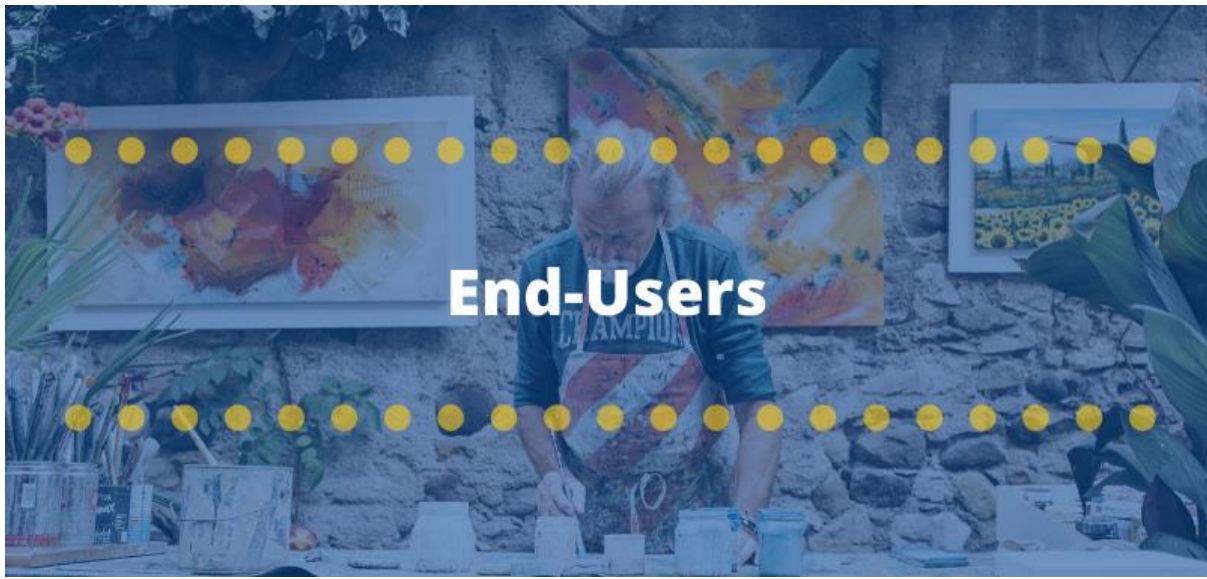


Fact sheet on public deliverables



The AAL-program focuses on active and healthy aging through digital solutions. This is because health, social and pension-systems are experiencing “new signals” linked to the shared demographic trends in Europe. In order to tackle these challenges, both technological and social innovations are needed, which consider the **different needs** and the **main drivers** of today (for more information, see the paragraph on “new signals” at the end of this report). To make changes happen, co-creation is the most promising way. This is why AAL requires all three end-user categories (primary, secondary and tertiary) to be in a project from the beginning, to get the most out of this interdisciplinary approach in a transnational environment where research, SMEs and end-users think out of the box together.

Main findings from the analysis of the public deliverables



It is worth to keep in mind that AAL Calls evolved over time. In the last years, conditions to participate have become more detailed, the focus having shifted from a “topic-lead” call to a “challenge-lead” one. The new approach allows applicants to think out of the box while sticking to an interdisciplinary and transnational approach.

While in the beginning, when there was not such variety in technology available in the market, the focus was on development of technologies, today the focus is on the human aspect. Hence the importance of concepts such as age-friendly environments, vitality and abilities embedded in the eight AAL-domains ([Taalxonomy](#)) endorsed by the AAL Programme.

To ensure the invested budgets in the projects do not fizzle out without midterm/longterm impact, the involvement of 3 different parties (SMEs, research and end-users) plus a business plan with roll-out/scale-up strategy is mandatory. A unique approach which matches to the European hemisphere in terms of the stage of digitalization and demographic trend.

Working lean with interoperable standards while delivering measurable and comparable outcomes in a transparent and agile environment is the way of bringing up innovation (tech and social) where the AAL-program stands today.

Through the analysis of the deliverables related to end-users and made public by the projects funded by AAL, the main findings can be summarized as follows:

