



**Ambient Assisted Living
Call for proposals AAL-2010-3**

Ambient Assisted Living (AAL) Joint Programme

**Call for Proposals 2010
AAL-2010-3**

**ICT-based Solutions for Advancement of
Older Persons' Independence and Participation in the
“Self-Serve Society”**

Date: 23rd of April, 2010
Version: Call 3 – Final for publication
Status: **This edition of Call 3 is without national commitments for funding and national eligibility criteria. This information will be published as soon as possible.**



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Call 3 for proposals to the Ambient Assisted Living Joint Programme (AAL JP)

The AAL Joint Programme will launch the third Call for Proposals with the topic **“ICT based solutions for Advancement of Older Persons’ Independence and Participation in the “Self-Serve Society”¹**.

The core of the AAL Joint Programme is to provide innovative ICT based solutions to elderly persons, which means innovative products, systems or services addressing identified wishes and needs of the end-users. Projects funded under the AAL Joint Programme will be multinational, collaborative and cost-shared. Funding contracts of individual project partners will be concluded with the relevant national funding authority.

The AAL JP is a demand-driven R&D funding programme **for innovative ICT-based solutions (products, services, and systems) for ageing well**. Improving the quality of life, autonomy, participation in social life, skills, and employability of older people is the main goal of the AAL program, while improving service delivery and reducing care costs are secondary targets.

AAL projects should address major issues associated with a market introduction of 2-3 years after finalisation of the project.

Objective of the Call

Previous calls by the AAL JP have targeted specific application areas. Call 1 asked for proposals on “ICT-based solutions for prevention and management of chronic health conditions of elderly people”, while Call 2 asked for “ICT-based solutions advancement of social interaction of elderly people”. In Call 3, the approach is different, focusing on the structural, pervasive challenges to an ageing population when society requires mastery of technology of all citizens: **“ICT-based Solutions for Advancement of Older Persons’ Independence and Participation in the “Self-serve Society”**. The application areas in call 3 are explained below.

AAL JP is based on article 169 in the European Union Treaty and supported by 23 Member and associated Member States. Proposals for funding from the AAL JP should have an explicit European dimension, aiming at solutions which are adaptable across Europe and addressing end-user needs that are transnational and European in character. Cultural, organisational, and market diversity is important also for the development and uptake of ICT-solutions. Proposals are encouraged to include variations along these dimensions - including in the piloting activities.

A **“self-serve society”** is rapidly developing also in Europe. This represents both benefits and challenges to citizens as well as providers, public and private. Goods and services can now be

¹ The expression the “self-serve society” is used in this call text to describe that goods and services can now be accessed and transactions completed by way of digital solutions – in most cases operated by the user interacting directly with technology .

accessed and transactions completed by way of digital solutions. Opportunities for individual choice and personalization of products, services and the transaction itself to the demands and desires of consumers and citizens is becoming more common, sometimes even mandated (e.g. through legislation on accessibility). The trend is evident both in commercial, cultural and public services. This represents a positive development for suppliers as well as clients, with lower costs and greater flexibility. For some, however, the ICT-based self-serve society presents problems, in particular for older people with impairments or little or no familiarity with technology. Solutions which increase independence and efficiency for experienced technology users, threatens others with exclusion and loss of independence. These **societal** concerns form the context for Call 3.

This call will fund proposals for innovative ICT-solutions that enable older people to:

- Preserve and enhance independence and dignity in all aspects of daily life
- Take active part in the self-serve society
- Stimulate and support the capacities required for such participation (e.g. mobility, physical, and cognitive)

Relevant **application areas** in Call 3 are

- **Home environment** and related activities of daily living – at home, on holiday, in visits (“mobile enabled solutions”)².
- **Transportation and travel** activities

In any application area, innovation of ICT-based solutions must take into account the following challenges:

- Improvement of older people’s access to, acceptance, trust, and use of services provided through ICT-based solutions.
- Improvement of user interfaces and the usability of devices and solutions for older people, based on design for all-principles as far as possible.
- Enabling customization to individual needs and wishes of elderly people of the total service chain involving different providers, channels, methods, and market segments.
- Integration of new ICT-based solutions to be provided by existing (or new) service providers, channels or market segments, and adapted for seniors.

Proposals should include a description of how the diversity of needs and desires of older people in the “self-serve society” will be met; how end-users will be involved in the development process, and how they will be provided with the resources necessary for effective use of the solution in question after project end.

²This call focuses on ICT based solutions for independent living and mobility of seniors in the “self-serve-society”. The application areas indicated, “travel and transportation” and “home environment”, should be understood in a broad sense and seen from the perspective of the end-user(s). As a consequence, travel and transportation will exclude proposals on “smart cars” and transportation infrastructure, while “home environment” will avoid general proposals on “smart homes”. However, components of “smart homes” needed to deliver or access the solution proposed, may be included in the project.

