles and objectives set out in the AAL JP co-decision and recommendations for the future.

[33] Decision no 742/2008/EC of the European Parliament and the Council of 9th July 2008, in particular Recitals 12), 20), 23), 25), 27) & Articles 2, 3, 5, 12.2.

[34] Source: in particular Article 12 of the above co-decision.

In section 2 below a number of strategic principles that are applied to the AAL JP through specific recommendations have been elaborated by the Panel as a conceptual framework for directing the future positioning, scope, and activities of the AAL JP, within an overall approach to addressing demographic change in Europe.

This is followed in section 3 by the detailed findings and recommendations of this Interim Evaluation addressed to the five areas identified in the co-decision (1-5 in the above list), with the first area divided into three parts representing the specific objectives of AAL JP.

These findings and recommendations are not based on statistically valid sampling of all projects and participants, but instead upon the informed opinion of the Expert Panel. The Panel used as inputs, in addition to their expert knowledge, background documents on ageing well and ICT, case studies, and available statistical information about the AAL programme - plus approximately 40 interviews with a variety of individuals both involved and not involved in the programme but with knowledge of the area. The Panel also invited external stakeholders to submit their views through an online public consultation, which received 39 submissions. The resulting feedback has been used as an additional input to the Panel.

Most recommendations arise directly from the evaluation findings; some also draw on the Panel's broader awareness of societal needs and their experience concerning how new forms of innovation and market development can be successfully supported. Most of the recommendations in section 3 are of the former type and focus on what should be done in the short-term (i.e. within the current duration of AAL JP until 2013). In section 4, a second group of recommendations focuses on what is required in the medium to longer term (i.e. beyond 2013 and a possible renewal of AAL JP). A number of recommendations address activities outside the AAL JP such as other EU or national programmes.

The prime targets of the recommendations are the AAL programme itself and Partner States (i.e. participating countries) for most of the short-term recommendations, i.e. those in sections 3.1 to 3.4, although the European Commission will have a supporting role in most cases. The short-term recommendations in section 3.5 (European added value), as well as the medium to long-term recommendations in section 4, are divided in the text between those aimed mainly at European level stakeholders (primarily the European Commission), on the one hand, and the AAL programme and Partner States, on the other.

Annex 1 provides an overview of all recommendations by section, and indicates whether each is short or medium term, the prime stakeholders targeted, and into which group of strategic recommendations used in the Executive Summary it is allocated. An overview of the methodology and workplan is provided in Annex 2. Annex 3 lists the members of the Interim Evaluation Panel, Annex 4 the persons interviewed and Annex 5 provides a note on the public consultation. Finally, Annex 6 contains the abbreviations used and main references consulted.

2. Strategic principles guiding the Interim Evaluation

Innovation for demographic ageing needs to be guided by a set of broad strategic principles. These are in particular applicable to the AAL JP which should be a key pillar and exemplary programme which implements and further develops them.

The five strategic principles presented here have been developed as part of the present Interim Evaluation of the AAL JP, but have wider applicability. They provide a conceptual framework for the findings and recommendations in the rest of this report on the progress of the AAL JP and for directing its future positioning, scope, and activities as part an overall approach to addressing demographic change in Europe. Using these principles as a benchmark, the Panel wished to make clear that the AAL JP is to be positioned as a key initiative to realise an enhanced, positive vision on ageing in 21st Century Europe. This vision is to be based on recognising the market potential and the need for innovative services, with significant real-life impact by means of integrated innovation with all stakeholders and operational excellence.

In the context of each strategic principle, some of the related key recommendations for the AAL JP are presented in the following:

1. VISION: An enhanced vision for ageing in the 21st century and the immense opportunities this brings for Europe, embedded in a new agenda

- The AAL JP should further embrace a vision of ageing as bringing immense opportunities for Europe and be positioned as a key programme in a new agenda to realize that vision. As such, it should be continued beyond 2013 *(AAL JP, EC)*[35]
- Ensure wider political support at both EU and national level for the AAL JP, in order to fully achieve its potential and recognition as a programme underpinning Europe's social and economic development, combining technological, social and business innovation *(AAL JP, EC).*
- Support this enhanced vision as part of wider EU governance, policies and programmes, including EU2020 and the Digital Agenda for Europe *(EC).*
- Explore strategic initiatives with the European Investment Bank and the European Investment Fund to enhance investments, exploitation of results and their availability to the widest number of final users *(AAL JP, EC).*
- Undertake strategic communication and awareness raising across all relevant industrial sectors and levels of government *(AAL JP).*

2. MARKET: An open dynamic European market for ICT and ageing, strongly contributing to growth and jobs

- The AAL JP should be positioned as a key pillar in the development of an open dynamic European market for 'ageing well' solutions, and it should therefore factor the realisation of the internal market for such digital services into the political and operational lifecycle of the programme *(AAL JP, EC).*
- Fully integrate users, the third sector and other actors into the value chain *(AAL JP).*
- Ensure sufficient connection between the demand and supply sides in the programme *(AAL JP).*

[35] A recommendation to the AAL JP means that it is addressed to its participating states. EC means European Commission. For full explanation, see Annex 1.

- Link the programme more closely, clearly and effectively with national/regional actions and, at EU level, with the Competitiveness & Innovation and the Research Framework Programmes *(AAL JP, EC).*

3. SERVICES: Developing and delivering innovative world class ICT-based products, services and systems

- Combine technological innovation with social innovation[36] in service design and delivery: these should be more important elements in the overall focus *(AAL JP).*
- Prioritise global standards, interoperability and open platforms *(AAL JP, EC).*
- Focus on technology support for real life situations, to address social exclusion, isolation and the goals of inter-connectedness and self reliance within the community *(AAL JP).*

4. IMPACT: High social, economic and political impact through research, market and deployment activities

- Strengthen the linkage between the AAL JP research activities and market and deployment activities that are happening within the programme and outside *(AAL JP, EC).*
- The AAL JP should develop dynamic and open collaboration platforms, e.g. using online and Web 2.0 tools, linking public, private and third sectors *(AAL JP).*
- The AAL JP should prioritise much stronger involvement of users, care service providers, NGOs and the third sector in projects and project selection *(AAL JP).*
- Enhance evaluation criteria with stronger focus on impact and public value *(AAL JP).*

5. PERFORMANCE: Operational excellence based on efficient and effective governance and structures

- Harmonise financial regulations and participation rules across the participating countries *(AAL JP).*
- Explore ways to strengthen the financial integration between participating countries *(AAL JP).*
- Urgently reinforce the central staffing and functions of the AAL JP *(AAL JP).*
- Strengthen the role of National Contact Points and their coordination *(AAL JP).*
- Improve visibility, communication and knowledge sharing, internally and externally *(AAL JP).*

[36] Social innovation is about developing new forms of organisation and interactions between the public sector, third sector, social enterprises, the social economy, economic operators and civil society, to respond to social issues, like ageing and eldercare..

3. Findings and short-term recommendations of the Interim Evaluation

The findings and recommendations in this section are based on the investigation of five specific areas related to the progress of the AAL JP, which were requested by the European Parliament and Council AAL JP Decision to be addressed by this Interim Evaluation. The Panel advises that these findings and specific recommendations should be seen in the context of the strategic recommendations presented in section 2.

The overall, headline findings of the Interim Evaluation are as follows.

1. The overall finding of the Interim Evaluation is that the AAL JP has made good progress towards its objectives so far, especially in consideration of its short lifespan (two years), and that its overall direction is widely seen as positive. The programme should achieve its short-term objectives, provided a number of manageable shortcomings are addressed.
2. Given the growing importance of demographic ageing, which is a shared and urgent challenge across Europe, the AAL JP is very well justified as it provides both a new form of European collaboration and focuses on solutions for short and medium-term societal needs, by exploiting technological opportunities and fostering direct cooperation among participating countries.
3. It is a remarkable achievement that in just a few years the AAL JP countries have engaged in such close cooperation. It is strong evidence of their interest that they have increased their financial contributions significantly beyond the minimum required.
4. A high level of SME participation has been reached at about 40% compared with less than 20% in the first call of FP7 ICT & Ageing Programme.
5. The AAL JP should be continued into FP8. , as part of a coherent overall approach to research and innovation for demographic ageing.
6. As for its longer term prospects, the AAL JP can aspire to become a globally relevant major European flagship with increasing impact, through a number of targeted adaptations to its approach and the strengthening of the policy orientations that define its trajectory.
7. The recommendations made in this report focus on the actions needed to achieve this potential. Some of these reach beyond the AAL JP to the broader context of ageing in European society and economy.

3.1. Progress towards the objectives of AAL JP

The Expert Panel has found clear evidence of major achievements made by the AAL JP to date. These are set out below. It is not possible to draw unambiguous conclusions about the longer term impact at this stage, given that it is still less than three years since the earliest projects started and most have only been launched very recently.

Nevertheless, the view of the Expert Panel is that **the programme is well-justified in terms of economic and social needs and technological opportunities, and that its overall direction is positive so that it should eventually achieve its objectives**. This is also a unique initiative that offers opportunities for innovation in ICT for Ageing Well not currently found elsewhere in the world. As such it is a major window of opportunity for Europe to take the lead in this emerging

field. However, the Participating States need to pay attention to improving the joint operations of the AAL JP.

Thus, the medium term impacts of AAL JP can be expected to be useful to the numerous categories of **beneficiaries of the programme**. These include, as well as end-users and their immediate families and communities (who may be far from geographically near), formal and informal care providers, and service organisations at various levels, typically as intermediaries. These latter can also be beneficiaries in various ways, for example by reducing the need for costly and stressful emergency interventions, by enabling the better development of data that can allow for targeting and planning, by improving staff capabilities to better match user needs, and by integrating activities that are currently dispersed across different agencies. The wider community can also benefit from greater social inclusion.

There are also **commercial benefits** for European industry, both large companies and SMEs, in terms of innovation and design issues and in progressing the rollout of new solutions in a growing and more vibrant market with the possibility of exports to other parts of the world. Such commercial benefits are not only in the ICT sector but can also be cross-sector, whether in engaging older talent and benefitting from their experience, judgement and reliability, saving on recruitment costs, assisting younger employees to care for elderly dependents, and stimulating completely new services such as remote and life-long-learning for the elderly labour force. Indirect commercial benefits can also include moving to a preventive instead of a curative medical and care regime using ICT.

There has overall also been **excellent participation of SMEs across all Partner States and of user organisations in some of them**[37] which is important to both support economic growth and ensure better market acceptance. See Table 1.

Table 1: Organisation type, both in proposals submitted and in proposals ranked

	AAL JP[38] Call 1 2008	AAL JP Call 2 2009	FP 7 ICT programme, ICT & Ageing, First Call[39]
Large enterprises	9%	7%	10%
SMEs	38%	46%	19%
User and other organisations	18%	14%	6%
Research organisations	19%	21%	35%
Universities	16%	12%	30%
Total	100%	100%	100%

In the following, more specific findings are presented in relation to the three objectives of the programme.

[37] Not all Partner States currently allow user organisations as eligible participants for funding.
[38] The data shown for AAL JP are for submitted proposals, and are very similar to the data for ranked proposals – i.e. those eligible for funding – so the latter data are excluded.
[39] Average SME participation in the whole FP7 ICT programme is 14.4% (FP7 report, Spring 2010, European Commission, DG-Research).

3.1.1. AAL JP objective 1: Foster the emergence of innovative ICT-based products, services and systems for ageing well at home, in the community, and at work

The evaluation found evidence that fruitful approaches are being adopted by many industrial actors, service providers and user organisations to develop innovative ICT-based solutions, for example through integration into objects that elderly people already have and like to use. The focus is often on adapting **simple and existing technology**, like the TV, touch screen or talking to a camera, as well as a standard PC, although the latter can also be too complicated for some. However, this does not mean that appropriate technology is necessarily available off the shelf, as it often **requires adaption in terms of reliability, versatility and price**. In addition, new ICT tools like smart phones for eHealth applications and book-size tablets are being considered to take account of the setting in which the technology is to be used.

Achievements

- **Much good work is being done by AAL JP to develop innovative ICT-based products and services**, although it is still too early to judge how successful and sustainable this will be since the earliest projects started less than two years ago.

See the box below which compares two AAL JP projects with an FP7 and a CIP project.

Example projects to illustrate the distinction between FP7 (advanced R&D), AAL JP (applied R&D and closer to the market) and CIP (innovation validation, no R&D and close to the market)

FP7 project: FLORENCE[40] aims to meet the significant demand for care in the ageing society and the desire of elderly persons to remain independent much longer by providing robot-supported care and coaching services. Although this will greatly improve care efficiency and reduce costs, the main challenge is the acceptance of robots by elderly persons. To address this, a user-centric approach is adopted starting with focus-group sessions to assist in designing the robot as a consumer device supporting various lifestyle services. The consortium contains partners from the complete value chain: robot vendors, care providers, and consumer electronics vendors.

AAL JP project: eCaalyx[41] is developing a reliable long-term and maintenance-free solution addressing chronic conditions in elderly peoples' own non-technical environments. The technology used is based on advances in mobile positioning systems for location-aware tele-care applications, wearable light devices capable of measuring specific vital bodily signs, detecting falls, and communicating automatically in real-time with his/her care provider in case of an emergency, wherever the person happens to be, at home or outside. The purpose is to improve elderly persons' quality of life by assessing their health risk, by monitoring and controlling their health status and by teaching them how to manage their chronic conditions so that they can continue to live at home much longer. It also allows comprehensive and coordinated global treatment from different doctors of patients suffering from comorbidity,[42] leading to greatly improved and efficient treatment. Practical deployment aspects such as remote management and auto-configuration mechanisms are also being developed so that long-term large-scale commercial deployment is possible with reduced operating costs.

AAL JP project: ROSETTA[43] alleviates the progressive chronic disabilities (i.e. Alzheimer's Disease and Parkinson's Disease) of people in the community, and enables them to retain their autonomy and quality of life as much as possible. It also supports their (in)formal caregivers by developing and providing an ICT system that offers activity guidance and awareness services for independent living. The system uses sensors to monitor the activities of the elderly person, and

[40] http://www.florence-project.eu
[41] http://ecaalyx.org/
[42] Comorbidity is the presence of one or more diseases in addition to a primary disease.
[43] http://www.iese.fraunhofer.de/projects/med_projects/aal-lab/projekte.jsp

assesses these activities in relation to the individual's typical behaviour. Unexpected inactivity leads to an alarm being forwarded to the carer. Changes in typical behaviour that may arise from chronic diseases or a long-term deterioration are also detected and reported to the carer. In addition, the system directly supports the elderly person in carrying out his or her daily activities.

CIP project: Home Sweet Home[44] will trial and validate a new, economically sustainable home assistance service which extends elder persons' independent living by providing a comprehensive set of services to support their daily activities and allow carers to remotely assess their ability to stay independent. These services include monitoring and alarm handling using real time data collected from medical and environmental sensors and geopositioning systems; intuitive videoconferencing based on the familiar TV format; a domotic and daily scheduler system to help users organise their daily activities and to manage the house in spite of growing physical and mental impairments; and navigation and mental faculty maintenance using interactive games based on cognitive adaptive technology.

