



## Fourth edition of the AAL Programme impact assessment

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## Contents

<b>1 / Impact of the AAL calls and support actions</b>	<b>3</b>
1.1. Activities and objectives of the AAL Programme	3
1.2. AAL contributes to strengthening the industrial base in Europe	6
1.3. AAL contributes to better quality of life for older people and their networks	10
1.4. AAL contributes to increased efficiency and sustainability of support and care systems	12
1.5. EU added value lies in strengthening the wider AAL ecosystem and community	14
<b>2 / Lessons learnt for future innovation partnerships</b>	<b>16</b>
2.1. Key learnings from AAL Programme outputs, outcomes and impact	16
2.2. Methodological progress and learnings for AAL impact assessment	20
<b>ANNEXES</b>	<b>24</b>
<b>A.1 / Impact assessment framework for the AAL Programme</b>	<b>25</b>
<b>A.2 / Survey methodology and responses</b>	<b>32</b>
<b>A.3 / List of solutions developed based on participation in the AAL Programme</b>	<b>35</b>
<b>A.4 / AAL success stories: interview topic lists</b>	<b>37</b>
4.1 Interview topic list: Success Story Type 1	37
4.2 Interview topic list: Success Story Type 2	38
4.3 Interview topic list: Success Story Type 3	39
<b>A.5 / AAL success stories: reporting template</b>	<b>40</b>



## 1 / Impact of the AAL calls and support actions

This section first outlines the **objectives and activities** of the AAL Programme, and - based on this - the effects (outputs, outcomes, impact) that can be expected of the AAL Programme based on these objectives. Next, it demonstrates the actual **progress towards these objectives**.

The framework and evidence presented here, were developed in the context of the four editions of an impact assessment study of the AAL Programme (2019, 2020, 2021, 2023)<sup>1</sup>. Data were collected through **online surveys among participants of the AAL Programme**<sup>2;3</sup>. In total, surveys were sent out more than 2.300 times to project partners of AAL1 and AAL2.

The **2023 survey** targeted all participants from 25 projects finished by the end of 2022. A **response rate of 33.5%** was achieved and **all projects were covered** by at least one response in the sample. Moreover, the coordinator of each project has completed the survey. This high response rate and coverage of all projects strongly increases the reliability of the results presented in this section.

### 1.1. Activities and objectives of the AAL Programme

**The AAL Association** was founded in 2007 by 14 member-organizations to support and finance research and development of technologies and services for older adults. As the European population is steadily becoming older, more challenges arise on how to ensure quality of life for both older adults and caretakers, the impact on the labour market, or on how to support an emerging AgeTech sector/silver economy. Therefore, the AAL Association tries to formulate a common approach across different Member States and partners to convert these challenges into opportunities and to stimulate innovation.

The AAL Association implements **the AAL Programme** since 2008. This Programme is currently co-funded by the national and regional public funding agencies of 18 European countries, Canada, Taiwan and Horizon2020. It focuses on funding the development of information and communication technology-based solutions for active & healthy ageing.

<sup>1</sup> Please refer to Annex A.1 for an elaborated description of the impact assessment framework.

<sup>2</sup> Although end-user organisations and researcher organisations are not a priori excluded from the survey, the questionnaire takes an explicit supply-side focus to assess impacts in terms of bringing solutions to the market, their commercialisation and uptake as well as networking effects. Demand-side effects are thus not explicitly covered in the scope of this study.

<sup>3</sup> Please refer to Annex A.2 for more information on the survey methodology.



**Main activities** are the collaborative projects and AAL support activities, which are complemented by national activities. The national activities are not managed by the AAL Association, but do play an important complementary and leveraging role for several outcomes of the AAL projects (e.g. launch, upscaling, adoption and broadening of the solutions).

Collaborative R&I projects	AAL Support Activities	National activities
<p>In funded projects, industry, researchers and end-users from different Member States cooperate to develop solutions and bring them to the market.</p> <p>Since 2008, more than 309 projects that aim for end-user involvement and a market introduction within 2 to 3 years, have been funded in the framework of the programme.</p>	<p>Support Activities target participants and help them in different phases and dimensions of the project.</p> <p>The main Support Actions are the AAL Forum, AAL2Business and Smart Aging Prize - AAL Challenge Prize. In 2021, also the Eco-Systems Support Action was launched.</p>	<p>In addition, the AAL Programme connects different activities at national level which contribute to the realisation of its objectives, e.g. national programme calls, national policies, events, workshops, support mechanisms, etc.</p>

The **AAL Management Unit implements and manages** the programme and support activities. For projects, **funding** comes from Member States and Horizon 2020 sources. Eligibility of the proposals is checked at national level, while the evaluation of the proposals is done at central level, along with the monitoring and reporting.

The **main objectives** of the AAL Programme reflect the importance of its **three main target groups**:

- ▶ Better quality of life for older people and their networks;
- ▶ Increased efficiency and sustainability of **support and care systems**;
- ▶ Strengthening the **industrial base** in Europe.