Proposals must present a work plan specifying the innovation process from development and validation of the concept through user involvement and pilot testing to final prototype, supplemented by a business model for sustainable market development. Proposals should describe the complete service-model required for the ICT-based products and systems in relation to the AAL JP user-groups (see notes below).

Proposals must document ambitions “beyond state of the art” compared to solutions presently available in the market. Providing an information website or giving access to an information repository will not be considered fulfillment of such documentation.

In the area of “home environment”, expected results should be substantially improved ability of seniors to retain independence and dignity in managing the many diverse tasks of daily living. Overall expected results of projects in the area “travel and transportation” include a substantially improved capability of seniors to plan, manage and execute travel and transportation projects at their own discretion. Proposals should provide information on how their idea and implementation would lead to the expected benefits and how the results are to be demonstrated and measured. See Annex 2 on potential benefits.

To be eligible for funding through AAL Call 3, proposals must fulfil the national eligibility criteria and conform to the requirements regarding form and date of submission. All eligible proposals will be evaluated and scored in ranking order by an international panel. Proposals scoring above the required threshold will enter into the procedure for allocating funding from the AAL Joint Programme. Funding contracts for individual project partners will be concluded with the relevant national funding authority.

Annex 1 contains further details regarding proposal requirements.

Notes

The AAL-programme is an ICT-innovation programme focusing on the needs and wishes of end-users (definitions below). ICT is understood in the same broad sense as in FP7.

Definition of end-users in AAL Joint Programme:

- Primary end-user is the person directly using an AAL product or service, a single individual, “the well-being person”. This group directly benefits from AAL by increased quality of life.
- Secondary end-users are persons or organisations in direct contact with a primary end-user, such as formal and informal care persons, family members, friends, neighbours, care organisations and their representatives. This group benefits directly when using AAL solutions (at a primary end-user’s home or remote) and indirectly when the care needs of primary end-users are reduced.
- Tertiary end-users are institutions and private or public organisations which are not themselves directly using AAL solutions, but who somehow contribute in organizing, paying or enabling them. This group includes the public sector service organizers, social security systems, insurance companies. Common to these is that their benefit from AAL comes from increased efficiency and effectiveness which result in saving expenses or by not having to increase expenses in the mid and long term.

Basic information on Call AAL-2010-3

- Date of publication: **Call text 23rd of April 2010** (additional information pending)
- Call title: "ICT-based Solutions for Advancement of Older Persons Independence and Participation in the "Self-serve Society""
- Closure date: **30th of July** at 17:00, Central European Time (CET)
- Indicative total funding³: **XX** M€
 - o This amount includes a contribution of up to 23 M€ by the European Commission.
- Consortia submit one common project proposal, with one partner acting as coordinator.
- Project proposals will be evaluated centrally by independent European experts.
- Ranked list of proposals based on expert evaluation and other criteria set by the AAL JP (see Annex for details) expected in August
- Approval of the General Assembly of AAL JP of proposals recommended for funding expected in October 2010.
- Funding of individual project partners will be based on national rules and requirements in the respective partner states. Details are to be found at www.aal-europe.eu/AAL-2010-3.
- Final decisions by AAL partner states on funding of proposals under Call 3 are expected from December 2010.

Characteristics of AAL collaborative projects:

- Aims at ICT-based solutions to identified user needs
- Time-to-market perspective of 2 to 3 years after end of the project
- Project total budget: 1 - 7 M€
- Maximum funding from the AAL Joint Programme: 3 M€.
- Significant involvement of industry and other business partners, particularly SMEs. are encouraged. Maximum 1/3 of total efforts in the project (hours/man months) should be performed by research partners (total of all such partners).
- Realistic pilot trials as integrated parts of the project
- Proactive end-user involvement throughout the project
- Defined market segment(s), use cases and target group(s) and address the wishes and needs of these specific group(s).

Eligibility criteria – collaborative projects

- Submission of a complete proposal through the AAL electronic submission system before the deadline, as specified in the Call for Proposals
- English as the language of the proposal
- Consortium composition of at least 3 independent eligible organizations (legal entities), from at least 3 different AAL Partner States participating in the Call for Proposals
- Consortium must include at least one eligible business partner
- Consortium must include at least one eligible SME partner which can be the business partner
- Consortium must include at least one eligible end-user organization
- Size of the consortium: 3 – 10 partners
- Duration of the project: 12 – 36 months
- Common start date for all partners

³ See the Annex for an overview of the AAL Partner States financial commitments.

- Adherence to the specifications for structure and technical details (e.g. page count) of the proposal submission.