Improvements needed

- There appears to be some risk that work does not sufficiently involve users and service providers, and may be overly **driven by the technology.**

Recommendations for innovation-based ICT-solutions

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**[45]	**Strategic recommen-dation**
1) Further increase focus on technology developed in real life situations	S	AAL, Partner States	Services
2) Promote technology for carers and intermediaries as well as end-users	S	AAL, Partner States	Services
3) Focus more on broadly targeted solutions, usable by all	S	AAL, Partner States	Services

Recommendation 1 **Further increase focus on technology developed in real life situations**. It is important that technology is not developed by programmers working in isolation but rather working with users in real life situations, perhaps also in a living lab context. Products and services should be developed with real user involvement (in 'conversation' with users – elderly people, carers, etc.), to avoid missing the market target which appears to be a risk for some AAL projects. Appropriate technology must start by looking at what is happening in real life, and then by matching technological and ambient assisted solutions with the actual ability of elderly people to use them in their daily routines. Only once this happens should the product be commercialised by the ICT partner and also sold to other service providers. (An example of where this happens is Express2 Connect, see box in section 3.1.2).

Recommendation 2 **Promote technology for carers and intermediaries as well as end-users**. Although this is already happening in the programme, more emphasis should be put on developing technology which can also be useful for carers and intermediaries, as well as for end-users. It is important to stress and demonstrate that ICT solutions are not a Trojan horse that replace or deskill staff, or remove human contact from support services. Indeed they can increase active staff care by reducing their management and bureaucratic burden. It is

[44] http://www.homesweethome-project.be
[45] The prime stakeholders are the targets of the recommendations, i.e. who should act. See Annex 1 for explanation.

therefore also important to strengthen the capacity and skills of carers (both formal and informal) so they can use the technology well in order to improve overall care as well as improve their own work environment.

Recommendation 3 **Focus more on broadly targeted solutions, usable by all**. Focus should be placed on broadly targeted products but which can be easily personalised to suit individual needs. The programme should support the mainstreaming of the design-for-all concept as a platform for adaption and personalisation for specialised needs. In general, technology should not just be designed for elderly people but also for persons with disabilities and other people with special needs, indeed for people in all sorts of varied situations. If technology is designed only for one group, the market may not be viable and there is also a risk of stigmatising the group by making it appear separate rather than part of the mainstream.

3.1.2. AAL JP objective 2: Create a critical mass of research, development and innovation at EU level in technologies and services for ageing well in the information society

A critical mass of R&D and innovation is understood to mean the presence of a sufficient number of actors, sufficient cooperation, and sufficient total R&D and innovation activity to initiate a self-sustaining, productive and viable research environment. This section thus focuses on actors, cooperation, and amount of activity in the AAL JP.

The evaluation suggests that **most progress takes place in already existing professional social or health care provision** as that is the everyday reality of professionals. There appears to be currently rather less progress in the informal care sector or in new approaches to elderly care and elderly services such as community- or private-sector based ones. **Most R&D and innovation appear also still to be taking place at the national rather than at European level** and thus involve mostly actors with a national orientation.

However, there are contrasting examples of the extent of international cooperation.

In Belgium, although the AAL topic is high on the political agenda, participation by private companies is seen as insufficient. Belgian national initiatives are very well funded, which takes much of the attention and effort of Belgian actors. This appears to limit their international participation, especially of Belgian SMEs, even though European programmes like AAL JP would otherwise be seen as interesting. **Community building takes time** and there may, in the first place, be a need for communities to be established at national level. Belgian international cooperation is also seen as limited by the budgets available in other Partner States compared to Belgium.

A contrasting example is the Netherlands, where there has been a five times higher demand to AAL JP than the funding available. Out of 104 submitted proposals only 34 could be funded. Unlike many countries, the Netherlands has been able to achieve **good synergy between the AAL JP, national networks and other national programmes**, each benefiting from the other. Many participants in the Netherlands acknowledge that AAL JP projects are not traditional R&D and are able to involve different partners with different backgrounds. However, even in the Netherlands, it is clear that as yet there is no clear beneficiary or end-user impact: this necessarily requires longer elapsed time.

Overall, it is clear that there is much **interesting and valuable research being done**, although there is also some concern, especially from SMEs and service providers, that AAL JP is **too research-driven.**

In relation to extent of activities resulting from the call design, **opinions vary about the scope of the calls,** with some of those interviewed preferring a narrowing of the scope - in order to become more focused - whilst others suggest that future calls should be widened in order, for example, to encourage innovation and new thinking. There may be different perceptions about the value different stakeholders place on the programme – what is important for SMEs, academic researchers or national policymakers may be quite different.

Achievements

- The volume of research and innovation generated across FP7, AAL JP and the CIP pilots (more than one billion € between 2008-2013) makes the European ICT for Ageing Well initiative the world's largest in this area.

- There is a lot of enthusiasm demonstrating **an incipient community across Europe**.

- The AAL JP has had a strong impact in creating critical mass, good contacts for dissemination and commercialisation, and a **valuable European network**.

A number of national AAL programmes and initiatives have emerged as either largely a direct result of, or stimulated by, the AAL JP. These include the German national AAL programme, the Hungarian eVITA initiative focusing on application opportunities in the healthcare system, the Spanish EVIA initiative, and the UK TSB innovation platform on technologies for ageing well.

- A very successful feature of the programme is the **high involvement of SMEs** – more than 40% of all participants (see Table 1 above)..

- The **involvement of users is also good** (see Table 1 above) and there are some good examples of this.

The objective for the **Express to Connect** (E2C)[46] project is to transform the proven concept of the Storytable® working in an institutional frame, and develop, test and deploy a personal version valuable in a private home setting. This is done by applying specific, relevant media-content and social media principles (as seen on for instance YouTube and Facebook), which are not broadly used by elderly people today. With personal storytelling as an enabler for unfolding one's own creative potential as a driver for story and interest-based social interaction among elderly people and the caring community the personal story table helps elderly people in living more joyful and satisfying lives.. Express-to-Connect follows similar principles which lay behind MIT's FabLab programme[47] in the USA for actually designing machines that are relevant to improving the quality of people's lives. The approach has already shown the potential to empower individuals to create smart devices for themselves. These devices can be tailored to local or personal needs in ways that are not practical or economical using mass production.

Improvements needed

- A **critical mass of involvement of all key stakeholders at the EU level is slow in coming**. Community building takes time and often first takes place at national level.

[46] http://www.express2connect.org/
[47] http://fab.cba.mit.edu/

- **End users are not always strongly involved**, sometimes only appearing at the end of the research process, and are not always well differentiated. (Table 1 above shows the involvement of user and other organisations between 2008 and 2009 needs to be investigated.)

In **France** attempts have been made to distinguish different types of user. Both elderly people and persons with disabilities are recognised with three client groups identified. First, champions of older persons. Second, persons with disabilities who also include younger people with special needs with many market niches. Third, the chronically ill, where disease management is more important than case management compared to the first two groups. The third group includes patients which diseases like diabetes, cardiac problems, Alzheimer's, etc.

- There appears also to be **less interest from the non-profit sector** given that what they can get from the programme is less obvious. This is also because NGOs have a hard time participating in the programme due to the funding rules which exclude them in most countries as they cannot co-fund easily. The challenge is to get these involved especially as they are providing the bulk of present services. This is not just NGOs, but more broadly those involved with social inclusion and social services. In this sector, it is often difficult to change attitudes, and some appear to be wary of for-profit operators and of using ICT. In some countries, NGOs also mention difficulties in co-financing their involvement because of national rules.

- The AAL **community is still fragmented across the different stakeholders and there is** relative over-representation of technology researchers. Issues are not only technical – thus the institutional setting and the social environment in countries need to be better addressed. Legal, regulatory and political barriers must be resolved. For example, insurers and service providers (whether public or private) are not yet sufficiently involved: their knowledge and skills cold well be crucial.

Recommendations for critical mass of R&D & innovation

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
4) Further improve the involvement of end-users, carers and providers, including the non-profit sector; and include user representation in the AALA Advisory Board	S	AAL, Partner States	Market
5) R&D community development at European level should be further addressed	S	AAL, Partner States	Market
6) Greater focus on innovative collaboration of different stakeholders	S	AAL, Partner States	Market

Recommendation 4 Effort is needed to **further improve the involvement of end-users, carers and providers, including the non-profit sector, across all project phases**, and at the regional and municipality level, in order to help define the main problems that solutions need to solve. Otherwise the acceptance of solutions risks being limited. Focus should also be on improving the quality of work and the working environment for staff which will help attract new resources to the care sector. This will also help to strengthen the dissemination of results.

Recommendation 5 Building on the often successful community development at national level which in some countries may be a necessary initial step, **R&D community development at European level should be further addressed**. For example, AAL JP should develop a set of tools, including conferences, workshops, placements of staff in different Partner States, training and support, good practice analyses, etc. (the annual forum is a good example). There is a need to bring together public, private and third sector entities to improve their dialogue and increase the level of trust between them. This would spur collaboration and speed up the development of new markets.

Recommendation 6 There is a need for a **greater focus on collaboration of different stakeholders in innovation**. Although it is necessary to ensure that participation in calls remains healthy and reflects wide stakeholder interests and practitioner needs, there is also an opportunity to use calls to help guide and encourage innovation through the collaboration of diverse stakeholders. This needs to link social, technological and business innovation, to promote the involvement of the public, private and third sectors, and directly address issues of service provider capacities, skills and work organisation. Innovation in this area can only take place through such collaboration.

3.1.3. AAL JP objective 3: Improve conditions for industrial exploitation.

The evaluation shows that, with some important exceptions such as social alarms and telecare, **a European market for AAL products and services is not yet taking off**. [48] Though earlier generations of (especially emergency social alarm systems) are well-established in several countries, the development of more advanced ICT solutions for an ageing population is still seen as **a high risk field.** This is especially the case with respect to the transition to the (e)service sector, and for SMEs (which may find it difficult to grow beyond specific and local markets) and NGOs (which are sometimes suspicious of ICT). There is as yet no mass market for the full range of AAL solutions, there is a lack of European interoperability standards, few users or intermediaries know what is available or how to easily establish this, and there is general lack of knowledge about who is going to pay (with no standardised or clear approach to reimbursement schemes within or across countries). Given that AAL projects have been running for up to only two years, it is **difficult to know whether there will be real industrial success** from these.

There are **strong cultural barriers**, and a lack of a common language between care volunteers and professionals, on the one hand, and the ICT industry on the other. The attitude to technology also matters: technology still tends to be seen as just physical objects rather than part of, or an enabler for, delivering a service.

There are also some conflicting opinions about the **positioning of AAL JP between FP research and CIP implementation**. Some participants are pleased with the programme, for enabling FP research (and other similarly more fundamental research) to continue, closer to the market. However, some participants are of the view that the programme's projects are too similar to FP research and still too far from the market. It is also considered by some that there is still too much

[48] "The immaturity of the AAL market results in the inability for demand-side messages about peoples' uses, experiences and desires to be heard in the way they are in a mature market. However, that market is failing to emerge in part because of the absence of consumer voices that can shape the production of technology designs.(...) The AAL sector currently sits in a liminal space between the market and the pilot and because there is only a proto-market' at present there is no clear mechanism for understanding what products and services are desired and would be used in repeatable, non pilot contexts", explains Design Anthropologist Simon Roberts. "A Market of Pilots: Exploring the role of consumers and design in the development of a mass market for ambient assisted living technologies", paper to the AAL conference - Malaga, Spain - 11 and 12 March 2010.

focus on research and not enough focus on results and on useful products with real impacts. The need instead is to move towards shorter, closer to market projects. In part this may reflect the reality that different AAL JP projects vary in terms of closeness to the market; in part it probably also reflects the fact that AAL JP participants themselves come from a variety of backgrounds, some being more research-oriented and some more market-oriented.

Achievements

- The AAL JP has had **some success in helping to create favourable conditions in industry**, and many SMEs in particular have greatly benefited from being involved in the programme. For example, they have acquired new knowledge of technologies, services, markets, and other actors in the field; they have participated in wider networks and in moving ideas closer to commercial realisation. Larger companies tend to look towards the global market and global competition, and are less inclined to focus just on Europe - though Europe is nevertheless extremely important for them.

- There are **some important market niches** already apparent, such as active and independent living in the home environment, easy ICT interfaces enabling them to better cope with public and private services, as well as security/safety (e.g. falls, social alarms) and health alarm systems.

In the FP5 **HOMETALK project**, traditional Graphical User Interfaces (GUIs) are speech-enabled with automatic speech recognition and text to speech generation capabilities to achieve a more natural user interaction, particularly suitable for the elderly and persons with disabilities. The user operates the system from a personal digital assistant (PDA) or an ordinary telephone by either programming or dictating into the PDA the actions they want HOMETALK-based systems to carry out, for example remotely switching on the oven for cooking.

The FP7 I2HOME project (Intuitive Interaction for Everyone with Home Appliances based on Industry Standards) successfully developed the mainstream Universal Remote Console standard for making devices and appliances at home more accessible to persons with mild cognitive disabilities and to older persons.

Improvements needed

- **Substantial impacts of projects, and evidence of these, are not coming through quickly enough**, as downstream work is not being sufficiently prioritised.

- Reimbursement schemes and regulatory regimes concerning AAL products and services **vary enormously across countries** which limits their potential uptake and the development of a mass market.

- The impression is that in many instances the **innovation-orientation** of care service providers and those responsible for reimbursement (public authorities, insurance companies) needs to be strengthened.

However, there are exceptions where the social and health care systems are receptive to such innovations. For example, in the Netherlands the general insurance scheme offers good support for the care of elderly people and can be used for ICT products and services. The resulting market stimulation may explain why demand for AAL JP funding in the Netherlands has been five times greater than available resources.

- There is **still lack of real focus on a large scale European market** – in addition to varying regulatory conditions, there are still attitude barriers that limit progress as many actors remain orientated to national or local markets only.

Recommendations for improving conditions for industrial exploitation

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
7) Examine the pattern of reimbursement scheme differences across countries, and suggest ways to overcome difficulties arising from these	S	AAL, Partner States	Market
8) Better define and target beneficiaries, especially end-users	S	AAL, Partner States	Market
9) Reinforce downstream work in projects and broaden the focus further towards practical deployment; link AAL to national and regional deployment	S	AAL, Partner States	Market
10) Investigate how projects can be made more sustainable	S	AAL, Partner States	Market

Recommendation 7 Important markets are still in the early stages so a lot of work is still needed to build confidence across and between the public, private and third sectors. An important part of this should be to **examine the pattern of reimbursement scheme differences across countries**. Some country schemes are restrictive in themselves, while the differences between countries can also cause problems at trans-national and the European level. Clearly, AAL JP cannot change these conditions as these are under the mandate of the Partner States, but AAL can study them, explain the problems with the differences, and work with the countries to resolve these.

Recommendation 8 **Better define and target beneficiaries, especially end-users**. Every project involves a certain number of beneficiaries and end-users. After the completion of projects in a given call, the CMU should make a comprehensive summary of the number of beneficiaries (including end-users, carers and providers) that were finally involved, with data on their main characteristics. These could include average age, gender, disability, functionality status, locality (rural, small – medium – large city), socio-economic status, etc.; this information could be used to analyse and highlight the real improvements different classes of beneficiary experience from the use of ICT-based solutions, and the market and service opportunities associated with these.

Recommendation 9 **Reinforce downstream work in projects and broaden the focus further towards practical deployment**, by focusing on raising awareness of solutions, fostering wider partnering, achieving greater industry buy-in, and building better mechanisms to bridge to the market. Actions here could include appropriate training (provided by civil organisations or by the care services and hospitals, and provided to staff and/or family members) in supporting elderly peoples' use of ICT devices. They could also encompass the design solutions for different levels of capability rather than for specific age categories, related to assessment of the capabilities of, and functionalities required by, individual people. This may require some revision of the co-decision which positions AAL as a joint research programme, and careful design is required to minimise overlap with CIP activities. In addition the AAL JP

can extend activities to better link to downstream deployment and market roll-out (with private sector investment, where already such efforts are undertaken with the Investment Forum; and with public sector investment such as regional funds and national deployment programmes).