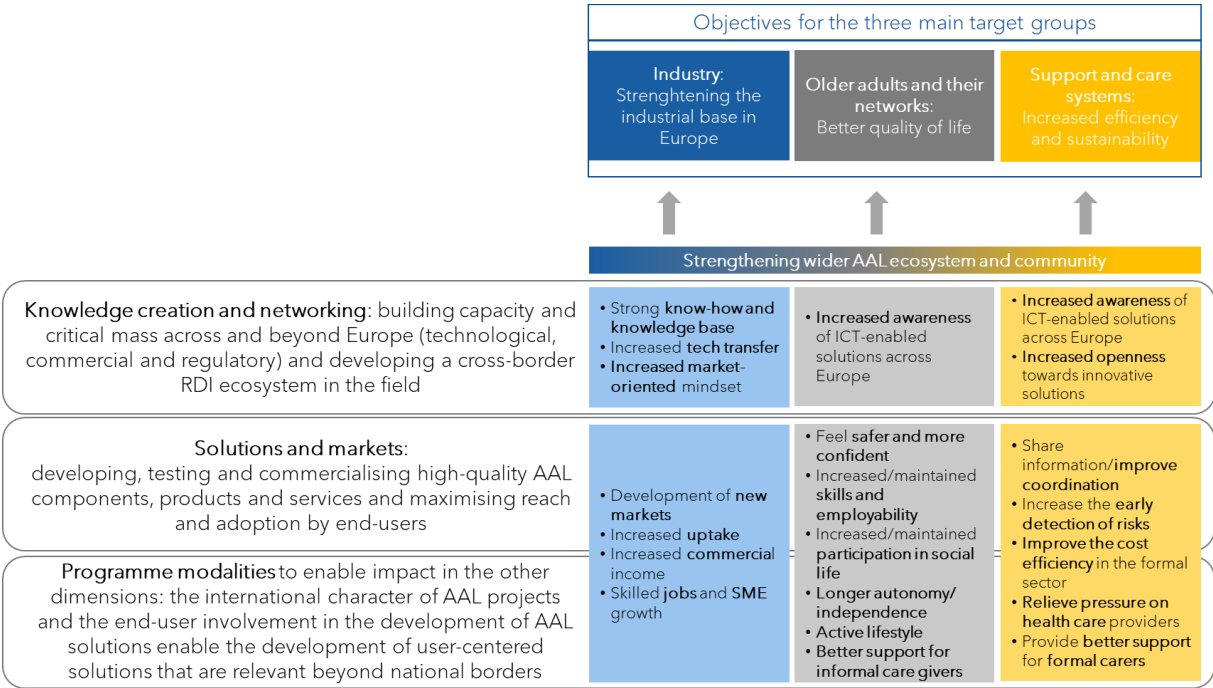
Figure 1 visualises the way the AAL Programme aims to reach its objectives for each target group. It distinguishes between **three different dimensions** through which impacts are expected to be realised:

- ▶ Supporting and increasing **knowledge creation and networking** across and beyond Europe;
- ▶ Fostering the emergence of innovative ICT-based **solutions and markets** for ageing well;
- ▶ Using the **AAL Programme modalities** as a lever to create impact in the other dimensions (i.e. knowledge creation and networking & solutions and markets).

The detailed intervention logic, including the intermediary outputs and outcomes, is presented and explained in Annex A.1.



Figure 1: Dimensions through which impacts are expected



The **Support Actions** implemented by the AAL Association are also expected to support the realisation of these impacts, for instance:

- ▶ **AAL Forum - European Week of Active and Healthy Ageing:** knowledge sharing, networking, strengthening the ecosystem.
- ▶ **AAL2Business:** supporting user-involvement in development and testing of AAL products and services, facilitating commercialisation, IPR, business modelling, launch and upscaling, developing insights in the investor’s point of view, etc.
- ▶ **Smart Ageing Prize - AAL Challenge Prize:** reputation, visibility and awareness raising.

This impact framework is used in the next sections to assess the extent to which the AAL Programme has managed to realise progress towards its objectives and create impact for older adults, the support and care systems and the industrial base in Europe.





## 1.2. AAL contributes to strengthening the industrial base in Europe

The development and adoption of AAL solutions, and their integration in the care system, allows to develop **new markets** and increase the **uptake of these solutions**, thus leading to an **increased commercial income, skilled jobs and SME growth**.

Based on the AAL impact assessment, a positive impact is observed of the AAL Programme on commercialisation and development of new markets. The Programme also contributed to increasing commercial income. Moreover, the AAL Programme has accelerated development and was an essential factor to bring solutions to the market.

### Contribution to commercialisation:

- ▶ **64%** the surveyed AAL projects **have led to at least one solution or component** being brought to the market (61% in the 2021 survey).
- ▶ A **strong majority** find that the funding acquired via the AAL project has **accelerated the development of solutions** to a moderate (20%) or great (64%) extent. This share is substantially higher than in the 2021 survey (68% in total).
- ▶ Without the AAL Programme, **5 of the 9** launched products/services (**2 of the 6** launched components) **would not have been brought to the market**. A similar pattern was found in the 2021 survey.
- ▶ **The majority** acknowledge that the AAL Programme has contributed to **reducing barriers** related to bringing their product to market, e.g., by supporting business plan development, creating an ecosystem, facilitating knowledge sharing, giving testing opportunities, and increasing the level of technological maturity. This is in line with the findings of the 2021 survey.

### Contribution to development of new markets:

- ▶ **77%** of the respondents agree with the fact that their learning in the context of an AAL project is **relevant to bringing AAL solutions to markets in other regions, countries, and across the EU**. For respondents who have also had the experience of launching a product, service or product range, this share is 100% (8 out of 8). Similar results were found in the 2021 survey.

### Contribution to commercial income:

- ▶ 4 of the 9 launched AAL products/services and 2 of the 6 components would have generated 10-50% lower revenues without support of the AAL Programme.

Comparing results over time, there are indications of learnings and growth of the AAL ecosystem from AAL1 to AAL2.