Eligible for funding are only organisations that are explicitly included in the national eligibility criteria (available from the Call website). It is highly recommended to consult with the AAL National Contact Persons (NCP) prior to submission of a proposal (list of NCPs and contact data also found on the AAL JP website). In some countries, prior NCP-contact is a requirement for being eligible for funding. Details of national eligibility requirements are published as part of Call 3.

Project partners may include businesses and organisations not requesting funding. This includes organisations ineligible for funding according to national rules or residing outside an AAL Partner State⁴. Such organizations may be associated to the project without funding from the AAL Joint Programme, but they cannot be crucial for the project's implementation and they will not be taken into consideration when assessing the project proposal against the eligibility criteria and project characteristics stated above.

Consortium Agreement

Projects recommended for funding under the AAL JP must submit a signed consortium agreement before the contract with the national agencies is concluded. The Consortium Agreement should state a set of rules/procedures to ensure fair protection for the IPR⁵ interests of the partners and partners' employees (e.g.: conditions/ limitations on the ability of individual consortium partners to freely publish or profit from project results directly covered by other partners' IPR). The consortium agreement should include conflict resolution procedures/mechanisms to be invoked if and when necessary.

Evaluation criteria, scoring and selection principles for collaborative projects

The proposals for **AAL collaborative projects** will be evaluated against the following four criteria:

1. Relevance and innovation: assesses whether the proposed project is in line with the objectives of the Call and demonstrates an innovative approach to the theme.

- i) The proposal is expected to be highly conformant with the specific objectives of the Call and the thematic description of the Call Rationale. It addresses the necessary enabling elements to ensure access of the targeted end-users to the proposed solution. It addresses one or several of the application areas of the Call as described in the Call

⁴ The participation of organisations residing outside an AAL Partner State is restricted to organisations residing in a Member State of the European Union that currently does not participate in the AAL Joint Programme, i.e. Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Malta and Slovak Republic.

⁵ The AAL Joint Programme follows the IPR regime on the basis of Regulation No. 1906/2006, which establishes the rules for participation in the FP7 (Chapter III, articles 39 to 51, hereinafter "Rules for Participation"). the general European FP7 IPR rules and general principles on IPR according to legal text): http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_391/l_39120061230en00010018.pdf

rationale.

ii) The proposal is expected to describe the motivation of the targeted innovation with respect to the end-user needs and the solutions currently existing in the market.

iii) The project is expected to apply Information and Communication Technologies (ICT) in new and innovative applications or service concepts. The results should be solutions (products, systems and service concepts) that can be applied and deployed widely in Europe, with market introduction envisaged within 2-3 years after project end.

2. Scientific and technical quality

This assesses the overall scientific and technical quality of the proposed project and the extent to which the consortium will be able to deliver the planned results in time and with the desired quality. The potential of the project to contribute to scientific and technical advancement in the field will also be evaluated.

i) The proposal should lead to an innovative and effective solution for users and other stakeholders, based on scientifically and technically sound concepts and likely to contribute to advancing the knowledge in the field. The proposal should demonstrate a clear opportunity to progress beyond the state-of-the-art in integration of technologies and products that provide new innovative solutions to the defined end-user needs.

ii) The proposal is expected to include development of a realistic prototype or pilot application to be tested during the project. Through the pilot application(s), the impact envisaged in the initial proposal should be demonstrated to the maximum extent possible.

3. Quality of consortium and efficiency of implementation

This assesses the extent to which the consortium composition includes the critical mass and diversity of competencies and infrastructure required for successful completion of the defined tasks. The quality of the work plan will also be assessed here.

i) Consortia are expected to provide evidence of the necessary expertise and resources, scientific, technical and commercial, to perform all planned tasks and deliver the targeted results on time and with high quality. The consortium should include the essential components of the value network and demonstrate an added value by international collaboration.

ii) The proposals are expected to include proactive end-user involvement throughout the project. The issues of accessibility, end-user acceptance and usability are fundamental. The proposals are expected to target creation of innovative solutions to specific end-user needs related to the independence and participation of older people in a self-serve society. The approach to specific end-user needs should be validated by an evidence base in a use case (building on testing in a realistic real user environment).

iii) The proposals are expected to be put forward by consortia where SMEs play important roles. The implementation plan must demonstrate significant involvement of industry and other business partners in terms of budget and effort.

iv) Projects are expected to put forward a high quality work plan detailing relevant methodologies and organisation of activities, including a plan for dealing with ethical issues (see Annex 3). The work plan should consider adequate quality assurance and

control procedures regarding the development and release of external project deliverables, as appropriate to each specific type of deliverable (e.g. management reports, research notes, market studies, application or service prototypes, etc.). The proposal should state a set of rules/ procedures to ensure fair protection for the IPR interests of the partners and partners' employees (e.g. conditions/ limitations on the ability of individual consortium partners to freely publish or profit from project results directly covered by other partners' IPR). The proposal should include conflict resolution procedures/ mechanisms to be invoked if and when necessary. The proposal should include a dissemination plan, ensuring that innovative project contributions are properly disseminated, subject to limitations imposed by the protection of partners' IPR over commercially-sensitive information, as stated at project start in the Consortium Agreement.