Recommendation 10 **Investigate how projects can be made more sustainable**. A major challenge – faced by many R&D programmes - is the sustainability of project solutions, and especially the continuation of successful partnerships, after AAL JP funding ceases. This is particularly the case in the current economic climate, where many stakeholders are focused on surviving immediate problems. The sorts of solutions developed in AAL JP are often ones that should reduce costs substantially over the long term in an ageing society, and the case for making investments for the future should be made clearly. Decision-makers must confront the enormity of the challenges faced, and the considerable opportunities that are opened by working on these solutions. One pertinent implication is that it is important to assess the short- and long-term cost savings associated with individual projects when examining their costs and benefits.

In addition, it is suggested that readers refer to the following recommendations, made elsewhere in this report.

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
33) Contribute to the development of standards and interoperability amongst projects	S	AAL, PS	Services/ Market
38) The market is very fragmented so stakeholders need to work together to build a Europe-wide market	M	AAL/PS	Market
40) Improve supply- and demand-side integration	M	AAL/PS	Market

3.2. Level of financial contributions by countries

The evaluation found that most of those interviewed felt that, overall, **current levels of funding are reasonable**. However, in some Partner States, the level of interest in participation is so high that it is felt that the finance available at national level is insufficient for the effort involved. (This view was expressed, for instance, in Spain and the Netherlands.) A problem mentioned by some interviewees concerned the challenges caused by exhaustion of a specific country's funds, restricting the scope for other projects involving partners from that country. This issue was not restricted to the less wealthy Partner States, and sometimes led to projects needing to rapidly find partners from countries where funds were still available to fill the gaps in the project. While this may have meant the forging of new and sometimes very valuable links, this stressful restructuring was cited as a major issue by several interviewees (and not only those who had to be excluded due to the exhaustion of funds).

Achievements

- **Financial contributions from Partner States constitute an important success of the programme**. In the first Call for Proposals, Partner States increased their funding about 30% above the legal minimum required. In Call 2 the additional funding was increased by 50% more than the minimum required commitment. In Call 3 this was 20% above the minimum. In

all cases, therefore, many Partner States put much more money in than required, including in Call 3, despite the financial crisis. This is one of the main successes of the programme. At the same time, EC funding was consistently kept at the same level, throughout, thus raising its leverage above the originally foreseen indicative 1:4 ratio, which was already twice as much as the indicative leverage ratio of research in the Framework Programme[49]. The programme not only promotes topics that are considered worthwhile for the Partner States to fund, but also provides a built-in mechanism (the ranking list) that provides incentives for top-up financing by Partner States themselves. (See Table 2)

Table 2: AAL JP Partner States' funding contributions

AAL Partner State	**Call 1 (2008) (Mio. €)**	**Call 2 (2009) (Mio. €)**	**Call 3 (2010) (Mio. €)**
Austria	2.5	2.5	2.5
Belgium	1.0	1.0	1.0
Cyprus	0.5	0.5	0.0
Denmark	0.5	0.5	0.50
Finland	2.5	2.5	2.00
France	2.5	2.0	2.00
Germany	5.0	5.0	5.00
Greece	1.5	3.0	0.0
Hungary	2.5	2.5	0.50
Ireland	0.5	0.5	0.50
Israel	1.0	1.0	1.00
Italy	2.5	4.0	2.50
Luxembourg: FNR	0.3	0.3	0.3
Luxembourg: Luxinnovation	0.3	0.3	0.3
The Netherlands	1.9	1.9	1.9
Norway	1.0	0.8	0.8
Poland	0.5	0.5	0.5
Portugal	0.2	0.5	0.5
Romania	0.2	0.2	0.6
Slovenia	0.2	0.2	0.2
Spain: ISCIII	2.0	2.4	2.4
Spain: Mityc	2.0	2.0	2.0
Sweden	0.8	0.7	1.5
United Kingdom	1.1	1.1	1.1
Total AAL Partner States	**32.7 (59.1%)**	**35.9 (62.2%)**	**29.6 (57.9%)**
Switzerland	2.0	2.0	2.0
EC contribution (% of public funding)	**24.0 (40.9%)**	**23,0 (37,8%)**	**23.0 (42.1%)**
Total call budget	**58.7**	**60.9**	**54.6**

[49] These ratios are indicative in the sense that they assume that the funding of EU (or EU and Partner States in the AAL JP) is matched by funding by the project participants. The actual matching varies depending on the type of participant as usually for each type specific co-funding requirements are imposed.

- The **Virtual Common Pot** (which means each country only funds its national participants) is reported to be working fairly well overall. The mechanism is appreciated in that it eliminates concerns that some countries are persistently funding research in some other countries, and failing to gain much, in terms of building capabilities, themselves from the collaboration.

- Decisions in the AALA are taken according to **one country one vote** and this has helped to involve smaller countries, as they have a clear influence on decisions. There are differences in the level of active engagement of countries in the decision preparation and programme operations, and the programme does not impose quantitative conditions upon country engagement.

Improvements needed

- Despite the benefits of the Virtual Common Pot approach, however, the mechanism does involve **some inflexibility from the perspective of the research teams when it comes to working with partners whose national funding is exhausted**, or reallocating responsibilities across the project in the event that the development process reveals unexpected issues. This issue was not restricted to the less wealthy member states. There are sometimes also problems caused by the extensive discussions needed to either increase national funding to ensure the funding of lower ranked projects when original commitments run out or through the substitution of partners. This has lead to delays in start up of up to 15% of the fundable proposals.

- The annuality of budgets in many countries requires a **very strict timing of calls** to complete the evaluation and negotiation process within the financial year and thereby to avoid losing credit. Some countries have limited their financial commitments as they have problems spending the money late in the year if they are not successful in the AAL JP call. For example because they would want to use the money elsewhere instead, but there may not be time to do so.

- The retrospective funding in Call 1 projects, and the time difference between expenses incurred and reimbursement, caused **cash flow problems** for some project partners.

Recommendations for level of financial contributions by countries

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
11) Countries should be encouraged to fund all types of participants	S	AAL, Partner States	Impact
12) Countries should consider prefunding their projects	S	AAL, Partner States	Performance

Recommendation 11 **Countries should be encouraged to fund all types of participants** for the AAL JP, rather than the highly varied approaches seen at present, where some types of participant are seen as ineligible for funding in certain countries and eligible in others. This need not compromise an individual country's regulations for their own national programmes, where they may find it appropriate to differentiate between participants. One way in which

arrangements could be made would be to add several national funding streams as a basis for their participation in AAL JP, as is the case in Spain. This would help strengthen the AAL JP and make it easier for all participants to become involved, regardless of country.

Recommendation 12 **Countries should consider prefunding their projects**, e.g. as in the Netherlands, so that the time gap until the first payment does not have a negative effect on projects.

In addition, it is suggested that readers refer to the following recommendations, made elsewhere in this report.

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
13) Harmonise financing conditions	S	AAL, Partner States	Performance
39) Consideration should be actively given as to how the Common Pot can be strengthened	M	AAL/PS	Performance

3.3. Performance of AAL JP as an integration of national programmes

The evaluation shows that **many participants want the same financial rules across countries**, which they argue should be similar to EC financial implementation rules. It is also clear that the **role of the NCPs is critical** and often determines how AAL JP is perceived nationally and locally. For example, the NCP is critical in advising potential participants about the balance between research and deployment components in the programme, and about its relationship with other European programmes.

There is mixed evidence in relation to the **administrative burden on AAL JP participants**. On the one hand, many participants report the high administrative requirements as being too rigid and too bureaucratic, and this dissuades many, typically smaller, actors from participating. On the other hand, many also report that the AAL JP is far less demanding than the FP. The project coordinator may have a hard time dealing with the different countries, but in many cases individual partners can work fairly well with their national agencies, and are often familiar with their routines and procedures.

Achievements

- **The programme has enabled a good basis for integration**. There are significant differences between countries' priorities, but in AAL JP there is the possibility to coordinate these differences and achieve positive synergies with national programmes which mutually reinforce each other. Both annual and local fora can also support this. The fact that each year there has been a successful launch and implementation of a call, including a common evaluation process, is a good example of such integration. The important central feature is that **the programme is rooted in country needs and these are the main drivers of the programme**, supported by the EC.

An example of good synergies is that with the ALIP initiative in the UK. Similarly, in France there are good synergies with national activities shaped by the AAL JP, helped by the tendency for the same actors to be involved.

- The **joint evaluation process with independent experts** for selection of proposals for funding is working very well and **can be considered a key achievement of the AAL JP.** It has not been contested by countries or participants, even though the level of EC funding received by a country is based on the resulting ranking list.

- In terms of **financial and management integration**, the former is essential but the most difficult to achieve. Management integration is in principle well developed and is beneficial to the European Commission, as it can possibly save in the longer run on programme management staff (the co-decision preparation and its implementation such as ex-ante auditing and this interim evaluation bring along additional work for the EC).

- **Scientific integration** is key to achieve a common strategy on a voluntary basis and is a substantial achievement, given that countries prepare a joint work programme and evaluation criteria together.

- In several smaller countries (such as Portugal, Slovakia and Greece) many actors are participating. This is a positive achievement, though these participants tend to be hospitals or academics, and to date only a few companies are involved (for example, small software companies). It is clear that **AAL JP has actively tried to engage more countries** including those with less funding and power.

- In terms of finding partners and putting together proposals, **active local agencies** are often very effective in providing counselling and support to help SMEs get involved.

Improvements needed

- Overall there is **limited evidence yet of well developed financial integration across all countries**. There is some confusion and concern about the complexity and lack of harmonisation of project funding rules across different countries. For example, the percentage of funds that can be spent on project management varies and sometimes national regulation does not even cover this, there are different budgetary processes and time schedules for financing and reimbursement, different rules for transferring budgets between partners, etc. This can result in frustration and loss of interest.

- **Lack of standardised rules**. Some of those interviewed consider the Joint Programme to be a complex tool. There are different levels of decision-making, which allows for some flexibility, which can be a positive aspect in some situations. But it also poses challenges.

- **There are several challenges for international integration**
  - The most important barriers to the good integration of national programmes are **lack of the needed competencies** amongst providers of services for the elderly and national agency staff in using ICT and in international coopeartion, as well as barriers in the financial scheme for training of staff. There is also **lack of awareness in high level policy making** of the benefits of international cooperation in this area. Often, the pressing challenge is the **need to develop national communities** and fora before these can be

integrated at European level. In most countries, local governments have a crucial role in the integration of services around elderly people and persons with disabilities.

- There are clear **differences in approach in using the AAL JP to develop products** and services between multinational companies, SMEs, universities and user organisations, and it can be difficult to achieve good cooperation. Some of this might be reconciled at the proposal and contracting stages.

- There are reported cases of very **different messages being given by different national agencies as to how rules should be interpreted**. This has had a material effect on the preparation of proposals. To some extent this reflects the novelty of the joint programme approach, and there is not a huge body of established practice to draw on.

- **Lack of awareness about the AAL JP is an acute challenge:** this may represent a general area for improvement by NCPs as well as the central programme management. Active communication to key stakeholders is difficult because each country has different governmental and political structures. So, to reach out to even a small number of key decision-makers can take a lot of time and energy.

Recommendations for the performance of AAL JP as an integration of national programmes

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
13) Harmonise financing conditions	S	AAL, Partner States	Performance
14) Participation rules across countries should be better harmonised	S	AAL, Partner States	Impact
15) Establish a European framework for project management	S	AAL, Partner States	Performance
16) Strengthen the functioning and support provided by National Contact Points	S	AAL, Partner States	Performance

Recommendation 13 **Harmonise financing conditions**. In order to avoid financial fragmentation the rules need to be changed and stronger centralised capacity to manage the programme is needed, as well as stronger policy representation. As part of this, the feasibility of changing the legal basis of the AAL JP for dealing with national contributions should be investigated. If this is not possible, at least procedures allowing for more flexibility to move funds between countries could be examined. This could perhaps be achieved by a wider view of how contributions are balanced, for example by taking account of longer time periods or of balance across multiple projects, so that individual countries do not think they are unfairly investing for the benefit of other countries.

Recommendation 14 **Participation rules across countries should be better harmonised**. The legal basis for participation varies significantly by participant and country, and imposes much complexity and many restrictions, making the programme function much less efficiently than it could. Efforts to improve harmonisation should include looking at what can be done within the existing legal base, for example by having several funding streams involved at national level which could cover different stakeholders (as in Spain), but also to examine the possibility of changing the legal base of national funding streams where appropriate.

Recommendation 15 **Establish a European framework for project management**, with common guidelines on how to handle funding and rules across countries. This would assist participants and well as the CMU and provide a basis for harmonisation, for example of participation rules and financing, reporting times, etc., and how these can be aligned with other programmes. Flexibility is also needed, however. Cross-national funding has its own advantages, but familiarity with national regulations may still be preferred by some participants, not least SMEs and NGOs. Overall, the goal must be to keep bureaucracy as low as possible as long as it remains commensurate with proper accountability.

Recommendation 16 **Strengthen the functioning and support provided by National Contact Points** (NCPs). The key to participation lies with the NCPs as eligibility is based on national criteria. They can be strengthened, for example, by supporting their activities of awareness raising and communication about the programme, and ensuring they make visible the linkages and synergies between regional/national and AAL JP activities. In some countries there is a danger of two parallel and separate activities, i.e. AAL JP on the one hand, and often much more dynamic on-the-ground national developments on the other. These need to be integrated as much as possible.

In addition, it is suggested that readers refer to the following recommendations, made elsewhere in this report.

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
11) Countries should be encouraged to fund all types of participants	S	AAL, Partner States	Impact
25) Improve programme visibility and communication, both internally and externally	S	AAL, Partner States	Impact

3.4. Operational performance of AAL JP

The original expectation was that Partner States would support the management of the programme with staff and other voluntary support, but this did not materialise sufficiently. As a result, a change in policy has recently taken place to allow the recruitment of staff, but this has taken longer than expected. Current CMU staffing levels are three persons plus a secretary, and two part-time staff including an accountant. **Three CME vacancies are to be filled shortly** consisting of a financial officer, a communication officer and a programme officer.

Many of those interviewed request a **more transparent way of preparing proposals** in order to be able to ask questions and receive rapid guidance in good time. **Better communication from the CMU** with partners and NCPs is also requested by many. A particular problem for some during contract negotiation or project implementation is how to carry out consortium restructuring if a partner has to drop out.

Achievements

- **The roll-out of the three AAL JP calls has generally been very successful and call topics have been seen by most participants as relevant.** The first call in 2008, on individual chronic conditions, was easy to specify and agree with countries, and the second in 2009, on social interaction, was also agreed though this required a wider discussion. Wide discussion was also needed for defining the contents of the 2010 Call 3 on older person independence and participation in the "self-serve society", but this took place relatively smoothly. With each subsequent call there has been a successful broadening of its base. Most of those interviewed agreed there has been good progression between calls.

- In terms of the proposal evaluation process, many of those interviewed agree that **the ranking system generally works well**. Modifications to the ranking list typically only occur once or twice and are mainly due to technical mistakes by proposers.

- **Many countries are involved in the governance of AAL JP and in complementing the work of the Central Management Unit (CMU)** (e.g. for contracting and payment) and reinforcing the CMU (e.g. for call definition, and joint public communications such as the annual AAL Forum conference). There has been **strong personal involvement** in setting up the programme, and the pioneering work of those individuals needs to be acknowledged. Neither the Executive or Advisory Board members are directly paid, but are seconded and, in effect, paid for by their own organisations.

Improvements needed

- In terms of preparing call content, there is some criticism that **users are only consulted at the end of the process** and that they sometimes find it difficult to be involved as they do not speak the same language as the ICT experts.