In the 2019/2020 impact assessments, which focused mainly on AAL1 projects (Calls 2008 – 2013), an upper estimate of 28% of AAL projects in the surveys resulted in at least one AAL solution on the market. This share of **AAL supported projects, which report to have effectively commercialised a product, service or component, has more than doubled** in the 2021 survey (cf. supra, 61%), focusing on AAL2 projects. The 2023 results for AAL2 projects from the Calls 2017 - 2018 confirm these figures, with 64% of projects resulting in at least one product/service or component. At the same time, when looking at the share of respondents instead of projects, the 2023 survey includes slightly less respondents that have already



launched an AAL solution or are working towards a launch either with a partner or through a spin-off (47% versus 62% in the 2021 impact assessment and 69% in the 2019/2020 editions).

The increase in the share of projects that resulted in at least one AAL solution on the market was probably the result of learnings in the AAL2 projects from the AAL1 projects as well as the establishment of the AAL ecosystem over the years, and the development of existing and new Support Actions in AAL2, which further supported the commercialisation of AAL products, services or components by spreading and strengthening knowledge on (among others) business or commercialisation strategies across the AAL network(s).

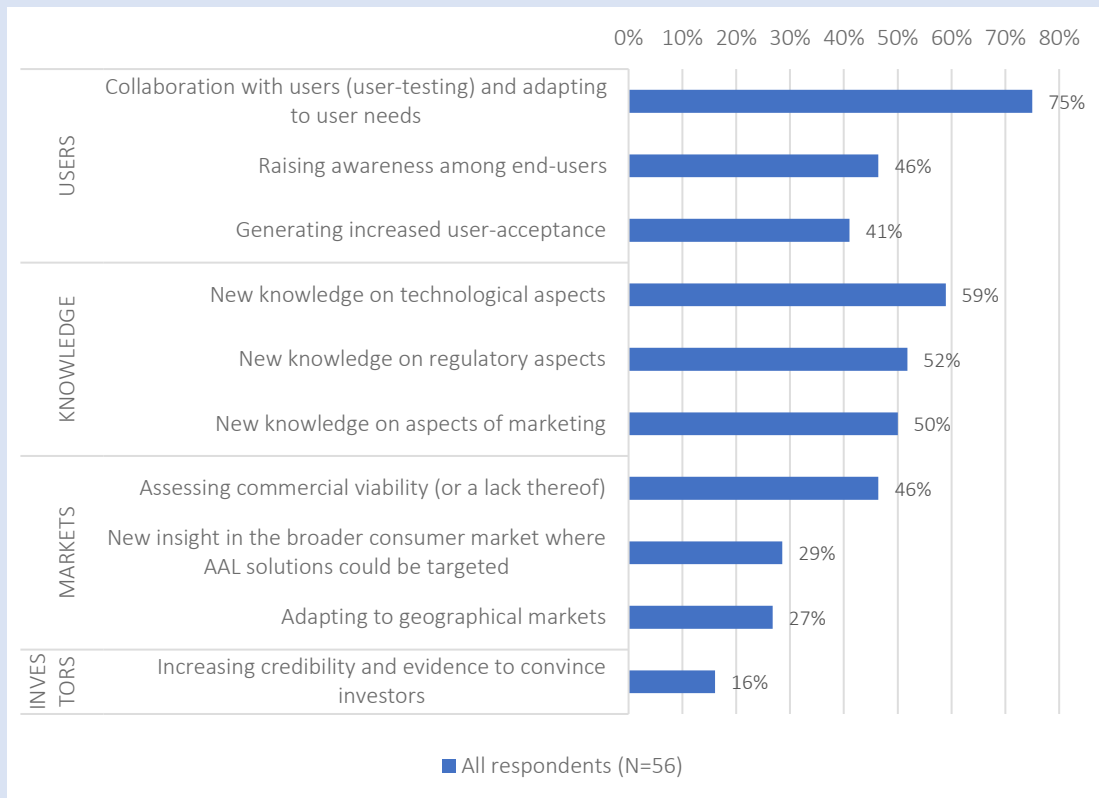
In this context, the observed increase in the share of projects with an AAL solution on the market is evidence of the importance of the **long-term stability** of the AAL Programme, which clearly supports the AAL innovation cycles.

At the level of **knowledge base and networking**, the development of a critical mass and cross-border ecosystem in the short run, allows more generally to **strengthen the knowledge base** and to increase **technology transfer** at national level and across actors in Europe. The more interlinked the networks become, the easier knowledge is transferred within the network. The AAL Programme is expected to contribute to this process by encouraging partnerships and cooperation across Europe and between industry, research organisations and end-users.

The impact assessment provides evidence that the AAL Programme strongly contributes to the development of a knowledge base and network in the field of AAL, in particular regarding collaboration with users and adaptation to user needs, and regarding markets and commercialisation as well as technological aspects. The AAL also allows participants to benefit from collaborations and networks established during the AAL projects.



- ▶ At the level of the organisation, acquiring **knowhow, knowledge and skills** is impacted positively by participation in an AAL project. Also visibility and reputation, gaining **new partners, social engagement and networking** have improved for a substantial share of the participants.
- ▶ As in previous editions, **very strong learnings** of participants in the AAL Programme are related to collaboration with users on the one hand and technological aspects on the other. Participants who have launched a product or service, also have strong learning experiences regarding **regulatory aspects, marketing, assessing commercial viability and generating increased user-acceptance**.