4. Potential impact

This assesses the extent to which the final deliverables of the proposed project may provide a direct benefit to the AAL target base; end-users, businesses, and other stakeholders.

i) The proposal should demonstrate ambition and ability to provide added value to the individual (e.g. quality of life) and to society broadly defined (including, but not limited to, cost effectiveness). The proposal should provide evidence of possessing the capability, at project completion time, to access and develop relevant markets for the solution developed, as well as the capability for disseminating the knowledge achieved to a wider public and scientific audience. The proposed activities should be targeted towards bringing new products, solutions or service concepts to the market within about 2 to 3 years after the project end.

ii) The proposal should target an attractive and high potential market, in Europe and beyond, for an innovative solution to specific end-user needs related to advancement of independence and active participation of older persons in a self-serve society.

iii) A business model and an outline of a market plan covering value chain and business analysis activities should be included to support the realization of economic opportunities. The approach of capitalising the economic opportunities must not be contradictory to the needs of the individual and their carers, as emphasized in the ethical guidelines (Annex 3). The business model should build on open and inter-operable solutions as far as possible. The proposal should demonstrate an economic impact which may include

- Capability of the consortium, particularly of its business partners, to derive benefit from the project results, proportionate to the investment.
- Making existing or new products, systems and services significantly more affordable or acceptable to the end-users.
- Improving the sustainability and the efficiency of publicly funded products, systems and services.

iv) The project should contribute to the creation of a European market through the development of open interfaces and interoperability, applying the relevant standards, norms and regulations in the European framework. The proposal should demonstrate that the necessary actions are

identified for taking into account the ethical guidelines in AAL (Annex 3) and relevant national and European rules and regulations on ethical issues. The proposed activities should ensure adequate respect for the individual end-user's rights, such as self-determined private life, conscious (or consciously delegated) consent and dignity, as described in Annex 3.

Scoring, thresholds and weights

Project proposals are evaluated by independent European experts and an evaluation panel. Each criterion will be scored on a 5-point scale (only full points allowed):

5 (Excellent)	Issues under assessment are comprehensively covered.
4 (Good)	Issues under assessment are well covered, with minor suggestions being put forward to enhance the project chances of success.
3 (Acceptable)	Issues under assessment are adequately covered, but the proposal shows weakness in some specific area of the criterion. To enhance the project chances of success may require significant additions or changes to some specific part of the proposal that can realistically be introduced prior to the start of the project.
2 (Defective)	Issues under assessment are sketchily covered and proper evidence of project chances for success is lacking or omitted. Potential for greater chance of successful outcome(s) requires significant major additions or changes.
1 (Failed)	The proposal does not adequately cover the issues under assessment and/or demonstrate that it has met the objectives of the AAL Joint Programme.

Following thresholds and weights will be applied to the criteria:

1. Relevance and innovation	threshold = 3, weight = 1
2. Scientific and technical quality	threshold = 3, weight = 1
3. Quality of the consortium and efficiency of implementation	threshold = 3, weight = 2
4. Potential impact	threshold = 3, weight = 2

Selection of projects for funding (phase 1):

Guided by the outcome of the evaluation process, the final selection of projects for funding will be made using the following principles:

- Maximizing the total quality of the project portfolio of the Call
- Optimizing the usage of the available funding of the Call
- Ensuring sufficient thematic spread and avoiding directly overlapping projects to be funded in AAL Joint Programme or already funded under previous calls.
- Ensuring participation of project partners from as many AAL Partner States participating in the Call as possible.

Phase 1 of project selection concludes with a list of projects qualified for funding, to be submitted to the AAL General Assembly. Upon approval of the GA, the first group of proposals

will be invited to start the clarification and negotiation phase with their national funding agency (Batch 1 of projects).

Restructuring of consortia and selection of additional projects for funding (phase 2):

After the completion of phase 1, remaining proposals on the recommended list (not included in Batch 1) will be invited to restructure their consortia and redesign the proposal, if required by the changes in consortium. Restructuring may take place with following boundary conditions:

- Restructuring can take place only when availability of national funding is the limiting factor
- Restructuring is possible only in cases where changes affect less than 50% of the total effort (person months) of the original proposal
- Restructuring cannot lead to change of project coordinator
- Restructuring can take effect either through non-funded participation of the partner or through finding a replacement partner from an AAL Partner state that still has funds available. This can be combined with redistribution of tasks between the remaining partners of the consortium.