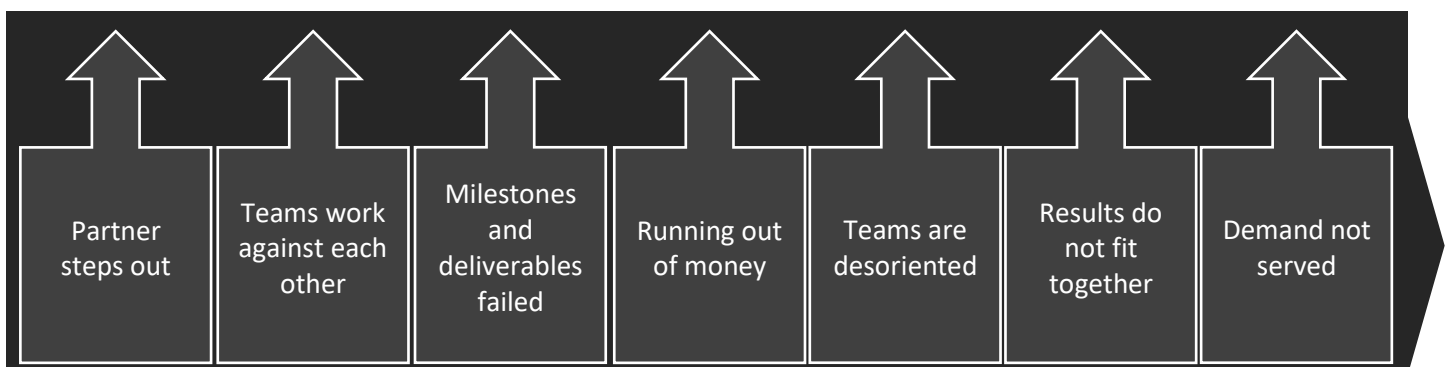
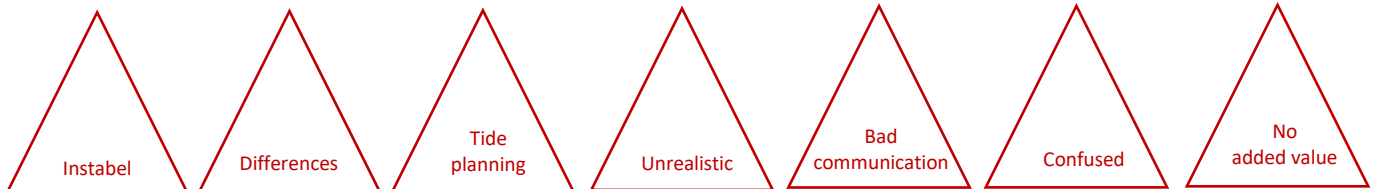
- ✓ Availability of TECHNOLOGY is not the bottleneck (anymore) as many stable and interoperable solutions are out in the market today. Off-the shelf solutions have since 2008 been made more and more available and funded projects have profited from this, also for the co-design approach.
- ✓ The HUMAN FACTOR remains the most critical one and is key to get to a satisfying result. This means future programs should continue focusing on both – technical and social innovation by challenging both. Like a business plan is mandatory, a change management strategy should be also requested to support digital transition in organizations.

- ✓ The 8 DOMAINS offer more variety than what has been targeted in AAL-projects so far. Calls are open for solutions in all domains since the calls are not linked to a specific topic anymore. Even so, most of the projects have been linked in a broad sense to building & housing with short-term impact which is in metropolitan areas a very important topic with. Other domains with topics such as mobility & transfer are not so often seen so far.
- ✓ The involvement of relevant ECO-SYSTEM(S) in AAL-environments crucial to establish sustainable and measurable solutions in the market. Digitization so far has shown that most of organization going through transition towards digitalized processes struggle with getting the whole eco-system work. On the technical side, interoperability is the solution. On the social side, co-creation approach and life-long learning is the right way alongside professional change management.
- ✓ Screening the reports of the end-user trials of eleven years/calls the state of the art in MANAGEMENT TOOLS and COLABORATION TOOLS varies a lot. In order to bring innovative and GDPR-compliant solutions that are stable and established in organizations, it would be beneficial, both for the projects and for the Programme, to prescribe certain tools. This also to set standards and promote data compliance.
- ✓ The level of QUALITY is linked to QUALITY MANAGEMENT. Focusing on less aims but sticking to those by setting up a simple and transparent controlling, best outcome has been observed. And also here it could make sense to give more guidance.
- ✓ The ULTIMATE INNOVATION has not come up so far. Regarding this fact it might make sense to think about the framework in which innovation is expected to happen and change adequately the program to these requests.

Main criticalities/weaknesses/gaps identified

■ major challenges (criticalities)
 △ threats (weaknesses)
 ▣ recurring weaknesses (gaps)

	HUMAN	CULTURE	TIME	BUDGET	MANAGEMENT	COMPLEXITY	MARKETABILITY
LEAD PARTNER <small>might be challenged to ...</small>	... entertain all the personalities	... bring different expectations together	... calculate realistic to proceed in plan	... deliver in budget	... keep at any time the control	... simplify	... think about tomorrow
CONSORTIUM <small>might be challenged to ...</small>	... accept all different kind of characters	... work in the same speed	... stick to agreed time frames	... manage given budgets	... transfer knowhow both ways	... transfer	... commit to long term measurable impact
PRIMARY <small>might be challenged to ...</small>	... stick to the project when conditions (health, ...) change	... accept certain standards	... function within a set schedule	... report to get refunds	... understand the full picture	... explore	... give constructive feedback
SECONDARY <small>might be challenged to ...</small>	... stay motivated for the project besides daily tasks	... act within the given frame	... follow while unexpected things pop up	... document tasks for invoicing	... accept high effort for admin	... pry	... make realistic estimations
TERTIARY <small>might be challenged to ...</small>	... put local interests behind	... leave comfort zone by open up for transnational approach and field work	... work result oriented	... rapport effort to coordinated degree	... keep transparency at all time	... be faced with many vage points at once	... be ready for change



Opportunities deriving from criticalities



From the analysis of the public deliverables, it is evident that a key role is played by the innovative (technological and social) impact of the solutions developed in the AAL projects (see also mentioned “signals”) and measurability.