- ▶ Another strong result is that **70%** of participants say to currently **benefit** to a great, moderate or limited extent **from the collaboration and networks** established during their AAL project.
- ▶ The participants also agree strongly with the statements that the AAL Programme is an **opportunity for mutual learning** (93%) or **broadens perspectives of national R&D** in the field (84%) and that learnings from participation are **relevant for broader market-orientation** (77%). These results are again very similar to the 2021 survey.

The **Support Actions** are expected to leverage certain impacts. By offering training and market insights, the Support Actions have an impact on enterprises and organisations' **knowhow and knowledge as well as their market-oriented mindset** (cf. understanding of the investor's point of view, capabilities in terms of market intelligence, business modelling, commercialisation and upscaling). 73% of the respondents in the 2021 impact assessment survey have participated in AAL Support Actions, mainly in the AAL2Business (30) and AAL Forum (36).

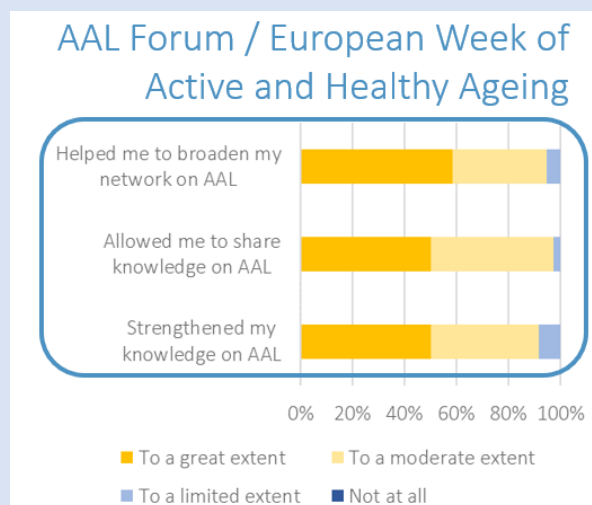
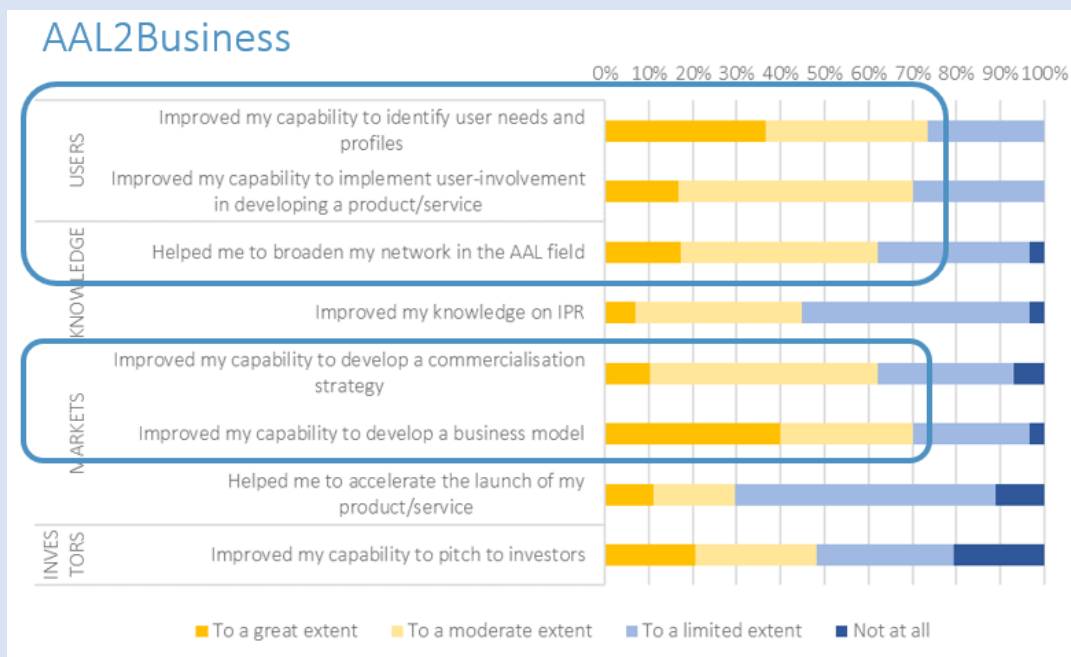
**The AAL2Business and AAL Forum and/or European Week of Active and Healthy Ageing clearly strengthen the AAL-programme learnings and improve the capabilities of participants regarding commercialisation, user-involvement and networking.**





### Contribution to development of AAL solutions:

- ▶ **62%** of the participants in the AAL2Business Support Action (N=30) see an improvement in their **capability to develop a commercialisation strategy** thanks to their participation. Furthermore, more than **70%** of respondents agree that their participation has helped them to **improve in the development of a business model**. These results are very similar to the 2021 survey results.
- ▶ Also similar to the 2021 survey, **more than 70%** of the participants agree that AAL2Business contributed to **improving their capability to implement user-involvement** in developing a product or service (70%) or to **identify user needs and profiles** (73%).
- ▶ Although the AAL2Business Support Action helped organisations in their business and commercialisation strategies, there was no clear direct effect on **accelerating the launch of concrete products or services** in the 2021 survey. In this fourth edition of the AAL impact assessment however, 30% of participants indicated to agree to a moderate or great extent that the Support Action had effect in this regard and over 50% agreed to a limited extent.