Proposers invited to resubmit their proposal with a restructured consortium have to meet the eligibility criteria of the Call. They may be subject to a re-evaluation by independent European expert(s), in order to ensure their quality. The selection of projects to be funded among the resubmitted proposals will be guided by the outcome of the evaluation process and the availability of national budgets. After the approval of the relevant governing body of the AAL JP, additional projects are invited to start the clarification and negotiation phase with their national funding agency (Batch 2 of projects)

Note! If at any point during the processes of project selection, clarification and negotiation, a project partner withdraws from the project, is found to be ineligible or unable to fulfil its commitments as stated in the proposal (affecting more than 20% of total effort in person months), the project proposal is irrevocably disqualified without the opportunity of restructuring. Furthermore, if at any point, the project coordinator withdraws from the project, is ineligible or unable to fulfil his/her commitments, the project proposal is irrevocably disqualified without the opportunity of restructuring. In all cases, a restructuring of the consortium may lead to a re-evaluation of the proposal.

Annex 1: Proposal Requirements

Proposals are expected to take into consideration both the enabling elements and the application specific elements of the theme with an innovative approach. *Enabling elements* are such that promote the general inclusion of older persons into the information society. These include individual skills, motivation, trust and technical solutions such as user interfaces.

Proposals should embody the ‘win/win/win’ concept combining the perspectives of and benefits to individuals, to businesses and to the society. The topic area should be approached through a holistic view of the individual’s physical, psychological and social wellbeing. In this context, it is important that the solution providers as well as the older persons and their families are provided with relevant and specific information concerning state-of-the-art equipment, systems and services. End-users should be actively involved in the work to be performed with appropriate methodology applied (e.g. user-centred design). Effective solutions are flexible and adaptable to the end-user needs throughout the phases of ageing.

- End-user groups

Proposals should address clearly defined market segments, use cases and target groups in terms of wishes, needs, interests, knowledge, etc. Older persons are not an undifferentiated or homogenous mass within European societies. Some sections of the older population may be more familiar with ICT (e.g. ‘baby boomers’) and the use of technology, as opposed to other groups for whom technology and ICT development and deployment may not have been as ubiquitous as it is currently. However it must be stressed that like other sections of society and people of other age groups, older adults’ capabilities, attitudes and values are based on a variety of factors such as country of origin, technological and ICT development pervasiveness within that country, educational attainment, individual receptiveness to new ideas and socio-economic status. There is also the need to differentiate between solutions for a person living alone and solutions for couples or even those living in extended families. Solutions put forward (i.e. services or products) need to be simple, intuitive and appealing to end-users without being stigmatising. A universal design approach is preferred.

- Technology

The solutions developed (products, systems and services) should be built on innovative enabling ICT technologies. Specific attention should be made to the adaptation of generic tools to the specific conditions of a given older person and his/her immediate environment including partners, family or friends. Technology familiar to older persons (e.g. TV, telephones, panel displays) should be preferred as far as possible, especially when the solution is intended for independent use by older persons. The development of integrated technological solutions addressing the multi-faceted nature of ageing and the evolution of the solution with his/her life course in a flexible and appropriate way is necessary. The complementary nature of virtual/digital and real components should be considered. Interoperability, robustness and dependability of the developed systems are important

aspects. The project should through applied research and development address all major issues associated with a market introduction 2-3 years after finalisation of the project.

- End-user involvement⁶

Applying technologies to fulfil the needs of older persons and their partners, family or friends, requires highest attention to user acceptance, user interface and usability design in order to meet the expectations, cognitive capabilities and eSkills of the end-users (whether primary or secondary end-users). Importantly development and use of new ICT should not lead to exclusion and widening of the digital divide. To fulfil these requirements, involvement of end-users during the whole process is essential. The solutions should be validated in 'real end-user' situations for a well defined user case study. The projects may raise ethical⁷ concerns as the types of technology are likely to be new and not necessarily transparent to the end-users. Issues of privacy, control of personal data and information, confidentiality, transparency, autonomy and dignity may be of concern to the intended end-users, and this has to be addressed by the project.

- Service innovation

Innovative ICT enabled service concepts can offer new opportunities in fulfilling the needs and expectations of older persons. In innovative service concepts, the innovation can emerge from other areas than technology or product ("physical goods") development, for instance from new types of user experience, new ways of service delivery, new value chains and networks, new organizational models and new business models⁸. An innovative service concept is a new or significantly improved service that can be systematically reproduced widely. It makes use of ICT technology and brings added value both to service provider and the client/customer. Financing and business models need to be developed and the willingness of the individual to pay for solutions needs to be considered so that the customer perceives to get high value for money invested.