- There is a strong view that **evaluation criteria for user involvement need strengthening**. These should recognise the diversity of end users, with interpretations ranging from service providers to funders to end-users who are seen as a rather homogeneous group of 'elderly people' who all need the same support. The criteria should also encourage user involvement earlier in design and development phases of projects.

- It is **not always clear who can make the final decision**, at national level or central level, when deciding about funding of a ranked proposal where there has been need for further national funding or the replacement of partners.

- There are criticisms about some aspects of call implementation. In the current case of Call 3, the **time period is seen by many as too short to prepare submissions**, and it is difficult to align call timescales with the requirements of different countries. However, problems of this sort may prove very difficult to counter. A particularly important issue was identified in the long time it takes from the opening of a call and the actual start of projects.

- The biggest concern in relation to the performance of the programme is **the operation of the CMU**. It is widely seen as being insufficiently responsive, and often ineffective and slow, despite the major efforts undertaken by the staff involved to address these issues. The CMU was set up to consume maximum 6% of the EU contribution to the overall AAL JP budget, with the countries contributing in kind, for example by seconding staff. This may be a

weakness as some countries may be reluctant to second a valued staff member for the common good. There are **currently staff vacancies** which have made the problems worse, but this does not seem to be the sole cause of the problem.

- **Project coordinators have a specific problem** with these CMU shortcomings, as they often lack a clear source of supervision and assistance.

- **A related problem is the need for improved communication and awareness raising**. There does not seem to have been sufficient publicity about the programme to potential participants. Since this feedback generally comes from those who are now participating, it is probably the case that there are many others who have not been reached. This is likely to be a particular problem given that the targeted participants are not used to getting involved in European programmes.

Recommendations for operational performance of AAL JP

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
17) Improve call design	S	AAL, Partner States	Impact
18) Simplify and shorten call texts and proposal procedures	S	AAL, Partner States	Performance
19) The ability of coordinators to manage multi-country projects should be examined	S	AAL, Partner States	Performance
20) Improve proposal evaluation	S	AAL, Partner States	Impact
21) Streamline but also make call and project scheduling more flexible and project friendly	S	AAL, Partner States	Performance
22) More flexibility in project management and support is required	S	AAL, Partner States	Performance
23) Improve participant and coordinator support	S	AAL, Partner States	Impact
24) Urgently reinforce CMU's daily operations and operational capacity	S	AAL, Partner States	Performance
25) Improve programme visibility and communication, both internally and externally	S	AAL, Partner States	Impact
26) Investigate other similar programmes for what works and what doesn't	S	AAL, Partner States	Impact

Recommendation 17 **Improve call design**. A more transparent procedure for topic selection and design of calls is needed, for example through greater formal participation of different stakeholders and the Advisory Board. Both end users and businesses should be included in the process. Different approaches might also be adopted, for example by linking to the EU context like FP7 and CIP calls, the AALIANCE roadmap exercise, the 2012 European Year on Active Ageing and Intergenerational Solidarity, the EU Disability Strategy, the Digital Agenda, etc.

Recommendation 18 **Simplify and shorten call texts and proposal procedures**. Call texts should be shortened - down from 30-40 pages to perhaps 10-12 pages - and to be made clearer. Proposals should require a two-page summary: if proposers are not able to summarise their project this does not bode well for implementation. These summaries should cover the aim of the project, the market targeted, as well as how it will be targeted, i.e. the type and potential impact of the opportunity being pursued.

Recommendation 19 During proposal evaluation, **the ability of coordinators to manage multi-country projects should be examined**, encouraged and supported, as this is a critical capacity often missing or not evidently present in a consortium.

Recommendation 20 **Improve proposal evaluation**. A number of issues need addressing, with one issue being the need for a better balance between three types of evaluators, i.e. between users, businesses/providers and researchers. At present there is often a preponderance of academics. Furthermore, consideration should be given to evaluator training on how to focus on users and their needs and the fact that they are very diverse. This could involve workshops and follow-up activities. Evaluation criteria themselves should be clearer, particularly in relation to user involvement, and attempts should be made to make the evaluation and negotiation processes more transparent, also in relation to who makes final decisions, and how this is accomplished.

Recommendation 21 **Streamline call and project scheduling - whilst also making them more flexible and project friendly**. The balance of time needs to be adjusted, with more time to prepare and submit proposals, but a shorter time for AAL to come to a decision and complete contract negotiations. Better transparency and planning of operational milestones for the whole annual cycle should be ensured, with participating countries making commitments to respect deadlines for funding and contracting.

Recommendation 22 **More flexibility in project management and support is required**. A number of issues need addressing here, including shortening project payment times, and easing and simplifying the rules for recommending changing partners during proposal evaluation or during project implementation. Given the fast-changing environment, more flexibility is needed in budget re-allocation (within the overall budget framework), and to improve alignment with countries' yearly budgets (typically fiscal years are calendar years) so as not to leave part of the budget unspent. In addition, it would be useful to prepare guidance or rules on how to act if national authorities fail to perform.

Recommendation 23 **Improve participant and coordinator support**, for example there may be a need for special training programmes to use AAL JP. Project coordinators have a specific problem with the lack of a clear source of supervision and assistance. As part of this, consideration should be given to ensuring that each project has its own stable contact point, or Project Officer, as in the FP. This would facilitate delivery of quick and informed answers, both specifically to the project itself but also in relation to more general questions. Another element in improving contact points could be providing different ones that specialise in specific types of issues and questions.

Recommendation 24 **Urgently reinforce the CMU's daily operations and operational capacity**. Given the evidence that the CMU needs to improve its performance, particularly in relation to the lack of timeliness and the limited support it is able to offer NCPs, proposers and contracted projects, urgent measures should be undertaken to remedy the situation. The CMU may need more resources to undertake its tasks better. Other options might include

reinforcing the operation of the CMU by looking for synergies with related initiatives, by getting participating countries to assist in the CMU's daily operations, or by outsourcing parts of or the whole CMU function.

Recommendation 25 **Improve programme visibility and communication, both internally and externally**. A great deal more effort needs to be put into ensuring that the importance of the AAL JP is much better understood. The visibility and knowledge of the programme is improving, but is still too low. A bigger budget should be allocated to the tasks of training and communicating with stakeholders, and upgrading the website including the use of Web 2.0 tools to create an online collaboration platform so that all AAL JP stakeholders can become actively engaged with each other. An enhanced visibility and communication strategy should differentiate its target groups and focus particularly on stakeholders not yet sufficiently involved, such as user organisations, NGOs and service providers. Many of the latter, for example in health, care, housing, mobility, etc., are not aware of the programme, and indeed have no idea how to get involved in programmes like this. This targeting could include physical outreach via conferences and exhibitions which also function as exchange and training platforms. Programme visibility is, of course, also linked to awareness about issues of ageing and ICT more generally, so consideration might also be given to targeting individuals and organisations which have high potential influence on the constituencies which need to change attitudes about both ageing and the elderly's use of ICT. ICT products and services for the elderly should become an icon of modern living just as smart phones and similar devices have become 'must have' accessories for the young and an intrinsic part of their self image and life narrative. Publicity on the results of AL JP projects also needs to be stepped up.

Recommendation 26 **Investigate other similar programmes to learn lessons as to what works and what doesn't** in relation to the overall operational performance of the AAL JP. Although the programme is ultimately the responsibility of participating countries, some good practice lessons can be obtained from examining both the successful and less successful aspects of other similar or related programmes. These could include, for example:

- Article 171 (Article 187 the TFEU) on Joint Technology Initiatives
- EUREKA, this is purely a country activity with no EC
- The other FP7 Article 169 initiatives (EUROSTARS, EMRP, Bonus-169)

3.5. European added value of AAL JP

The evaluation has clearly shown that although large scale added value has not yet materialised in the form of major social or economic impacts, **progress to date with the programme is encouraging**. Many interviews confirm that new networks and partnerships have been set up, so the crucial issue going forward is whether these are enduring or will be extended beyond the specific project. Successful pilot projects and dissemination of the work are important, and the European Digital Agenda action agreed in April 2010 could play a crucial role in this context. AAL JP can become **a catalyst to foster national initiatives**. However, there are also large differences between and within countries, and some regions and organisations are very active whilst others do not participate at all in AAL JP.

The next challenge for the programme is to be a prime mover in creating a **large, open European market**, and to support the psychological and attitude changes needed to achieve this. Such a market is very unlikely to develop with closed standards and this is a big challenge. Similarly, interoperability is widely recognised as being essential, also remembering that the big players see

the global not just the European market. Part of this is the need for new payer models which are often a mixture of actors, including from social security systems, from health insurance, from local authorities, and from the daily fees paid by end-users or their families.

Achievements

- There is **very strong recognition that AAL JP is necessary** and, on the whole, **provides the potential for real added value at European level**. The programme is already being used as an example of successful governance links between high end long-term research and market deployment. This could inspire European models for balancing international governance together with national efforts in order to be as effective as possible at both European and national levels, and then exploit this to compete globally. Indeed, the programme has realised some good synergies between the AAL JP, national networks and other national programmes, each benefiting from the other.

- AAL JP can serve as a model for country cooperation beyond the 2010 Lisbon Strategy towards **the Europe 2020 Strategy** launched a little more than one month later, and specifically in the context of the **Digital Agenda for Europe** launched one month later. The experience of the programme as it progresses can also be used to answer questions such as: how to exploit linkages with non-ICT policy areas, how far harmonisation of rules across countries is a practicable approach, and how to implement the ERA vision in a cooperative framework.

- The AAL JP has led to the creation of **major new national initiatives** in the field of AAL in a range of countries, such as Germany, France, Spain, Denmark and Hungary. This can be considered as a direct and major result that would otherwise not have happened.

- One value of the programme already being seen is **communication between countries**, different partners and solutions, with the potential for much greater solutions integration. Policy learning at European level is being enhanced across national initiatives, and this should have important spin-off benefits. It is clear the programme is supporting a shift in the ageing discussion, with many of the most interesting projects involving end users, their aspirations and needs.

- **Programmes like AAL JP are important to achieve critical mass, assist mutual learning, and reduce duplication of effort**. The themes addressed at European level are general across countries, so in practice the programme does avoid duplication. Within this, some adaptations at national level are needed using national resources, but it is important to develop the European level.

- AAL JP is a welcome development as it directs European research effort to the large issues by **combining national resources in the most efficient manner**. This leads to higher impacts especially for smaller countries which otherwise may not be able to access critical mass. The larger countries can to some extent do this on their own, but even for them European programmes like AAL JP bring scale and learning benefits.

- By complementing FP7, national programmes and CIP, **AAL JP fills a gap in the innovation chain,** helping to translate proven research ideas into concrete solutions close to the market.

Improvements needed

- The programme has created a framework for cooperation, but has **not yet sufficiently recruited the big players on the social provider side (especially the non-profit sector)**. There is as yet no strong link between efforts to develop the telecom infrastructure, on the one hand, and the innovation opportunity for the big players to create partnerships with end users on a large scale, on the other. Although some large IT players are involved, this remains at the pilot stage and many have concerns about the lack of regulatory discussions around, for example, joint telecoms-health initiatives, the lack of a modern directory of solutions, etc. Integration between AAL producers and companies that have strong brand equity would be positive developments for market take up. For instance, fixed and mobile telecom companies nurture strong relationships with customers and will need to provide more high value services and content over their next generation networks. Maximising European added value will depend on better integration of national efforts, regimes and aspirations. This is still work in progress.

- There are signs of a critical mass being reached. But the AAL JP still needs further development, in particular in policy synergies outside the programme, to have significant impact. This is a difficult area where **both national and European agreements are needed in order to address market barriers and a genuine European market**. At least at present, the programme is starting to become known but this needs further effort. The buzz about the programme is useful as a lot of people are speaking about it which is good publicity.

- Important challenges are also evident, including issues like appropriate **market support, cross-border services, reimbursement schemes**, etc. There are strong barriers making it difficult to achieve a unified approach. A European perspective is often blurred by national politics, policies and funding regulations, as well as by decision-making procedures. If a project is approved, there still may be a lack of consistency, for example, in terms of scheduling, how national agencies expect their partners to submit paperwork, etc. It has been reported that this can make project coordination and planning in a number of cases very difficult.

- At present it is not possible for EU level NGOs or users' groups to get involved in AAL projects because the funding is organised at national level. This prevents EU stakeholders representing end-users, social protection schemes, carers, etc., from participating thereby restricting the potential European level added value.

- Seven EU Member States (Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Malta and Slovakia) are not yet participating in the AAL JP. Their participation is encouraged.

Recommendations for European added value of AAL JP

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
27) Continue and enhance AAL JP as a long term investment in the 8th Framework Programme planning	S	EC/EP/ EU	Vision/ Impact
28) Improve and make the linkage FP-AAL-CIP more explicit	S	EC/EP/ EU	Vision
29) Improve linkages with other EU level programmes and initiatives	S	EC/EP/ EU	Vision
30) Improve linkages between AAL JP and relevant programmes and initiatives at national and regional level	S	AAL, Partner States	Vision
31) Encourage networks of stakeholders to share knowledge	S	AAL, Partner States	Impact
32) Create an effective incentive system at regional/national level to identify good practices	S	AAL, Partner States	Impact
33) Contribute to the development of standards and interoperability amongst projects	S	AAL, Partner States	Services/ Market
34) Contribute to the promotion of innovative procurement	S	AAL, Partner States	Services/ Market

Recommendation 27 **Continue and enhance AAL JP as a long term investment**. Given the strong recognition that AAL JP is necessary and is, on the whole, already providing evidence of some added value at European level, it is important to continue and enhance the programme as a long term investment in the 8th Framework Programme (FP8) planning. This is essential, both because it directly addresses a major societal challenge increasingly making its impact on Europe, but also because the way in which this challenge can be met will provide a test bed for how new types of governance between different levels and different sectors, as well as the interplay between social and technological innovation, can be realised. It is clear that the programme is badly needed, but that it also needs to be more strongly and consistently supported both at EU and national level. There is also a need to understand the importance of global competition and emerging markets in the ageing area: if we want to be competitive, we need to think more ambitiously and to think beyond Europe. Indeed, within Europe the differences between countries can make wide roll-out of many products and services difficult, and global markets may develop as rapidly as those across Europe.. The size of AAL JP is very important in this context as a mid to long term strategic programme.

Recommendation 28 **Improve linkages between FP-AAL-CIP and make them more explicit**. It is clear that there are several stages in the innovation process. AAL JP has been designed to address the 2-3 years to market segment. There need to be stronger links to the FP and CIP as well as other relevant instruments. The links that do exist may be clear to the EC, but are not always evident to potential participants; this must be the subject of much better communication and awareness raising. This will involve simplifying and clarifying routes from FP research through to AAL near-market development, and then on to CIP deployment. This would help applicants to apply to the right programme. Part of this should be to **develop an overarching deployment vision for the AAL area and reinforce the AALIANCE technical roadmap** in order to support the progression of the whole area. Within this different pathways need to be available which are however linked together and

interdependent. For example, appropriate FP projects should be led into the AAL JP, whilst successful AAL projects should be supported in efforts to access CIP funding for the deployment phase. It is also possible that links can function the other way around, i.e. the CIP might identify research to be done (such as pilots) and this could then inform AAL JP, which in turn might require longer term research in FP7.

Recommendation 29 **Improve linkages with other EU level programmes and initiatives**. For example, benefits would arise from combining the European Regional Development Fund (ERDF) (and Cohesion Fund) the European Social Fund (ESF)[50] for AAL solutions deployment in different countries. The regions are often the most appropriate context for driving innovation. This will help create visibility and horizontal communication between EU funded programmes. Similarly, synergies should be developed with DG MOVE (to develop solutions to facilitate access to public transport and mobility solutions for the ageing population, including road safety), and DG AGRI (for solutions to help elderly people in rural and remote areas).