### Contribution to development of knowledge and market-oriented mind-set:

- ▶ Whereas the AAL2Business Support Action focuses on **commercialisation and user-involvement**, the AAL Forum Support Action makes a strong contribution in terms of **networking**. Participation in the AAL Forum and/or European Week of Active and Healthy Ageing has helped to **broaden the AAL-network** of **94%** of the respondents having participated to the Support Action (N=36) (versus 89% in the 2021 survey).
- ▶ The knowledge sharing aspect is even stronger than in the 2021 edition: **92%** of the respondents confirm that the AAL Forum has enabled them to get to **know more about AAL** (75% in 2021) and **92%** of respondents stipulate that participating in AAL Forum has allowed them to **share knowledge on AAL** (80% in 2021).

## 1.3. AAL contributes to better quality of life for older people and their networks

At the level of **markets and solutions**, the development of solutions in AAL-funded projects is expected to result in solutions that allow older adults to feel **safer and more confident**, to increase or maintain **their skills and employability** and their **participation in social life**, to remain **autonomous and independent** longer and to lead an **active lifestyle**.

Also **informal care givers** in the networks of the older adults are expected to be **better supported** through these solutions, which is an impact in itself, but also **contributes indirectly** to the realisation of the above impacts for the older adults (e.g. autonomy and independence).

- ▶ **6 of the 9 respondents** (67%) with an AAL product/service on the market agree with the statement that the majority of the older adults using their product/service “**remain in better mental condition**” and “**continue participating in common activities with their network**” for at least 1 year longer.
- ▶ 5 out of the 9 respondents (56%) think that the majority of the older adults using their product/service “succeed in independently interacting with their network” and “remain in better physical condition” for at least 1 year longer.

The survey data (indirectly, i.e. based on the perception of the supply side) indicate that the AAL Programme has a positive impact on older adults and their networks, in particular by enabling older adults to remain in better mental condition and to continue to participate and interact with their network.

**Adoption of these solutions** and their integration in care systems are important outcomes in the medium run, which should result in a larger group of older adults across Europe having **access to these solutions**. The figures below summarise the reach of older adults (as end-users and paying customers) by launched AAL solutions, based on the survey of participants.

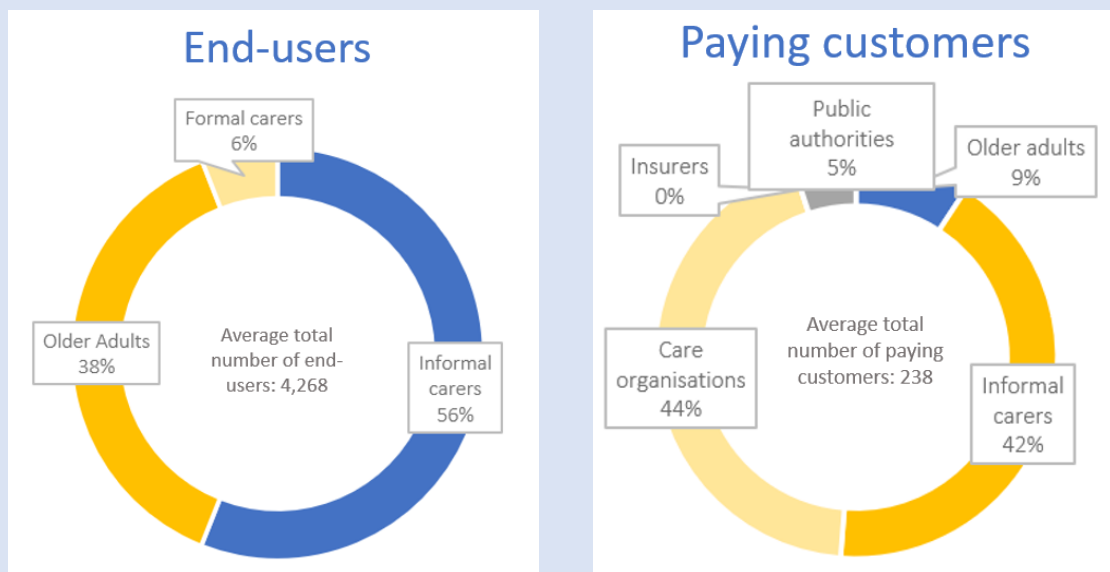
Although there is large variation between the different projects and solutions, the average number of end-users/paying customers reached per solution was relatively stable over time (2019-2020-2021). In the 2023 survey however, the number of end-users has more than doubled while the number of paying customers decreased considerably. This is explained by the growing share of care organisations among the paying customers, who indirectly



support higher number of end-users. This pattern seems to point to the AAL programme increasingly reaching the health and care systems in Europe. The improved adoption by end-users similarly is an important evolution which contributes to the increased uptake and integration of AAL solutions in care systems.

Launched AAL solutions have **reached** on average:

- ▶ 4,268 end-users in 1 year, of which **older adults make up 38%**. The average number of end-users reached is considerably higher than indicated in the 2021 survey (1,855 end-users). The share of older adults was similar (37%).
- ▶ 238 paying customers, of which **older adults make up 9%**. The average number of paying customers is lower than in 2021 (771). At the same time, the share of care organisations among paying customers is considerably higher and the share of older adults has decreased.



The AAL Programme **modality of user-centered development** that is at the heart of the AAL projects, ensures the relevance of the products and services for the users and facilitates the extent to which they can be commercialised across (and beyond) Europe. This modality is thus expected to further **leverage the uptake of products and services, and the extent to which impacts for the older adults and their networks are realised.**

**User-involvement** clearly has a central role in the development of AAL solutions and is a key modality of the AAL Programme. It thus has an important positive impact by improving the adoption and relevance of the developed solutions.