- Technologies behind the concept of active and assisted living are rapidly evolving. Project participants should therefore not dive into a topic which might be disappearing from the market (see the substitution of classical TV concept into the more customized multimedia content such as the one provided by Netflix and Amazon).
- Solutions in certain domains meet more urgent issues than in others, this also depends on the country’s specificity; this is true for housing in metropolitan areas which is a challenge. Most metropolitan cities can only partially fulfill the fundamental right to have access to affordable space which is accessible/age-friendly. Yet, in the domain of housing, many AAL-projects have been successfully carried out and new directions in this domain could be, for example, increasing knowledge about age-friendly environments in the education sector (relevant disciplines being facility management, architecture, engineering and design); also, another valuable opportunity would be the exploration of the use of existing technologies in domains such as voice assistant, smart home and tele scouting by bringing tech companies (R&D) and co-housing institutions (facility managers, planners, administrations, ...) together for co-creation processes and enabling multipliers (social worker, care giver, church, community aging officer ...) to strengthen the local approach in a district framework.

Opportunities in the field of mobility can also be envisaged. The active third phase of life is in fact driven by mobility which strengthens the muscles, increases brain activation and acts against isolation. Also, limited mobility, often caused by the loss of the driving licence, arrives completely unexpectedly because of age-related hearing loss, visual impairment and balance disorders in old age. Opportunities arising from this domain (mobility) could be further explored, making recent solutions like car sharing, mobile applications and others, practicable and affordable to the market of elderlies and convincing the mobility industry of considering the target group of 65+ as an attractive market.

Unexplored fields

From the analysis carried out in the end users-related public deliverables, projects in the AAL Taalxonomy domains 1 (health & care), 2 (housing & buildings), 3 (mobility & transport), 4 (security & safety), 5 (work & training), 6 (ability & vitality) have been implemented more in projects than in domains 7 (leisure & culture) and 8 (communication & information).

Unexplored or less covered fields may be the following:

ACCESSIBILITY - The United Nations' Committee on the Rights of Persons with Disabilities' convention is focusing on inclusion and disadvantaged groups. Article 9 is about accessibility. It covers spatial as well as informative and communicative infrastructure. The informative and communicative area has so far been neglected, although Article 9 requires every public institution to make its website accessible. Banks fall into a similar category, as almost every adult person has a bank account to which access must be secured. Fintech is a game changer in the banking world and must not exclude disadvantaged groups in society.

GAMING - Focusing on an industry with a yearly growth of 2,2% (CAGR 2020-2024) worldwide, this domain opens a broad field of opportunities for an attractive and sustainable AAL-proposal. Even if gaming has quite a bad reputation among older people, the benefits for older people are very relevant. This ranges from simple entertainment with anti-solitary effect to training (motor skills, memory, reaction, flexibility, ...), behavioural change and data collection for research in areas such as e.g. dementia.

TOURISM - Tourism is a sector where the benefit is visible in a first step in the economy and in a second step – maybe also abroad – for the elderlies. The target group of elderlies, for whom it is important to set up good and attractive infrastructure, safety and accessibility, has become very attractive. ICT solutions empowering older adults to travel more and in safe conditions can be considered as an opportunity as well.

Different needs arise next to other factors because of the longer and more active third phase of life. To develop a new solution with a high conversion rate, the target group (end-user) and its environment (eco-system), plus the future trends (sustainability) must be understood first. Otherwise, failure can be expected.

The main drivers of today may be considered being digitization, globalization, climate change and refugee movements¹.

- The digital transformation is going on, which means humans in all phases of life are in different stages regarding their interest in ICT, the acquisition of ICT-skills, the acceptance of ICT-solutions and the abilities to manage ICT-applications. Resistance to change is more difficult to overcome than adjusting a new ICT-solution to a green field.

¹ Other marginalized groups such as e.g. HIV infected, drug-addicted and remote living people should be included in new solutions as well.

- Regarding globalization three effects are relevant: a) travel behavior, especially in the third phase of life has changed, b) isolation in third and fourth phases of life has increased as families do not live close to each other anymore and c) moving into another country with a better climate and affordable support is not pursued as much as in the past.
- The climate change has a different leverage on the AAL-topic than it has in broader public discussions. It is about the heat which elderlies cannot stand anymore when getting fragile.
- The movements of refugees and the inhabitants with foreign nationalities who still do not speak the national language but must rely more and more on support outside of their families (care, meals, physio, ...) cause additional challenges and effort in the systems.

Disclaimer:

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