Recommendation 30 **Improve linkages between AAL JP and relevant programmes and initiatives at national and regional level**. There is a need to improve programme links to country level social ministries and initiatives, in addition to those typically already established with research or industry ministries. AAL JP should provide an overall European framework which can inform and channel national policies and programmes, whilst allowing flexibility in addressing specific national issues and challenges. Part of this would be to change the current rules which make it impossible for European level NGOs and user groups to participate because funding is organised at national level. These changes would send a strong political and practical message to the market and thus help to mobilise both demand and supply sides together.

Recommendation 31 **Encourage networks of stakeholders to share knowledge**, not just websites and so-called best practices, but using accompanying measures to support regular meetings and other communication. It is important to create a real stakeholder debate with more focus on deployment. This will support grass root consortia building. This could include an ideas market, presentations at the European Forum for Demography, awards and competitions, exhibitions, etc., all of which should be designed to help build consortia and avoid duplication. The aim should be to make knowledge accessible, understandable, operational and useful.

Horizontal communication must be improved between the different projects across Europe, for example what was developed in Germany, Spain, the Netherlands or Finland, and how can these solutions be adapted to fit other countries? A recurrent problem in EU programmes is the fragmented development of parallel work in different places. The scope for common standards, interfaces, platforms and components is huge, and despite involving some transaction costs and reductions in autonomy, this is vital for ensuring eventual commercial success and uptake. Ways of fostering this – of locating low-hanging fruit and recognising synergies – are needed, but these must also be non-bureaucratic and clearly indicate attractive benefits.

Specific working groups for different sub areas of AAL could be created in order to support decision makers, standardised indicators, quality and cost measurements, models, budgets and

[50] ERDF and ESF are the two components of the EU Structural Funds. In addition there is the Cohesion Fund for accelerated economic convergence of countries.

care/health impacts. Recommendations could then be directed both to the EC, the AAL Association and its General Assembly on the one hand, and to countries, regions and NCPs on the other.

Recommendation 32 **Create an effective incentive system at regional/national level to identify good practices**, i.e. to establish what works and what doesn't in which circumstances and how, and also to explore how to adapt this to national and regional environments. For example, one focus could be on existing national reimbursement schemes and examine which seem to encourage innovation and market growth, and match these to new forms of health and social care needs from public funding. Another focus might be documenting the various barriers and highlighting cases of good practice where national regimes are more conducive to innovation; and also looking for common points of entry (countries where very similar arrangements cold be put in place, specific products that face fewer problems, etc.)

A third focus might be on how to promote design-for-all systems which are personalisable to suit specific groups and segments, and which take account of the interdependency between individuals and their family, community and wider environment. The wider market is likely to develop towards individualised systems, some supplied as applications from the IT world, and some in place from voluntary and private agencies, with which AAL JP or other public funds will need to find synergies. Thus, there is a need to develop a European internal market for AAL to achieve large scale impact, and there are useful country models, such as in Denmark, where authorities achieving savings through service quality improvements are able to reinvest the money elsewhere. In many countries there are one or two very active regions, areas and cities, as well as some enthusiastic people or organisations making a huge input to AAL JP. The key success factors should be studied to create good benchmarks for other areas, organisations and people. Recognition and associated visibility ("buzz" around the solutions) is the key, and one of the roles of AAL JP should be to select the best projects and provide public recognition. Supporting and celebrating social innovation on the ageing opportunity by Europe would have a major impact and could act as a counterweight to individual countries not supporting it enough.

One example of recognising the significance of interoperability and an open-standard, platform-based approach comes from the Assisted Living Innovation Platform (ALIP) in UK. A key deliverable of this work is a "Framework for Assisted Living", which provides two things:

- A guide to the complexities of the 'assisted living' space, in its fullest sense (multiple stakeholders, needs, goals, organisations, locations, services, technologies, suppliers)
- Fundamental approaches and architectural principles to help cut through complexity, to maximise interoperability, flexibility, effectiveness, scalability and the impact of resources.

This framework provides guidance for individuals, commissioners, funders, owners and providers of services and public and privates spaces, and is helping to steer other ALIP projects and investments in a suitably open, non-proprietary way.

Recommendation 33 **Contribute to the development of standards and interoperability amongst projects**. These issues must be prioritised. Progress here can be achieved for example through building in such factors into call criteria, and by involving large industrial players with the clout to influence standards adoption perhaps also in giving advice whilst guarding against proprietary solutions and ensuring that an open standards and an open platform approach can also play an appropriate role. The market will not develop with closed standards and a lack of interoperability, so this is a big challenge. It is clear that this is something to which AAL JP can contribute for example by using and effectively

disseminating such standards, and needs to be seen in the wider context of FP7 and CIP activities which should also be promoting the same agenda. One further way to promote widespread adoption of standardisation and interoperability is linking to regional development funds (ERDF) which can be applied to diffusing ICT products and services which can be used across Europe, including in remote areas.

Recommendation 34 **Contribute to the promotion of innovative procurement**. Public authorities should use their considerable purchasing power, typically as the largest procurers in national economies, to stimulate innovation in ageing solutions, as well as for other societal challenges, through public procurement. Using public procurement to pull through innovative products and services can bring forward solutions from beyond the normal supply chain. Such an approach is already being pursued in FP7, but needs to be supported by AAL JP as well. AAL JP's role should be seen as part of the wider initiative to improve the framework for exploitation as part of the Ageing Well Action Plan, Digital Agenda for Europe (DAE) and European Innovation Partnership (EIP, as announced in Europe 2020 which stated that the Commission will work to launch European Innovation Partnerships, of which the first will include 'technologies to allow older people to live independently and be active in society') rather than in its own right.

There are already compelling examples of successful innovation procurement initiatives. In the UK and Netherlands, a SBIR (Small Business Innovation Research Programme) enables a public sector organisation to run an open competition to seek technology solutions proposals from industry, leading to the placing of commercial contracts A recent paper by the Social Innovation eXchange (SIX) to BEPA suggests taking a step further: commission-based outcomes and Social Impact Bonds. Under this financial tool, government agrees to pay for measurable outcomes of social projects, and the prospect of this income can then be used to raise bond financing from commercial, public or social investors. This is possible where outcomes are measurable, and particularly where they lead to tangible public financial savings. When it comes to ageing, there is a real opportunity here. Thus, according to MediNeuvo, a small Finnish company, originally developed from SITRA support, having elderly people in institutions costs a lot more than caring for them at home: €250,000 and €50,000 respectively This company won a contract with a municipality that outsourced social and health services for supporting elderly people. About 25% of those elderly people who would otherwise be in an institution are instead able to live at home – this simultaneously saved substantial money for the city and enhanced the wellbeing of elderly people in tangible ways.

In addition, it is suggested that readers refer to the following recommendations, made elsewhere in this report.

Recommendations overview	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
4) Further improve the involvement of end-users, carers and providers, including the non-profit sector	S	AAL, Partner States	Market
6) Greater focus on innovative collaboration of different stakeholders	S	AAL, Partner States	Market
7) Examine the pattern of reimbursement scheme differences across countries, and suggest ways to overcome difficulties arising from these	S	AAL, Partner States	Market
11) Countries should be encouraged to fund all types of participants	S	AAL, Partner States	Impact
37) Investigate the feasibility of cooperation with the EIB and the EIF	M	AAL, Partner States	Impact
40) Improve supply- and demand-side integration	M	AAL, Partner States	Market

4. Medium and long term recommendations of the Interim Evaluation

The short-term recommendations in section 3 above largely arise directly from the evaluation findings. The medium and longer term recommendations in section 4 are also derived from the Expert Panel's and interviewees' broader knowledge of the ICT and ageing area and of societal needs, as well as their experience as to how new forms of innovation and market development can be successfully supported.

The main issue raised here is that, although overall the AAL JP has made good progress over the last two years, there is a need for further and important changes if the programme is to realise the full potential it undoubtedly has, over the medium to longer term. Several of these changes go beyond the AAL JP itself. The recommendations in this section focus on the actions needed to do this. In support of this, at the end of the section, a summary of the key success factors for the longer term development of AAL JP is presented, derived from this evaluation's findings.

Recommendations for the medium- and long-term

Recommendation	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
35) Aim to secure strong political support	M	EC/EP/ EU	Vision
36) The programme should directly contribute to European level policy development	M	EC/EP/ EU	Vision
37) Investigate the feasibility of cooperation with the EIB and the EIF	M	AAL, Partner States	Impact
38) The market is very fragmented so stakeholders need to work together to build a Europe-wide market	M	AAL, Partner States	Market
39) Consideration should be actively given as to how the Common Pot can be strengthened	M	AAL, Partner States	Performance
40) Improve supply- and demand-side integration	M	AAL, Partner States	Market
41) Widen the 'business model' to put social and user needs at the centre	M	AAL, Partner States	Services/ Market
42) Promote a widening of emphasis from technology innovation to social innovation	M	AAL, Partner States	Service/ Impact
43) Involve users and their communities and networks directly in the innovation process	M	AAL, Partner States	Service/ Impact
44) Better criteria are needed to evaluate the impact and benefit of AAL JP and similar programmes	M	AAL, Partner States	Impact
45) Take stock of AAL experience in the context of the post-2013 regional policy where ageing is a core priority	M	EC/EP/ EU	Impact/Vision

Recommendation 35 **Aim to secure strong political support.** High level political involvement needs to be boosted. ICT is not yet sufficiently recognised as a major topic of ageing policies, and consequently the importance of work such as done in the AAL JP is inadequately recognised. An EU-wide agenda should be sought at ministerial level, directly linked to and bridging major European policies. The programme should be linked to major initiatives, starting from the recently proposed European Innovation Partnership on Active and Healthy Ageing. Doing so will maximise its potential, in synergy with initiatives with which it shares objectives. These include those on long-term research coordination, as in the planned Joint Programming Initiatives on "More Years, Better Lives", the eHealth and public health actions, and the 2012 European Year on Active Ageing and Intergenerational Solidarity. The AAL JP's strong strategic and operational links with other initiatives, like the Europe 2020 Strategy, the Digital Agenda for Europe Flagship, the Monti Report on the Single Market, the EU Disability Strategy and the Innovation Union Flagship should also be nurtured. Finally, political leaders should address the need for a comprehensive policy and political approach to ICT for Ageing Well that goes beyond R&D to encompass social and healthcare. In short, the AAL JP leaders need to adopt a broader political agenda in which the main incentives to innovate are Europe-wide social and economic challenges and the governance adjustments needed to address these. If it does this well, the programme could become a major European flagship.

Recommendation 36 **The programme should directly contribute to European level policy development**. This could include an investigation of the legal implications of age discrimination and how the programme can help to change the perception of elderly people, in the same way that there should be no discrimination based on disability. Another issue to consider is how AAL contributes to social perspectives on age and ageing.

Recommendation 37 **Investigate the feasibility of cooperation with the European Investment Bank (EIB) and the European Investment Fund (EIF).** The EIB can play an extremely relevant role, namely as a long term lender and as an equity investor:

a) As a policy-driven, project-based bank, the EIB provides long term, low interest loans. Some Joint Initiatives created by the European Commission and the Bank could be explored on the context of the ageing opportunity, such as:
   i) The Risk Sharing Financing Facility (RSFF)[51] could be used to fund research and innovation projects on ICT and ageing that otherwise would not meet the traditional lending criteria of the banks. Successful AAL or CIP projects on ageing and ICT could use RSFF to assure its further development and/or scaling.
   ii) The Jessica[52] initiative, created to promote sustainable urban development and could cover the needs of and age-friendly environments, for example the home and residential care design, and design in the built environment that best promotes independence and feelings of community with the use of ICT platforms and services. In practice, Jessica funding would enable large scale city-wide projects, with synchronisation and collaboration within the city, aligning Structural Funds

[51] RSFF is an innovative scheme to improve access to debt financing for private companies or public institutions promoting activities in the field of RD&I.RSF is built on the principle of credit risk sharing between the European Community and the EIB and extends therefore the ability of the Bank to provide loans or guarantees for investment with a higher risk and reward profile. The RSFF has a €2bn capital cushion, €1bn from the EIB and the same amount from the Commission's FP7 (2007-2013), enabling the Bank to lend more than €10bn for this kind of investment. See http://www.eib.org/products/loans/special/rsff/index.htm

[52] Jessica permits that National Structural Funds Managing Authorities use some of their Structural Funds allocations to invest in revolving funds - rather than one-off grant financing - and so recycle financial resources in order to enhance and accelerate investment in urban areas. These investments, which may take the form of equity, loans and/or guarantees, are delivered to projects via Urban Development Funds and, if required, Holding Funds.

and EIB funding with a range of private, public and social sector partners in areas like care and social services, high speed broadband, housing and real estate.

b) Alternatively, a potential new Joint Initiative on "Connected Ageing" could be launched by European Commission and EIB. It would combine investments from EIB, European Commission (e.g. non used funds earmarked for innovation) and Member States. Such focused initiatives would provide further awareness and visibility on the ageing opportunity and enable a body of knowledge to be developed. EIB's strong reputation means that an EIB initiative has an important financial (up to five times) leverage and encourages new players to enter new markets.

c) The European Investment Fund (EIF) plays a critical role, as the largest European fund of funds, channeling investments to hundreds of venture capital companies across Europe. There is strong evidence of the potential large market of ICT solutions to silver markets. More visibility of AAL projects combined with specific venture capital resources from the EIF focusing on this new emerging market, would allow a new generation of startups to emerge. The AAL Investment Forum (Odense, 15-17 September 2010) is a promising signal that encourages proper follow up by AAL, via investment fora and alignment with formal and informal venture capital sectors.

Recommendation 38 **The market is very fragmented, so stakeholders need to work together to build a Europe-wide market**. It is necessary to involve users, intermediaries, service providers, NGOs, insurance companies, policy makers, etc., in the development process. The programme should specifically try to reach out to non-governmental social providers and end-users involved in active and healthy ageing. Very often, the requirements are less technology development than systems integration of services and technology. In order to scale up successful solutions, the market is necessary – so it is, for example, appropriate to invest in a market forum. A clearer understanding of how products reach the market needs to be developed based on a deeper analysis of market barriers, and how to scale the market and tap into the growing ageing business. A main focus should be on the networks of care around the individual elderly person, not just the burden of care on one person.

The health department in the United Kingdom has set up a **€270m network of "regional innovation funds"** charged with financing service innovations, particularly ones addressing long-term conditions. It aims to complement the roughly €1.5bn spent annually on medical and technology research and development. The funds are underpinned by the need for radical change in how health services are organised over the next two decades—with a much bigger role for primary care, a focus on enabling patients to manage their own conditions such as diabetes and heart disease, greater use of technology to provide information and feedback, and more emphasis on public health and prevention. These funds are not aiming to replace existing research and development support, but they will increasingly complement it by supporting service innovations. The funds use a range of funding tools, including stage-gate investments, social impact bonds, equity, and loans—and complement a series of other new investment funds including a €115m Social Enterprise Investment Fund for health. Each of these funding initiatives requires small sums of money to be invested in helping create solutions for the future. Even if a tiny proportion of the ideas that emerge are successful in transforming the way that government addresses a particular area, the investment will likely recoup the initial funding many times over. It remains to be seen whether these funds will continue once the current budget deficit funding review is completed in the UK.