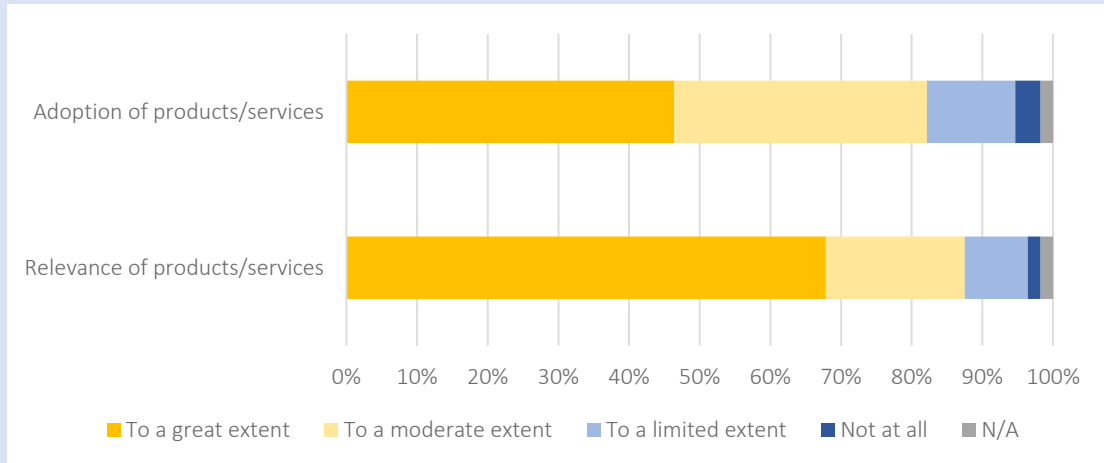
**User-involvement has a central role in the AAL Programme:**

- ▶ Similar to 2021, the top **learning** from developing solution(s) in the context of an AAL project is **user-testing** and adapting to user needs (75%). Also important are **raising awareness** among end-users (46%) and generating increased **user-acceptance** (41%).
- ▶ Participation in the **AAL2Business** Support Action further strengthens this by improving the participants' **capability to implement user-involvement** in developing a product or service (70%) or to **identify user needs** and profiles (73%). These results are similar to the 2021 survey results.



### Impact on adoption and relevance:

- ▶ The involvement of end-users in the development phase has an important **impact on the adoption (agreed by 82% of 56 respondents) and relevance (88%)** of products/services. This indicates that the AAL Programme modality of user-centered development further **leverages the uptake of AAL products and services**. This is in line with the survey results in 2021 (74% and 85% respectively).



Finally, the above impacts, including those of the Support Actions, are expected to also have an influence on the ecosystem by leading to **increased awareness** of older adults and their informal care givers regarding AAL solutions.

From the survey, we find indirect but strong confirmation of the contribution of the AAL Programme to awareness-raising among older adults and their networks.

According to the **large majority of the respondents (84%)**, the AAL Programme helps to raise awareness among older adults and their networks. These results confirm the 2021 findings (91%).

## 1.4. AAL contributes to increased efficiency and sustainability of support and care systems

The development of solutions in AAL-funded projects are expected to result in solutions that allow to increase the **early detection of risks**, improve the **cost efficiency** in the formal sector, **relieve pressure** on health care providers and provide **better support** for formal and informal carers.

The survey data provide indirect evidence that the AAL Programme has positive impacts on the formal and informal carers, in particular regarding increased time for qualitative interaction and increased use of (other) innovative solutions. For other elements, the effects are less strong compared to the 2021 survey.



- ▶ **44%** of the 9 launched products/services are indicated to contribute to **increased time for qualitative interaction** between (in)formal carers and older adults.
- ▶ **In the 2021 survey, the impact on support for formal and informal carers was assessed to be higher by respondents:** especially in case of making care visits more **relevant** thanks to automated risk detection tools (11% versus 69% in the 2021 survey) and making carers feel **unburdened** (22% versus 62%). The impact on **cost-saving effects** was also **higher in the 2021 survey**.
- ▶ On the other hand, for **56%** of launched products/services, respondents indicate that their product/service leads to **increased use of (other) innovative solutions** by informal and formal carers, compared to only 23% in the 2021 survey.

Like for the older adults and their networks, adoption and user-centered development support the **uptake** by carers.

Please refer to the graphs and conclusions above, which include also the carers as end-users and paying customers.

Launched AAL solutions have **reached** on average (see graphs above):

- ▶ 4,268 **end-users** in 1 year, of which formal and informal carers make up 56%. The share of formal and informal carers in the end-users is similar to 2021.
- ▶ 238 **paying customers**, of which **informal carers make up 42% and care organisations make up 44%**. The share of care organisations in paying customers is considerably higher than in the 2021 survey (1%), potentially explaining the lower level of paying customers as they indirectly support a higher number of end-users.

As mentioned above, data also show that the AAL Programme modality of user-centered development further **leverages the uptake of AAL products and services**.

At the level of knowledge base and networking, the involvement of user-groups and the development of a cross-border ecosystem, are expected to lead to an **increased awareness, trust and openness as regards innovative solutions** in the market among the carers in the support and care systems. Also here, the Support Actions play a supporting role to realise these impacts.

From the survey, we find indirect but strong confirmation that the AAL Programme contributes to awareness-raising among formal carers.

**71%** of the respondents assesses that the AAL Programme helps to raise awareness among formal carers. This was 86% in the 2021 survey.