- Socio economic impact

To ensure maximum effectiveness and impact, the solutions proposed within the AAL Joint Programme should include new innovative approaches to assessment and validation of the proposed solutions taking into consideration their social, economical and psychological dimensions. The solutions must recognise and enhance the contributions of older persons to society and make quality of life a key focus. The economic situation both in European countries and among individual older people varies widely in Europe. Customer value, ease and efficiency of use are essential for ensuring broad acceptance, wide applicability and affordability of AAL-solutions across Europe.

⁶ See Annex 6 - End-user involvement

⁷ See Annex 3 - Ethical guidelines

⁸ See Annex 7 - Business model development

Annex 2: Potential benefits

Contribution from end-users

The primary aim of the AAL Joint Programme is to foster solutions that meet end-user needs. It is important to recognise the contributions that technology and service advancements can make to quality of life of older people. However, even more importantly, it must be recognised that end-users should be the drivers in the development and practical application of these advancements. Industry stands to gain clear benefits and generate a “*market pull*” by engaging end-users. A synergistic relationship between industry, service businesses, research institutions and end-users will ensure that products/services reflect user needs and wishes. This will then translate into products/services that are reliable, acceptable, useful, adaptable and marketable. The AAL Joint Programme deems active end-user involvement to be an essential component of activities from the outset and throughout the life of the project (i.e. from planning all the way to implementation, execution and follow-up).

Commercial benefits

A partly affluent market exists and continues to grow as a result of European demographics, so business opportunities are increasing. In AAL Joint Programme, all projects are expected to investigate the commercial aspects of the solutions being developed through business cases, value network analysis and financial considerations. Business cases should focus on customer-driven approach, where the older person (primary end-user) has a central role in defining, selecting and using the product, service or system. If self-paying older person or their network is addressed, the consumers’ willingness to pay has to be taken into consideration. In solutions that require larger investment, the possible financing models (fully or partially), by third parties e.g. by insurance or housing companies should be considered. In such cases, these parties have to be involved in the business development activities. Adaptation to local markets requires scalability of the solutions across Europe and beyond with necessary modularity and flexibility to the cultural, social, economic and legislative differences between countries and regions.

Socio-economic benefits

Innovations for older persons can have significant impact not only on the individual level, but also on societal level. Solutions aimed at helping people to maintain independence in their everyday environment and a high level of intellectual engagement as they get older, will support active, healthy and independent ageing and thus improve the quality of life of older persons. Involving research on socio-economic impact can be an important factor in generating evidence on effectiveness of the developed solutions. The evidence is needed especially when an investment or reimbursement policy of the public sector is needed in order to bring the solutions to the market.

Annex 3: Guidelines for ethical considerations in projects co-funded by the Ambient Assisted Living Joint Programme (AAL-JP)

In AAL projects, ethical considerations apply along two dimensions:

- 1) The process of implementing the project
- 2) The solutions targeted as resulting from the project.

Both dimensions must be handled in ways that are ethically valid and acceptable to the end-users and to society in general. This means that ethical issues must be addressed from the concept phase to test installations, related to user involvement during the project and when the solution is tested and eventually launched in the market.

In addition to national requirements regarding ethical issues involved in R&D, the AAL JP requires proposals to document their procedures and principles for handling ethical issues related to process and product (final solution), see part B template.

The nature of AAL projects raises a broad range of ethical concerns, related to a situation where

- the technology involved is often new and unfamiliar to the end-users,
- vital aspects of the solutions will not be transparent to the end-users and other stakeholders because of a high degree of complexity. This may involve ethical issues such as
 - privacy
 - control of personal data
 - confidentiality
 - autonomy and dignity.

Solutions developed must be trusted, accessible and accepted by all designated user groups.

Ethics in the context of AAL projects is fundamentally about what a project can and shall do for the benefit of the end-users of that particular project. Ethical issues may also be raised with regard to the relationships and social networks of the involved (or future) end-users. New AAL solutions might bring about new allocation of resources and responsibilities and thus have an impact that goes beyond the quality of life of primary end-users.

In the conduct of an AAL project, ethical issues concern *inter alia* the correct recruitment and involvement of end-users. Whenever end-users are involved in projects, informed consent is a standard procedure. All end-users who participate in an AAL project, through interviews, observations and/or testing of prototypes, should know what they are signing up for and how they can withdraw from the project at any time. Transparency is the keyword.

An informed-consent form which guarantees transparency should cover the following issues:

- a description of the project and its aims (accessible with respect to language and content),
- a specification of the role(s) of different end-users in the project,
- self-determination of the end-users (must be able to turn off systems or services at their own discretion),

- compensations provided to the primary end-users (expenses or fees paid, etc.),
- contact person in the project (for ethical issues and related questions),
- exit rights for individual end-users (procedure for withdrawal from the project at any time, without giving a reason and without incurring costs or penalties).