A key issue in many countries is reluctance to adopt technology in services for the elderly, so careful management of the transition phase to do this is needed. There is a lack of involvement in the programme by the major providers of social services, which needs to be

tackled over the medium to long term. An ICT and Ageing market study[53] showed that technology has been viewed rather negatively by many social care workers and health professionals, mainly because it is felt that it threatens to remove the human presence from care. The programme must convey the message that this is not necessarily the case, but that the quality of care and of staff working conditions can be dramatically improved. This requires that technology, services and the institutional settings which support both are all designed and developed together.

Recommendation 39 **Consideration should actively be given as to how the Common Pot can be strengthened** through greater standardisation of rules and by increasing sharing of funds so that, for example, it constitutes 30% of total funding. This has been achieved in other Article 185 programmes such as *Metrology*. The main disadvantage could that countries which are less successful in calls would be forced to finance stronger countries, which would obviously be a big disincentive for participation, so this must also be addressed. There is reluctance by countries to directly finance work in others, and sometimes their own rules do not allow this. However, other actions could be taken – for example incentives so that for every Euro a country contributes it could get more Euros out of a commonly shared part of the pot of funding.

Recommendation 40 **Improve supply- and demand-side integration**. Most EU countries are deploying high-speed communication networks, with the main focus on the supply side. However, this technology is the enabler, not the driver, of sustainable demand. Networks are not valued for their own sake, but for the services they can deliver. Although AAL JP is an ICT programme, technology is only part of a whole complex of issues. These wider issues include education, carers, the openness of users to technology, wider health matters, the wider societal setting, people's wishes to continue to work and remain active after formal retirement and the role of technology in supporting this. In broad European policy terms, as well as at AAL JP level, there is a need to combine the ageing agenda with the digital agenda. This means ensuring that service providers are brought in to create take-up over the digital networks.

Recommendation 41 **Widen the 'business model' to put social and user needs at the centre**. There is a good opportunity to widen the 'business model' used or developed by projects to capitalise on the AAL JP's success to date and to ensure that this can be magnified in future by putting social and user needs at the very centre of its activities. Working to ensure that this is also better coordinated with a similar approach in the CIP, as well as corresponding national initiatives, would increase impact even more. A new business model would imply a sequence which first commits to specific social impacts, then looks for financing and technology to meet these, applies this to organisational and social practices in real user situations, and then, if results are achieved, the government (or the payer) pays. This is a form of payment by results.

In certain AAL JP projects it is likely that there is a supply side orientation as the supply side partners are driving the project. Such a new business model approach implies turning around such orientation, to start with the user situation. A change process must be triggered, but institutional and cultural change takes a long time, so a step-by-step medium-term approach is necessary, also to ensure that this is manageable as directions given from within the AAL JP itself (e.g. through business model requirements in its work programme).

[53] "ICT & Ageing – European Study on Users, Markets and Technology", Report prepared by empirica and WRC on behalf of the European Commission, Directorate General for Information Society and Media, January 2010.

Recommendation 42 **Promote a widening of emphasis from technology innovation to social innovation.** Though the importance of social issues is still underrated by many on the technology side, the walls between social and technological innovation are dissolving. In part this reflects the increasing prevalence of more holistic design perspectives, and the profile and implementation of social innovation approaches is starting to grow substantially in Europe. There are already many radical initiatives with clear social outcomes (e.g. a decrease in the level of loneliness, elderly people staying longer in the community, etc.). However, recognition rather than money is often the key, and a role for AAL JP should be to develop this new market and the funding models that encourage scaling. A European Social Innovation Fund focusing on ageing would be a good step forward, and would also help to roll out EU level initiatives. Users and social providers could be directly involved through this fund.

Launched in 2009, the **US Social Innovation Fund**[54] aims to catalyse partnerships between the government and nonprofits, businesses and philanthropists. It mobilises public-private funds to expand effective solutions across three issue areas: economic opportunity, healthy futures and youth development and school support. The awarded initiatives need to have a track record of success at identifying and growing high-performing nonprofit organisations, and their proposals have to offer a set of compelling ideas for how to use innovation and evidence to tackle social challenges in a new way.

The report "**Reinventing Europe Through Innovation**", published by the Business Panel on EU innovation policy, recommends Europe to align its innovation policy around the big societal challenges we face, including ageing. In this broader sense of innovation (from business innovation to business *and* social innovation) some specific initiatives are proposed:

- Finance social innovation funds, through a new partnership between the European Commission and European Investment Bank (EIB) and through the EU structural funds and EU level recognition. To increase reach and impact, European social innovation funds should be combined with existing national social investment funds (already operating in countries like France, UK, Italy and Germany).
- Transform the public sector, by dedicating at least one percent of public budgets to innovation – such as the UK NHS and to create specific EU support for platforms and mechanisms for trans-national transfer and the scaling up of innovative public services.
- Engage older people: in education, training and projects and networks to support innovation, creative entrepreneurship and research, and provide role models for elderpreneurship, establishing new systems to draw on the expertise and experience of senior citizens. The young and old should be included in value chains, both by addressing their demands and by unlocking their potential.
- New places for new kinds of collaboration, to improve Europe's capacity to innovate new models of service delivery, new technology applications and new business models to meet the most pressing social challenges facing Europe, including ageing.

Recommendation 43 **Involve users and their communities and networks directly in the innovation process**. AAL JP should support approaches which look not only at how services can be provided *for* elderly people, but also at how platforms can be organised for collaboration between the public, private and third sectors which enable elderly users themselves to participate in developing *their own* solutions and support, where ICT is the enabler not the driver. This is not simply a matter of technology innovation in which end-

[54] http://www.nationalservice.gov/about/serveamerica/innovation.asp

users are passive consumers. The emphasis should be more about enabling people to participate in their own use of technology.

For example, in the UK and the Netherlands, some budget is given to users of care services to determine their own priorities, although there is a need to ensure that money is not used for other purposes. In Southwark in London, the Southwark Circle is building the 'neighbourly way to sort for everyday' for elderly people as a network of volunteers, helpers and entrepreneurs to fix any problem. The local authority provided initial funding and a team which spent time living with elderly people to gain deep knowledge of their everyday needs and involve them in their own service design. Both examples have helped to transform the lives of users through ethnographic research, design methodologies and user involvement. Elderly people are thus not seen as a burden, but as a valuable resource.

This implies a more radical rather than an incremental approach to innovation (not necessarily radically new technology or user behaviour), such as using people's social networks for self, family and community support, thus developing platforms for people to create their own wellbeing. This can also be low cost and involve the participation of actors who have never even heard of the programme. Innovation is about collaboration to enable services, and it is imperative to collaborate with organisations as close as possible to elderly people (often third sector NGOs). The issue is therefore how to kick-start such new service models, perhaps using service incubators or living labs, which can develop by themselves if the right conditions are created. In a democratic society, a process directly involving end-users is an essential part of the impact.

Recommendation 44 **Better criteria are needed to evaluate the impact and benefit of AAL JP and similar programmes**. For example, what is now the old world of 'New Public Management' focused strongly on measuring outputs, rather than real outcomes or impacts, but is now seen by many as having failed. There is now a need to change to analysing and measuring effectiveness, value and relationships (Public Value Management)[55]. For example, measuring how people can be kept independent and at home for longer, thus reducing their need for residential or hospital care. Public services are evolving from delivering governance to building capacity and relationships. New kinds of indicators and new kinds of skills are needed for this. The AAL Association is indeed attempting to define and improve impact and benefit measurement and assessment, building on the review process and the evaluation of Call 1 projects and similar work in the CIP ICT PSP[56]. It is examining the use of 'effect analysis' in the context of carefully defined overall goals, even though this can be quite subjective. Two types of indicators are being proposed:

- Related to the *projects* themselves, e.g. examining promising approaches from Call 1, and by comparing programme activities with other relevant activities, including national initiatives, and then using this to derive useful criteria
- Related to the soft area of how successful *communities* around the projects are created given that much activity involves non-state actors (this is an important indicator in all technological programmes).

Some work on these new impact measurements is also being undertaken in the CIP; the AAL JP should cooperate with this.

[55] Stoker, G. (2004). *"Public Value Management – a new narrative for networked governance"*, American Review of Public Administration, 36 (1) 41-57; Dunleavy, P., Margetts, H. et al (2006). *"New public management is dead: long live digital era governance"*, Journal of Public Administration Research and Theory, July.
[56] See European Commission website on e-Inclusion: http://ec.europa.eu/information_society/activities/einclusion/index_en.htm.

Recommendation 45 **Take stock of AAL experience in the context of the post-2013 regional policy**, since ageing will probably be elected as one of the few core priorities of a reformed cohesion policy. The current overall amount of expenditure allocated to cohesion policy for seven years is €346bn, accounting for 35.7% of the EU budget. One of the substantive changes proposed by the Barca Report[57] on "An agenda for a reformed cohesion policy", is the concentration of the majority of funds (possibly up to two thirds) on a few narrowly defined core priorities in all regions. One of these core priorities for a renewed cohesion policy would precisely be ageing (the other core priorities suggested are: innovation, climate change, migration, children, and skills). This would represent a surge in investments to address the ageing opportunity. Currently, the measures encouraging active ageing and prolonging working lives represent only an investment of €1,043.6m, a tiny 0,3% of the overall cohesion policy budget 2007-2013, under the category "Access to employment and active and preventive labour market measures". The concentration of resources recommended by the Barca report would: i) create a European-wide critical mass of interventions on a few priorities, ii) attract both public and high-level political attention and accordingly give more of an incentive for all those involved to produce effective results; iii) create more favourable conditions for an EU wide learning process; iv) enable the Commission to focus its expertise in a limited number of policy areas and give it more credibility in playing a greater strategic role in governing cohesion policy – enabling the Commission to put in place more effective conditions to make the case for innovation (using the narrower definition) to be a core priority of cohesion policy.

If ageing is recognised as one of the core priorities on the next financial period, we strongly recommend:

a) A stronger involvement of regional players in AAL. So far, AAL has been able to initiate inter-national collaboration, but with little involvement from regional representatives which is critical to encourage the 'opportunity' dimension of an ageing society and the need to promote innovative social and technological solutions.
b) Effective funding mechanisms to leverage investment. More money makes sense, if and only if, there is enough capacity to co-invest. It is important to learn from the present experience, which indicated that a substantial increase in money available alone is not enough.

A European Ageing and Innovation Partnership

Ageing would be a perfect candidate to experiment this new institutional funding arrangement, that could increase the quality, efficiency and speed of investment decisions and leverage private sector funding capacity at a moment when public spending is being cut across all Member States. AAL provides a potential interesting learning experience for the Innovation Partnerships announced by the European Commission as one of its flagship initiatives on the context of the "Innovation Union" chapter of the EU 2020 agenda ("European Innovation Partnerships will include [..] 'technologies to allow older people to live independently and be active in society'"[58]). An "ageing and innovation" European Partnership would probably make sense, having in mind the recognition of ageing as a top priority for regional policies, with substantial resources that need to be wisely invested. The broader concept of innovation and the new vision of ageing we advocate for AAL needs to be 'embedded' in regional policy making. A joint political endeavour between Information Society, Regional Policy and Innovation portfolios would probably pave the way for such a partnership between the European Commission, Member States and the European Investment Bank.

[57] "An Agenda for a Reformed Cohesion Policy: A place-based approach to meeting European Union challenges and expectations". Independent Report by Professor Fabrizio Barca
http://www.eurada.org/site/files/Regional%20development/Barca_report.pdf
[58] See Europe 2020.

Annex 1: List and designation of recommendations

Key to abbreviations in the table:

Short/medium-term
S = short
M = medium

Prime stakeholder(s) are the targets of the recommendations, i.e. who should act.
AAL = the AAL Joint Programme. A recommendation to the AAL JP means that it is addressed to its participating states and the Central Management Unit.
PS = Partner States (participating countries)
EC = European Commission
EP = European Parliament
EU = European Union Institutions, notably the EP, EC and Council of Ministers

Strategic recommendations
1. Vision
2. Market
3. Services
4. Impact
5. Performance

Section	Recommendation	**Short/ medium term**	**Prime stake-holder(s)**	**Strategic recommen-dation**
Innovation-based ICT-solutions	1) Further increase focus on technology developed in real life situations	S	AAL, PS	Services
	2) Promote technology for carers and intermediaries as well as end-users	S	AAL, PS	Services
	3) Focus more on broadly targeted solutions, usable by all	S	AAL, PS	Services
Critical mass of R&D & innovation	4) Further improve the involvement of end-users, carers and providers, including the non-profit sector	S	AAL, PS	Market
	5) R&D community development at European level should be further addressed	S	AAL, PS	Market
	6) Greater focus on innovative collaboration of different stakeholders	S	AAL, PS	Market
Improve conditions for industrial exploitation	7) Examine the pattern of reimbursement scheme differences across countries, and suggest ways to overcome difficulties arising from these	S	AAL, PS	Market
	8) Better define and target beneficiaries, especially end-users	S	AAL, PS	Market
	9) Reinforce downstream work in projects and broaden the focus further towards practical deployment; link AAL to national and regional deployment	S	AAL, PS	Market

Section	Recommendation	Short/ medium term	Prime stake-holder(s)	Strategic recommen-dation
	10) Investigate how projects can be made more sustainable	S	AAL, PS	Market
Level of financial contributions by countries	11) Countries should be encouraged to fund all types of participants	S	AAL, PS	Impact
	12) Countries should consider prefunding their projects	S	AAL, PS	Performance
Performance of AAL JP as an integration of national programmes	13) Harmonise financing conditions	S	AAL, PS	Performance
	14) Participation rules across countries should be better harmonised	S	AAL, PS	Impact
	15) Establish a European framework for project management	S	AAL, PS	Performance
	16) Strengthen the functioning and support provided by National Contact Points	S	AAL, PS	Performance
Operational performance of AAL JP	17) Improve call design	S	AAL, PS	Impact
	18) Simplify and shorten call texts and proposal procedures	S	AAL, PS	Performance
	19) The ability of coordinators to manage multi-country projects should be examined	S	AAL, PS	Performance
	20) Improve proposal evaluation	S	AAL, PS	Impact
	21) Streamline but also make call and project scheduling more flexible and project friendly	S	AAL, PS	Performance
	22) More flexibility in project management and support is required	S	AAL, PS	Performance
	23) Improve participant and coordinator support	S	AAL, PS	Impact
	24) Urgently reinforce CMU's daily operations and operational capacity	S	AAL, PS	Performance
	25) Improve programme visibility and communication, both internally and externally	S	AAL, PS	Impact
	26) Investigate other similar programmes for what works and what doesn't	S	AAL, PS	Impact
European added value of AAL JP	27) Continue and enhance AAL JP as a long term investment in the 8th Framework Programme planning	S	EC/EP/ EU	Vision/ Impact
	28) Improve and make the linkage FP-AAL-CIP more explicit	S	EC/EP/ EU	Vision
	29) Improve linkages with other EU level programmes and initiatives	S	EC/EP/ EU	Vision
	30) Improve linkages between AAL JP and relevant programmes and initiatives at national and regional level	S	AAL, PS	Vision
	31) Encourage networks of stakeholders to share knowledge	S	AAL, PS	Impact
	32) Create an effective incentive system at regional/national level to identify good practices	S	AAL, PS	Impact

Section	Recommendation	Short/ medium term	Prime stake-holder(s)	Strategic recommen-dation
	33) Contribute to the development of standards and interoperability amongst projects	S	AAL, PS	Services/ Market
	34) Contribute to the promotion of innovative procurement	S	AAL, PS	Services/ Market
Medium and long term recommendations of the Interim Evaluation	35) Aim to secure strong political support	M	EC/EP/ EU	Vision
	36) The programme should directly contribute to European level policy development	M	EC/EP/ EU	Vision
	37) Investigate the feasibility of cooperation with the EIB and the EIF	M	AAL/PS	Impact
	38) The market is very fragmented so stakeholders need to work together to build a Europe-wide market	M	AAL/PS	Market
	39) Consideration should be actively given as to how the Common Pot can be strengthened	M	AAL/PS	Performance
	40) Improve supply- and demand-side integration	M	AAL/PS	Market
	41) Widen the ‘business model’ to put social and user needs at the centre	M	AAL/PS	Services/ Market
	42) Promote a widening of emphasis from technology innovation to social innovation	M	AAL/PS	Service/ Impact
	43) Involve users and their communities and networks directly in the innovation process	M	AAL/PS	Service/ Impact
	44) Better criteria are needed to evaluate the impact and benefit of AAL JP and similar programmes	M	AAL/PS	Impact
	45) Take stock of AAL experience in the context of the post-2013 regional policy where ageing is a core priority	M	EC/EP/ EU	Vision, Impact

Annex 2: Methodology and workplan of the Interim Evaluation

The methodology used by the Expert Panel (see Annex 3) covered:

1. Desk review of documents, reports of the AAL Joint Programme (see Annex 6)

2. Interviews, which took place during Expert Panel meetings in Brussels, in person or by telephone/conference call (see Annex 4)
   - members (previous and current) of the AAL JP Executive Board
   - staff of the central management unit of the AAL Association
   - members of the AAL General Assembly
   - members of the AAL JP Advisory Board
   - relevant national policy makers
   - European Commission services
   - participants in the AAL Joint Programme
   - other relevant stakeholders in the field of ICT for Ageing Well.