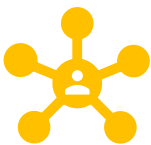
## 1.5. EU added value lies in strengthening the wider AAL ecosystem and community

The focus of the AAL Programme has widened over time towards the systemic dimension of implementing innovation, emphasising the need to ensure a resilient and sustainable ecosystem. The contribution of the AAL Programme in terms of strengthening the wider AAL ecosystem and community is confirmed in the 2021 and 2023 surveys. A number of the results outlined above, already point at the added value of the AAL Programme in terms of strengthening the wider AAL ecosystem and community.



Related to the international dimension of the AAL Programme, respondents report clear learning experiences from international cooperation e.g. regarding how to bring AAL solutions to markets in other regions, countries and across the EU.

- ▶ A strong majority of respondents agree with the fact that their learning in the context of an AAL project is **relevant to bringing AAL solutions to markets in other regions, countries, and across the EU** (77%). For respondents who have also had the experience of launching a product, service or product range, this share is 100% (N=8). Further explanations by some respondents indicate that this is thanks to the **collaboration between partners around Europe** and the wider **AAL network**, as well as the research done in scope of the project.
- ▶ **More than two thirds** of the participants (70%) say to currently **benefit from the collaboration and networks** established during their AAL project to a moderate or great extent.
- ▶ At the level of the organisation, gaining **new partners** and increasing **social engagement and networks** are confirmed as impacts from participation in the AAL programme.
- ▶ The **AAL Forum** Support Action also makes a **strong contribution in terms of networking**. Participation in the AAL Forum has helped to broaden the AAL network of 92% of the respondents having participated to the Support Action (N=36).
- ▶ The benefits in terms of collaboration, gaining new partners, broadening networks were similarly high in the 2021 survey.



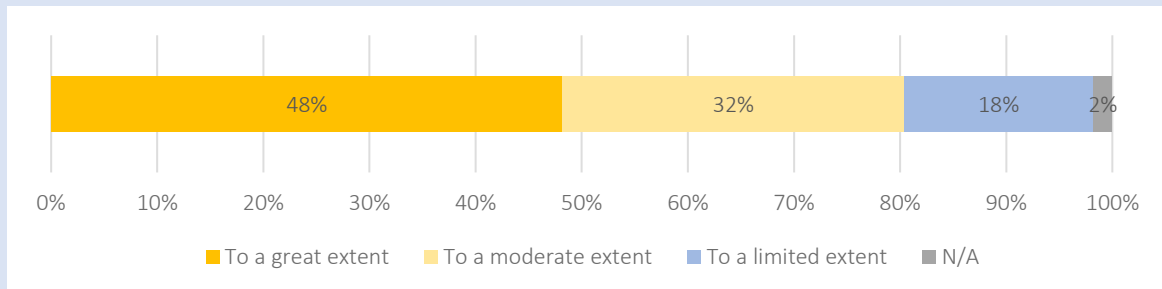
Finally, the survey provides direct evidence that the AAL Programme **strengthens the wider AAL ecosystem and community**. This impact is expected to result from the increased knowledge sharing and capacity building, the cooperation and coordination, and the better understanding across user or stakeholder groups and countries.

The large majority of the participants confirm the contribution of the AAL Programme to strengthening the wider AAL ecosystem and community.





**80%** of the participants state that the **AAL Programme contributes to strengthening the wider ecosystem and community** in the AAL field (N=56). This result is similar to the 2021 survey result.





## 2 / Lessons learnt for future innovation partnerships

### 2.1. Key learnings from AAL Programme outputs, outcomes and impact

The results of the impact assessment indicate that the AAL Programme has evolved from a solutions-centered focus towards a more systemic view, including a stronger focus on end-users' involvement and business and ecosystem development.

The first part of this report demonstrated that important positive outputs, outcomes and impacts are generated through the AAL Programme. Moreover, the **progress observed in the 2021 impact assessment, in terms of learnings and strengthening of the AAL ecosystem from AAL1 to AAL2, has been confirmed in the current impact assessment:** the share of AAL supported projects, which report to have effectively commercialised a product, service or component, had more than doubled in the 2021 survey and this result has been confirmed in the current survey (both focusing on AAL2 projects). As a considerable share of the 2021 respondents had also participated in AAL1, they could thus further build on their project learnings and networks for their AAL2 participation.

Furthermore, the 2021 and 2023 impact assessments show that the **development of existing and new Support Actions in AAL2** has also supported the commercialisation of AAL products, services or components by spreading and strengthening knowledge on (among others) business or commercialisation strategies across the AAL network(s). The 2023 survey additionally provided evidence that participation in AAL2 Business Support Actions helped accelerating the launch of concrete products or services.

In the 2023 impact assessment, 14 AAL success stories were elaborated based on follow-up interviews with respondents to the survey (see below in section 2.2). These success stories corroborate these results:

- ▶ **Strengthening the AAL ecosystem:** in most success stories, AAL participation resulted in **new collaborations**, delivering a high added value through the **combination of different types of partners** (private, academic, end-user organisations). Moreover, the **international dimension** of the consortia provided a particular opportunity for **mutual learning**. The success stories also highlighted that AAL participation resulted in **second-round partnership effects**, through new collaborations with partners of AAL-consortium partners or through new connections with key players in the AAL ecosystem (national health insurance organisations, insurance companies, etc.)