Special concerns

When designing the involvement of primary end-users in a project, it should be taken into account that end-users may get accustomed to the special attention and services they get during the project. When people get deeply involved, termination of the project may create problems. Provisions for dealing with such issues are necessary in order to avoid distress and negative reactions among end-users at the end of the project. In short, the involvement of end-users in projects requires ethical awareness and respect for their dignity and right to self-determination all through the project.

Other important ethical issues concern the information and data management. In most cases, this will be covered by existing legislation and directives (national and EU) on privacy and data protection. The relevant security and privacy rules regarding storage and transmission of personally identifiable information have to be respected. Data have to be made anonymous, codified and stored in a secure place guaranteeing access only to authorized persons. All collection of data and other interventions in the projects should follow the principles of proportionality and purposefulness, i.e. restricted to what is necessary to meet the aims of the project.

On a macro level distributive ethics are very important in the AAL field. Distributive ethics are about issues of justice, equality of access, choice etc. Proposals must demonstrate the ethical quality of the proposed solution as an element in the life of older people in a socially sustainable society.

The handling of ethical issues in the Ambient Assisted Living Joint Programme is dependent on the national rules of the involved partners in a project that is to be funded. In some countries, projects have to get a positive statement or permission by ethical committees before they can start working. In other countries, national partners responsible for the involvement of end-users will have to submit the final draft of the informed consent for assessment. Please consult with your National Contact Point what requirements are applicable to your proposal.

In the part B template of Call 3 you will find the following ethics declaration table:

Ethics declaration required by proposals in the AAL Joint Programme	Described on page
<ul style="list-style-type: none"> • How is the issue of informed consent handled? 	
<ul style="list-style-type: none"> • What procedures does the proposal have to preserve the dignity, autonomy and values (human and professional) of the end-users? 	
<ul style="list-style-type: none"> • If the proposal includes informal carers (e.g. relatives, friends or volunteers) in the project or in the planned service-model - what procedures exist for dealing with ethical issues in this relationship? 	
<ul style="list-style-type: none"> • If the proposal includes technology-enabled concepts for confidential communication between the older person and informal and formal carers, service providers and authorities – what procedures are planned for safeguarding the right to privacy, self-determination and other ethical issues in this communication? 	
<ul style="list-style-type: none"> • What "exit" strategy for the end-users involved in the project does the proposal have (in terms of end-users leaving the project during its implementation and after the project's end)? 	
<ul style="list-style-type: none"> • How are the ethical dimensions of the solution targeted in the proposal taken into account? (Brief description of distributive ethics, sustainability et.al.) 	

Annex 4 – AAL Partner States funding commitments

to the AAL-2010-3 call for proposals

	Mio. €
	To be announced
AAL Partner State	
Austria	
Belgium	
Cyprus	
Denmark	
Finland	
France	
Germany	
Greece	
Hungary	
Ireland	
Israel	
Italy	
Luxembourg FNR	
Luxembourg Luxinnovation	
The Netherlands	
Norway	
Poland	
Portugal	
Romania	
Slovenia	
Spain ISCIII	
Spain MITYC	
Sweden	
Switzerland	
United Kingdom	
<i>Total AAL Partner States</i>	
<i>Expected EC contribution for the Call</i>	23.0
<i>Expected total funding commitment</i>	

Please note: The EC co-funding is granted to the AAL States (or member organisations) listed above on top of the indicated commitment. The final allocation depends on the call outcome. Switzerland participates only with the indicated commitment – and will not benefit from the EC co-funding under this call - due to the status of associated member of the AAL Association.

Annex 5 – IPR provisions under the AAL Joint Programme

The Ambient Assisted Living Joint Programme (AAL JP) is a new joint research and development (R&D) funding activity by 23 European Member States and Associated States, with financial support of the European Community based on article 169 of the EC treaty. The most important activity under the AAL JP is the publication and evaluation of Calls for Proposals.

The financial contribution of the European Community resulted from a co-decision procedure, during which the EC⁹ proposed the terms of its participation, to which the Council and the European Parliament gave their approval. The proposal for the co-decision procedure includes the following condition for this financial contribution to the AAL JP:

Article 2: The Community financial contribution shall be conditional upon:

(h) formulation of provisions governing the intellectual property rights stemming from the activities carried out under the AAL Joint Programme and the implementation and coordination of the research and development programmes and activities undertaken at national level by the participating Member States, Israel, Norway and Switzerland in such a way that they aim at promoting the creation of such knowledge and at supporting wide use and dissemination of the knowledge created.

AAL JP provisions adopted by the AAL Executive Board 21 July 2008 take account of this article 2 of this co-decision.