3. An online public consultation (see Annex 5)

Duration

The interim evaluation, up to the preparation of the Final Report, was carried out between 15 April and 30 November 2010.

Workplan

The following workplan was employed by the Expert Panel:

- Phase I: Preparation and Launch
  - Timing: mid to end April 2010
  - Initial Meeting: Brussels 20 April 2010
  - Scope: establish objectives and modus-operandi of the interim assessment Panel, agree tasks and methodology, identify background material, draw up initial list of interviewees, design online public consultation

- Phase II: Additional Data Collection
  - Timing: May – mid June 2010
  - Second Meeting: Brussels 10 May 2010
  - Scope: study background material, statistical data and case studies, start on interviews, launch online public consultation

- Phase III: Data analysis, conclusions & recommendations
  - Timing: mid June – mid July 2010
  - Third Meeting: Brussels 10 June 2010
  - Final Meeting: Brussels 12 July 2010
  - Scope: finalisation of interviews, analyse all evidence from documentation, interviews and online public consultation, prepare and agree Final Report

- Phase IV – Communication of recommendations
  - Timing: October-November 2010
  - Scope: assist in communication of the evaluation findings to the Council and European Parliament

Annex 3: The Interim Evaluation Expert Panel

The evaluation was conducted by a multidisciplinary team appointed by the European Commission, known as the Expert Panel. It was composed of 6 experts, with one expert nominated as Chair.

The Expert collectively represented perspectives from relevant stakeholders involved in the AAL Joint Programme and more generally from the domain of ICT for Ageing Well, including specific expertise in industrial R&D and innovation involving SMEs. The expertise of the Panel covered:

- Understanding of the European Research Area policies
- Understanding of user requirements, technology, market and policy perspectives of ICT for Ageing Well and demographic ageing
- Knowledge about how SMEs operate and manage R&D and innovation
- Knowledge of the financial mechanisms for funding research at EU and national level, from public and private sources
- Knowledge of conducting research within industry and using research results for creating innovative commercial products or services.

The Expert Panel:

- Meglena Kuneva (Chair, Former Commissioner, Consumer Affairs)
- Csaba Dózsa (CEO, MEDECON, former Deputy secretary of State for Health, Hungary)
- Erika Mann (Former MEP, ITRE member, Chair of the interim assessment Panel for the RSSF)
- Ian Miles (University of Manchester - Manchester Business School)
- Anne-Sophie Parent (President, AGE Association)
- Diogo Vasconcelos (Cisco Fellow, Member of DG ENTR innovation 2020 Panel)
- Jeremy Millard (Rapporteur to the Expert Panel, Danish Technological Institute)

The Expert Panel was supported by:

- Paul Timmers (Head of Unit "ICT for Inclusion", Directorate-General for Information Society and Media, European Commission)
- Peter Wintlev-Jensen (Head of Sector ICT & Ageing, Unit "ICT for Inclusion", Directorate-General for Information Society and Media, European Commission)
- Giorgio Mongiat (ICT & Ageing, Unit "ICT for Inclusion", Directorate-General for Information Society and Media, European Commission)

Expert Panel CVs:

Meglena Kuneva

Former Commissioner for Consumer Affairs at the European Commission. She has worked as journalist for the Law Programme of the Bulgarian National Radio while being an Assistant Professor at Sofia University. In 1990 she took a job as Senior Legal Advisor at the Council of Ministers of Republic of Bulgaria and held it until 2001. Her political career started in June 2001 when she was elected as a Member of the Bulgarian Parliament, becoming deputy Minister of Foreign Affairs, later Minister of European Affairs, and Chief Negotiator for the EU accession process. She also served as a Representative of the Bulgarian government at the Convention on the Future of Europe which drafted the EU Constitutional Treaty. She held the position of

Bulgaria's first Minister of European Affairs in two governments. On 26 October 2006 Kuneva was nominated to be Bulgaria's first member of the European Commission assigned the portfolio of Consumer Affairs, a position she held until March 2010. She was chosen as European of the Year for 2008 by the European Voice and for Commissioner of the Year by the European Agenda magazine. She is chairing the Interim evaluation of the AAL Joint Programme for the European Commission.

Anne-Sophie Parent
Anne-Sophie Parent is Director of AGE – the European Older People's Platform, a EU network representing 28 million older people across the EU-27. AGE aims to voice and promote the interests of the 150 million inhabitants aged 50+ in the European Union.

Ms Parent was elected twice President of the Social Platform (March 2003 to March 2007). She sits on various advisory committees set up by the European Commission (European Pensions Forum, Science in Society programme, e-Inclusion programme, European Year of Equal Opportunities for All, European Health Policy Forum, Ad Hoc Expert Group on Desinstitutionalisation). She is also a member of the Steering Committee of the Social Justice Programme of the King Baudouin Foundation (B) and chairs the francophone jury of their Intergenerational Solidarity Programme.

As Director of AGE Ms Parent has been running the AGE Secretariat since September 2002. She is responsible for the overall implementation of AGE work programme and she supervises AGE involvement in projects. In addition to its PROGRESS funded work programme, AGE is currently leading two EU funded projects: EUSTACEA dealing with elder abuse (funded by the DAPHNE programme) and INCLUSAGE dealing with social inclusion and poverty of older people (funded by PROGRESS). AGE is also involved in several EU funded research projects as co-partner

Erika Mann
Erika Mann is the Executive Vice President of the Computer & Communications Industry Association; a non-resident Senior Fellow of the Atlantic Council; a Trustee of Friends of Europe; Chairperson of the evaluation board for the Risk-Sharing-Finance Facility (RSFF); and a member of the AAL-evaluation Panel.

Until 2009 Erika served as a member of the European Parliament, concentrating on trade and WTO policy, transatlantic relations, digital economy, telecommunications policy, and research policy. During this period she was a member of the European Parliament Delegation for relations with the US (Transatlantic Legislative Dialogue) and the European Chairperson of the Transatlantic Policy Network.

Erika conceived the notion of a "Transatlantic Market" between the EU and US, which lead to the foundation of the Transatlantic Economic Council, and she served on the advisory board until 2009. She was the Speaker of the Committee for International Trade for the Social Democratic Group in the European Parliament. As an MEP, she was the Chairperson of the Join Board, working to create a parliamentary dimension of the WTO. She has also served as the Chairperson of the European Parliament Delegation with Mexico, and has worked on EUROLAT, the EU-Ivory Coast Free Trade Agreement, Board of Internews, the International Education and Encounter Network in Belarus, and the European Parliament delegations to Ukraine, Moldova, Belarus, EFTA-Countries, and South Asia.

Csaba Dózsa
Csaba Dózsa was born on 27th May 1969 in Vác, Hungary. He obtained his degree in economics in 1994 at the Budapest University of Economic Sciences in the Faculty of Social Sciences specialising in Social Policy and Planning.

From 1997 to 1999 he continued his postgraduate studies through a World Bank scholarship (Universidad de Barcelona y Pompeu Fabra, Barcelona) in the field of health economics and obtained a Masters Degree in health economics (Máster en Economía de la Salud). He is an Honorary Associate Professor at the Corvinus University of Budapest, and is currently taking part in the Doctoral Programme of the Faculty of Economics.

Professional experiences:

From 1994 to May 2005 he worked for the National Health Insurance Fund Administration, where he was the Deputy Director General for Health Policy and Health Care from June 2002. Then he worked for the Ministry of Health as the Deputy Secretary of State for Economic and Strategic Affairs and led the planning of the health care and health industry programmes of the National Development Plan.

Since June 2006 he has been the Executive Director of Med-Econ Ltd., focusing on project management, organisational development consulting, planning and management of EU projects and programmes.

On several occasions he took part in official tours and scholarships on health care financing and health policy (Winston-Salem, Philadelphia, Washington - USA; Utrecht, Groningen - Netherlands; East-London University, University of London, Birmingham - U.K.; Saxony - Germany). He publishes regularly and has held several presentations at national and international scientific and professional conferences. His main spheres of his interest are the fields of financial issues of health care providers, including patient classification systems, incentive systems, the methodology and adaptation of health technology assessments in health care, managed care including risk-based refining capitation-based reimbursement systems (risk-adjustment), and the strategic management of public administration.

Diogo Vasconcelos
Since February 2007, Diogo Vasconcelos has been a Distinguished Fellow with Cisco's Internet Business Solutions Group (IBSG), the global open innovation and strategy group of Cisco. Based in London, we works across Europe and Middle East.

He chaired the Business Panel on Future EU Innovation Policy, set up European Commission, which called for a radical change in European innovation policies, co-authored the report on "Europe and Social Innovation" for the BEPA and advises the European Commission on ambient assisted living innovation.

Diogo Vasconcelos chairs SIX - Social Innovation eXchange, a global community of NGOs, global firms, public agencies and academics committed to improve the methods with which our societies find better solutions to challenges such as ageing, climate change, public services and healthcare. He Chairs Dialogue Café, he is a member of the Executive Board on Digital Europe and chairs APDC, that represents the ICT industry in Portugal. Diogo is also member of the board of Catholic University of Porto and member of the advisory boards of the leading European think

tanks, Lisbon Council (Brussels) and European House-Ambrosetti (Milan) and fellow of ResPublica (London).

Before joining Cisco, Diogo was the Knowledge Economic Advisor to the Portuguese President of Republic. Diogo coordinated innovation and information society policies, as Chair of the Knowledge Society Unit, reporting to the Prime Minister, and was a member of the board of the Innovation Agency.

He has a Law degree and post-graduate degrees in Communications Law, Management and Political Science. Awarded one of his country's highest honors "Commander of the Order of Prince D. Henrique".

Prof Ian Miles
Ian Miles graduated in psychology from the University of Manchester. After working at the Science Policy Research Unit (SPRU) at Sussex University for eighteen years, he joined PREST in 1990. His research interests and methods are wide-ranging.

Much of his work on technological innovation has concerned new Information Technologies, and he has been particularly interested in service industries as users and sources of innovation. IT is especially important for these industries, but other technological and organisational innovations are also highly relevant. Apart from analyses of services in general, Miles is particularly associated with Knowledge-Intensive Business Services (KIBS), pioneering research into these industries. Research covers both managerial and policy dimensions of these issues, and uses tools such as case studies and survey analysis.

Broader interests concern the social and employment implications of changing technology, and the social shaping of technologies; the evaluation of social science and other research programmes; social and other indicators; and foresight methods and practice. (In connection with the latter, he is on the editorial board of several leading journals such as *Technological Forecasting and Social Change*, *Foresight*, and the *International Journal of Foresight and Innovation Policy*, as well as journals focusing more on services and innovation issues.). He was a director of PREST and a founding director of CRIC, the Centre for Research on Innovation and Competition - both now assimilated into Manchester Institute of Innovation Research.

His work has been carried out for many sponsors, including the Economic and Social Research Council, UK government departments (DTI, DEFRA), foreign government departments (in, for example, Brazil, Finland, and Switzerland), international organisations (e.g. the EC's DG Research and DG Enterprise, World Bank, UNCTAD, UNIDO) and private companies (e.g. BT, BNFL). As well as producing numerous reports, he has written over 110 book chapters, over 80 journal articles, and authored and co-authored twelve books, and co-edited eight; not to mention numerous reports

Jeremy Millard
Jeremy Millard has a Masters Degree from London University in Geography and Social Sciences, as well as numerous diplomas including in Public Administration. In the UK, he worked in local government and with major telecoms companies (including ITT) as an administrator and research assistant. In 1971 he moved to the UK Open University where he designed and taught courses in the social sciences, as well as worked on developing new approaches to both distance and face-to-face higher education with a special focus on new technology. Moving to Denmark in 1984,

Jeremy taught first at Aarhus University in geography and statistics, and then became a Managing Consultant at Tele Danmark Consult. This involved mainly large scale international assignments in Europe, Africa and Asia, supporting governments and private clients in developing their telecoms infrastructures and institutions, and particularly their conversion to competitive market conditions.

Jeremy has been Senior Consultant with the Danish Technological Institute since 1999, where he continued working with new technology and society in Europe and globally. He has worked with governments, regional development agencies, and the private and civil sectors in all parts of the world, and has focused increasingly on information society and knowledge economy consultancy particularly in the areas of eGovernment, eBusiness and eInclusion. His clients include the European Commission, the UN and the OECD, as well as individual governments, regions and private companies. Apart from Scandinavia and Europe, he also works in Asia, the Middle East and Africa.

Recent assignments for the European Commission include leading an impact assessment of the European eGovernment 2010 Action Plan, development of the eGovernment 2020 Vision Study on Future Directions of Public Service Delivery, and a comprehensive study on European eParticipation. Over the past few years he has also supported the Inclusive eGovernment Expert Group of EU Member States, as well as the eInclusion Unit. Much of this work has focused on open, innovative, transparent and participative eServices, and the policies, strategies and actions needed to move towards this goal. His recent work with the UN, the OECD, World Bank and Council of Europe has also focused on this area. He has published numerous academic articles and book chapters, as well as a large number of policy and analysis reports for clients.

Annex 4: Persons interviewed

Interviewee	Position	Interviewer	Format
DK Arvind	Director of the Research Consortium in Speckled Computing, School of Informatics, University of Edinburgh, United Kingdom	Erika Mann	In person
Thomas Børner	Senior Advisor of the Department of Finance, Ministry of Finance, Denmark Chairman of the Public Welfare Technology Foundation (ABT Fonden), Denmark	Diogo Vasconcelos	Phone
Juan Carlos Castrosin Gutierrez	Member of the AAL JP Advisory Board Partner at Platform of Investments and Powerful Inventions (PIyPI), Spain	Diogo Vasconcelos	Telephone
Joaquim Croca	Head of Health Solutions, Vodafone Global Enterprise Limited	Diogo Vasconcelos	Phone
Gil Baldwin	Chief Executive Officer, Tunstall Healthcare Group	Diogo Vasconcelos	Phone
Frans de Bruïne	Former Director for ICT addressing Societal Challenges, Directorate-General for Information Society and Media, European Commission	All	In meeting
Frederik De Vusser	AAL Contact Person for the Flanders Region of Belgium Advisor, Flemish Agency for Innovation by Science and Technology, Belgium	All	In meeting
Simon Duffy	Director of the Centre for Welfare Reform, United Kingdom	Diogo Vasconcelos	Phone
Alvaro Fernandez de Araoz	eHealth Director, Telefonica SA (Global), Spain	Diogo Vasconcelos	Phone
Gerhard Finking	Former President of the AAL Association	All	In meeting
Alain Franco	Member of the AAL JP Advisory Board President of the National Reference Centre for Health and Autonomy in the Community (CNRSDA), France President of the International Society for Gerontechnology (ISG)	Ian Miles	Telephone
Lena Gustafsson	President of the AAL Executive Board Former Deputy Director General of VINNOVA, Sweden	All	In meeting
Paul Havinga	IS-ACTIVE Project Coordinator Professor of Pervasive Systems, Centre for Telematics and Information Technology (CTIT), University of Twente, the Netherlands	Erika Mann	Phone
Bart Janssens	Secretary General of the European Confederation of Care Home Organisations (ECHO)	Anne-Sophie Parent	Phone
Kevin Johnson	Programme Chair, Assisted Living Innovation Platform (ALIP), United Kingdom Founder of the programme 'Ageing Well – New Opportunities for a Connected Society', Cisco's Internet Business Solutions Group	Diogo Vasconcelos	Phone
Sita Kishna	Policy Advisor at the Department of Long Term Care, Ministry of Health, Welfare and Sport, the Netherlands	Csaba Dózsa	In person
Vladimir Kosic	Regional Minister for Health, Social Affairs and Socio-health Integration, Regione Friuli Venezia Giulia, Italy	Diogo Vasconcelos	Teleconference

Interviewee	Position	Interviewer	Format
Lutz Kubitschke	Senior Analyst, Empirica Germany	All	In meeting
Geja Langerveld	AAL National Contact Person for the Netherlands Programme Manager, the Netherlands Organisation for Health Research and Development (ZonMW)	Csaba Dózsa	In person
Graham Mobbs	AAL National Contact Person for the United Kingdom European Operations Manager, Technology Strategy Board, United Kingdom	Diogo Vasconcelos	In person
Giorgio Mongiat	ICT & Ageing, Unit "ICT for Inclusion", Directorate-General for Information Society and Media, European Commission	All	In person
János Monos	Engineering Unit Manager, Home Health Hungary, GE Healthcare Technologies	Csaba Dózsa	In person
Janet Morrison	Chief Executive, Independent Age, United Kingdom	Diogo Vasconcelos	In person
Irina Odnoletkova	Project Manager, Union nationale des mutualités libres, Belgium	Csaba Dózsa	In person
Silas Olsson	Interim Director of the AAL Central Management Unit	All	In meeting
Dávid Pap	AAL National Contact Person for Hungary National Office for Research and Technology (NKTH), Hungary	Csaba Dózsa	In person
Maud Pasquier	Legal Officer at the AAL Central Management Unit	All	In meeting
Petri Peltonen	Director General, Innovation Department, Ministry of Employment and the Economy, Finland Chairman of the Board, Funding Agency for Technology and Innovation (Tekes)	Meglena Kuneva	Phone
Roland Pouillie	AAL JP project evaluator Director, Assistive Devices & Medical supplies, Escapo, Belgium	Csaba Dózsa	In person
Louise Richardson	AAL JP project evaluator CEO, Older Women's Network (OWN), Ireland Vice- President of AGE Platform Europe	Anne-Sophie Parent	Phone
Ute Ritterfeld	Former a2e2 Project Coordinator Professor of Language and Communication at Technical University of Dortmund, Germany	Ian Miles	Phone
Simon W. Roberts	Product Research and Innovation - Digital Health Group, Intel Corporation	Diogo Vasconcelos	In person
Steve Sadler	Technical Director, Tunstall Healthcare Group	Diogo Vasconcelos	Phone
Miguel Sánchez Dominguez	AAL National Contact Person for Spain Department for Information Society, Minister of Industry, Tourism and Commerce, Spain	Anne-Sophie Parent	Phone
Kenneth Sandström	CEO of MediNeuvo, Finland	All	In meeting
Peter Saraga	Chair of the AAL Advisory Board	Meglena Kuneva	Phone
Henning Seiding	Director of the Welfare Tech Region Project, Region of Southern Denmark Director at Odense Municipality, Denmark	Ian Miles	Telephone
Dr Mike Short	Vice President, Telefonica 02 Europe	Diogo Vasconcelos	Telephone
Peter Skiczuk	Rapporteur of AAL JP 2010 Evaluation International Scientific Project Manager, Frequentis GmbH, Austria	Erika Mann	Phone
Luiza Spiru	Executive President of "Ana Aslan" International Academy of Aging, Romania	Anne-Sophie Parent	Phone

Interviewee	Position	Interviewer	Format
Paul Timmers	Head of Unit ICT for Inclusion, Directorate-General for Information Society and Media, European Commission	All	In person
Nakita Vodjdani	AAL National Representative for France Former Member of the AAL Executive Board Head of European and International Relations & ICST Programme Manager of the French National Research Agency (ANR)	Ian Miles	Telephone
Dr Jeroen Wals	Member of the AAL Advisory Board Account & Theme Manager Healthcare Vice President Philips Research	Meglena Kuneva	Phone
Reiner Wichert	V2me Project Coordinator Head of Department "Interactive Multimedia Appliances", Fraunhofer IGD, Germany	Ian Miles	Phone
Peter Wintlev-Jensen	Head of Sector ICT & Ageing, Unit "ICT for Inclusion", Directorate-General for Information Society and Media, European Commission	All	In person
Wolfgang Wittke	Senior Policy Officer, Unit "Coordination of national research programmes, joint programming and major European initiatives", Directorate-General for Rsearch, European Commission	All	In meeting
Anssi Ylimaula	a2e2 Project Partner CTO of Mawell, Finland	Ian Miles	Phone

Annex 5: The public consultation

An online public consultation[59] took place from 1 June to 1 July 2010, resulting in 39 submissions. Seven language versions were available: Czech, English, French, German, Italian, Polish, Spanish.

The questionnaire:

Questions 1-2: Ageing and Information and Communication Technologies (ICT)

Question 1: Which specific benefits do you think the use of ICT can provide to improve the life quality and independence of the elderly? Which practical examples of solutions would you wish to see realise that deliver these benefits?
Please type below. There is no length limit.

Question 2: Who should be involved in achieving these benefits and how should they do this? (For example, the elderly and their families/communities, or carers or supporters, public agencies, civil organisations, the private sector, ICT industry)
Please type below. There is no length limit.

Questions 3-4: How should the Ambient Assisted Living Joint Programme (AAL JP) operate in the future

Question 3: In the AAL Joint Programme, what specifically should be the respective roles of the European, national and/or regional levels in relation to policy, finance, deployment, research and innovation, other support, etc.
Please type below. There is no length limit.

Question 4: In order to maximise the future impact of the AAL Joint Programme, which recommendations do you have for its scope, e.g. keep existing scope, a possible widening of its scope (e.g. address also non-ICT topics, also assistive technology for the disabled, also roll-out of actual solutions, etc.) or narrow of its scope (e.g. not to address health-related questions, focus on the oldest part of the population, focus on affordability of independent living solutions, etc.)?
Please type below. There is no length limit.

Question 5: General question
Question 5: Do you have any other comments or ideas about the future work to be done or cooperation to be pursued as regards the AAL Joint Programme or ageing and ICT research/innovation?
Please type below. There is no length limit.

Questions 6-7: The context of your answers to Questions 1-5
Question 6:

[59] on the European Commission's eInclusion website: http://ec.europa.eu/information_society/activities/einclusion/index_en.htm

a) Had you heard of the Ambient Assisted Living Joint Programme before you answered this questionnaire?
☐ Yes
☐ No
b) Have you participated, or are you participating, in AAL JP?
☐ Yes
☐ No

c) Are you planning to participate in AAL JP in the future?
☐ Yes
☐ No
d) Did you access background information on AAL JP and its context before you answered this questionnaire?
☐ Yes
☐ No
Question 7: Is your interest in the AAL JP as (please indicate one or more):

- ☐ A (potential) elderly person
- ☐ A family member or friend of an elderly person
- ☐ A direct supporter of or carer for the elderly
- ☐ A non-profit organisation concerned with the elderly
- ☐ A public sector organisation concerned with the elderly
- ☐ An enterprise interested in products and services for the elderly
- ☐ A developer of ICT tools and services
- ☐ A potential financer of, or research into, products and tools for the elderly

Finally, if you wish to provide your contact details for follow-up, please do so (please see our policy on personal data protection & Specific privacy statement).

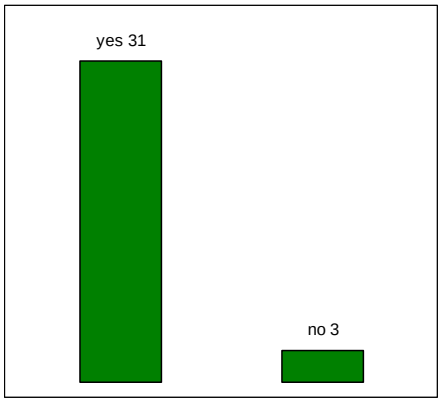
We would also welcome relevant data or documents (or links to these) which you think we may not have.

Summary of results of the public consultation, questions 6-7 (respondent profiles)

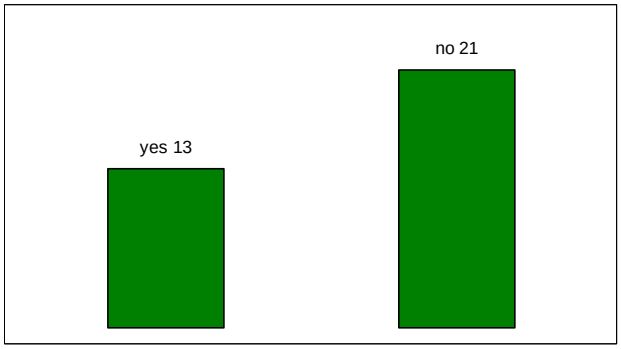
NOTE: the discrepancy between the total number of submissions received (39) and the total responses to sub-questions 6a, 6b, 6c and 6d is due to the fact that not all respondents answered all the questions.

Question 6

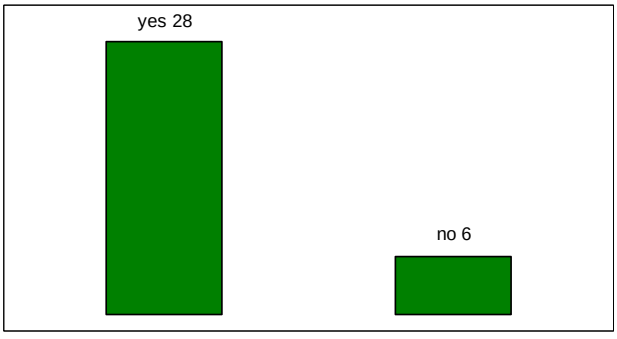
a) Had you heard of the Ambient Assisted Living Joint Programme before you answered this questionnaire?



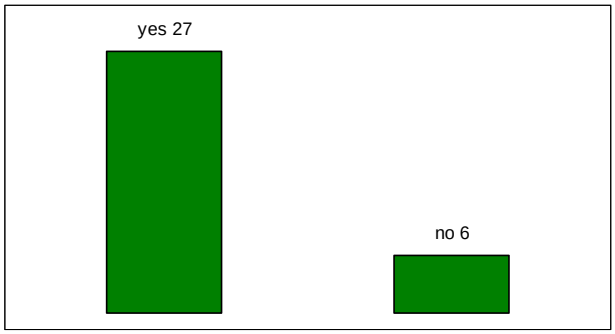
b) Have you participated, or are you participating, in AAL JP?



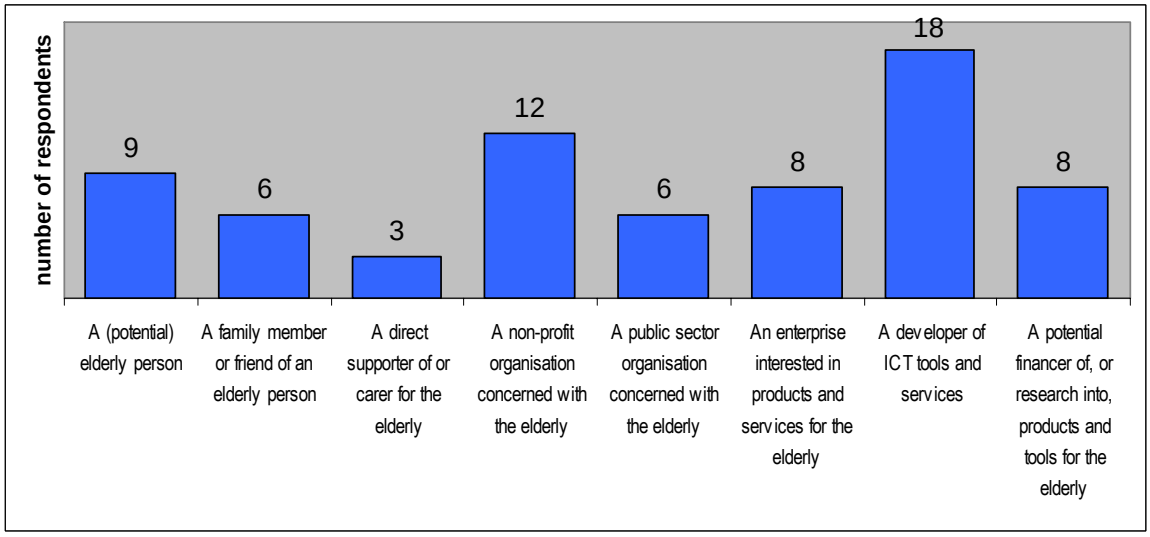
c) Are you planning to participate in AAL JP in the future?



d) Did you access background information on AAL JP and its context before you answered this questionnaire?



Question 7: Is your interest in the AAL JP as (please indicate one or more):



Annex 6: Abbreviations and main references consulted

Abbreviations

AAL – Ambient Assisted Living
AALA – Ambient Assisted Living Association (of the AAL JP Participating States)
AAL JP – Ambient Assisted Living Joint Programme
AALIANCE – The European Ambient Assisted Living Innovation Alliance
CIP – Competiveness and Innovation Programme
CMU – Central Management Unit (of the AAL JP)
EC – European Commission
EIB – European Investment Bank
EIF – European Investment Fund
EP – European Parliament
EU – European Union
ECDTP – European & Developing Countries Clinical Trials Partnership
ERA – European Research Area
ERDF – European Regional Development Funds
FP7 – Seventh Framework Programme for Research and Technology Development
ICT – Information and Communication Technology
LTC – Long Term Care
MS – Member State(s)
NESTA **–** National Endowment for Science, Technology and the Arts (UK)
PS – Participating States (in the AAL JP)
R&D – Research and Development
RSFF – The Risk Sharing Financing Facility of the EIB
RTD – Research and Technology Development
SF – Structural Funds
SME – Small and Medium Sized Enterprise
TEU – Treaty on the European Union
TFEU – Treaty on the Functioning of the European Union

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- “European Strategy in ICT for Ageing Well – AAL Joint Programme Interim Evaluation”, Kick-off meeting 20 April 2010, DG Information Society and Media
- “Ambient Assisted Living Joint Programme”, Prof. Lena Gustafsson, President of the AAL Association
- “What is wrong with AAL: Challenges & Chances”, Dirk Elias, Director, Center for Assistive Information and Communication Solutions, Fraunhofer Portugal Research, FhP AICOS
- “ICT & Ageing – European Study on Users, Markets and Technology”, Lutz Kubitschke, empirica, 10/05/2010

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