Provisions governing the intellectual property rights under the AAL JP

1. The AAL Joint Programme supports the IPR regime on the basis of Regulation No. 1906/2006¹⁰, which establishes the rules for participation in the FP7 (Chapter III, articles 39 to 51).
2. Taking into account the time-to-market perspective of two to three years after the end of an AAL project, all AAL projects recommended for funding must submit a signed Consortium Agreement (“CA”) to the Central Management Unit of the AAL Joint Programme (“CMU”) at the closure of the contract with the national funding agencies. The agencies also must approve the CA. The signed CA must clearly indicate the reference (Consortium Agreement of the project “X”) on every page.
3. The CA must be in effect at the official start of the project, but it is not required to conclude it at the time of the proposal submission.

⁹ COM(2007) 329 final: Proposal for a DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the participation by the Community in a research and development programme aimed at enhancing the quality of life of older people through the use of new Information and Communication Technologies (ICT), undertaken by several Member States (14 June 2007)

¹⁰ The AAL Joint Programme follows the IPR regime on the basis of Regulation No. 1906/2006, which establishes the rules for participation in the FP7 (Chapter III, articles 39 to 51, hereinafter “Rules for Participation”). the general European FP7 IPR rules and general principles on IPR according to legal text)

4. The AAL Association leaves it to the project consortia to draft a CA (“freedom of contract”).
5. The Consortium Agreement should state a set of rules/procedures to ensure fair protection for the IPR interests of the partners and partners’ employees (e.g.: conditions/ limitations on the ability of individual consortium partners to freely publish or profit from project results directly covered by other partners’ IPR). The consortium agreement should include conflict resolution procedures/ mechanisms to be invoked if and when necessary.
6. The AAL Association does not recommend any specific service or model agreement. The IPR Helpdesk, an EC funded consultancy service on Intellectual Property Rights, provides example models for consortium agreements on its website <http://www.iprhelpdesk.org>.
7. For any problem with the IPR orientations laid out above, the AAL President as a legal representative of the AAL Association shall be contacted by AAL project partners via the email President@aal-europe.eu.

Annex 6 – Framework for “end-user involvement” under the AAL Joint Programme

End-use involvement is a mandatory and essential part of all collaborative projects funded under the AAL Joint Programme. When developing new solutions for older people as primary end-users, specific questions and challenges related to user involvement must be addressed:

- Who are the relevant end-users in this proposal (primary, secondary and tertiary)?
- Who are stakeholders and what is their role? (who will use the solution, who will pay for it, who will decide on or regulate purchase, distribution and use?)
- How will the needs and wishes of the relevant end-user groups be expressed and integrated in the different project stages (e.g. how input from end-users will be collected, documented, analysed and used in the development process)
- How will privacy concerns, dignity and other relevant ethical issues be dealt with? (Is there specific national legislation or other requirements that will be applied to this project?)
- If primary end-users include persons with reduced cognitive capabilities, how will they be involved and their dignity and privacy respected, and who will represent them and protect their interests if they cannot do it themselves?
- How will the innovation potential of the end-users be explored and mobilized (creating an innovation culture where the design of new solutions is done with and for the older persons)

In AAL Joint Programme, end-user involvement is assessed by evaluating and reviewing the methodology and the participation of end-users in different phases of the innovation process.

- 1) In exploratory and creative phases of the innovation process, the needs and wishes of the end-users serve as an input to development of new solutions and design of the business model.
- 2) In development phases, the end-users provide the feedback loops validating and verifying the progress of the development work.
- 3) In business model development, end-users provide input about user behaviour and attitude, purchasing processes, regulatory and other decision-making. End-users are also crucial for validating the user appreciation and valuation of the solution, willingness to use it (and learn to use it) and willingness to pay for it (price sensitivity).

Annex 7 – Framework for “Business model development” under the AAL Joint Programme

AAL Joint Programme aims at launching research, development and innovation activities that can bring new solutions (products, systems and service concepts) to the market within about 2 to 3 years after the project end. The close-to-market nature of the programme means that developing suitable business models for the developed solutions must be an essential part of the projects.

Wikipedia defines business model as follows: *“A business model is a framework for creating economic, social, and/or other forms of value. The term business model is thus used for a broad range of informal and formal descriptions to represent core aspects of a business, including purpose, offerings, strategies, infrastructure, organizational structures, trading practices, and operational processes and policies.”*

Business model development should be approached in a systematic manner, utilizing a suitable conceptualization framework and involving different actors of the value network (end-users, payers (before or after procurement), delivery partners, service providers, integrators). In the domain of the AAL Joint Programme, “business model development” is not only relevant in activities involving enterprises and business partners, but whenever the objective is to create economic, social or other forms of value with new solutions. This means that also activities of non-profit and public sector organizations must include business model development aspects.

In the AAL Joint Programme, business model development is assessed by evaluating and reviewing the user/customer segments to be addressed, the selected conceptualization model and the consortium composition involved in the proposal.