- ▶ **Learnings:** nearly all success stories highlight **important insights from user-testing** for the development, relevance, adoption and awareness of the AAL solutions.
- ▶ **AAL2Business Support Actions:** participation in these Support Actions particularly helped organisations in their business plan development.
- ▶ Finally, the success stories underlined the important impact of AAL participation also on the interviewed companies' **visibility and reputation**, also thanks to the collaboration with academic partners within the AAL projects.

However, the impact assessment is not only intended to identify the positive outcomes and impacts of the AAL Programme, it is equally important to apply this impact framework to identify **opportunities for further development**. Therefore, the following sections summarise the key learnings from the impact analysis for the future of AAL, based on an analysis of possible **gaps** that still exist between the AAL Programme objectives (described in section 1.1 and Annex A.1) and its results. We focus on the extent to **which barriers are faced by participants** and how this hinders the realisation of the objectives of the AAL Programme, **whether and how the AAL Programme contributed to reducing barriers**, and finally on the identification of **which barriers still exist** and remain to be addressed. In this gap analysis, it is important to take into account the scope and action range of the AAL Programme, as well as the evolution over time (as described above).

#### BARRIERS FACED BY PARTICIPANTS

The main barriers for AAL Programme participants related to solution development and commercialisation. The absence of a mature AAL market was less of a challenge in comparison to the 2021 impact assessment, which could be an indication of further advancement in this field.

All respondents to the impact assessment survey (N=56) have identified the **challenges** they have encountered when bringing an AAL solution to market. The main barriers relate to:

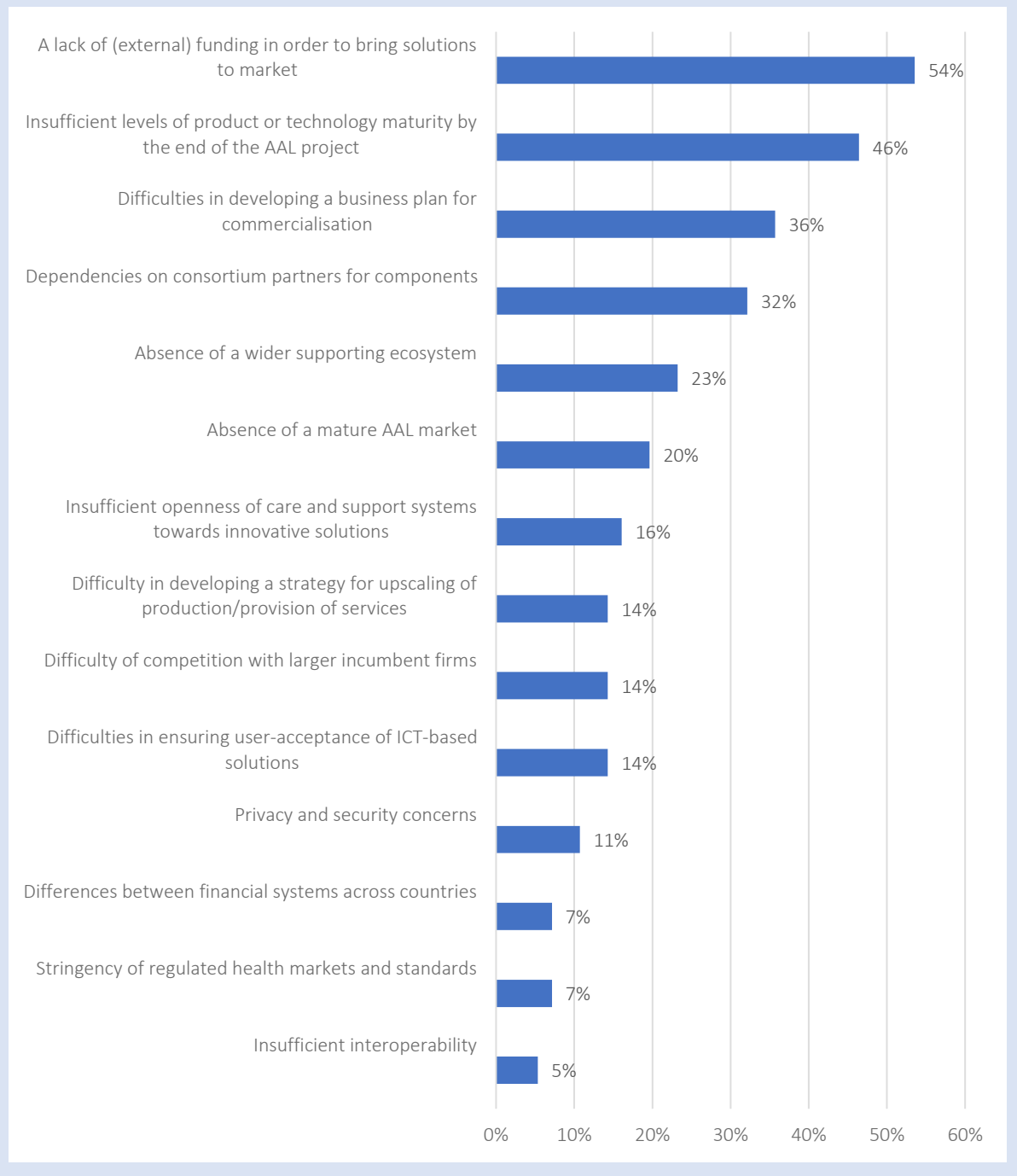
- ▶ A **lack of external funding** in order to bring solutions to market
- ▶ Insufficient level of product or technology maturity by the end of the project
- ▶ **Difficulties** in developing a **business plan** for commercialisation
- ▶ **Dependencies on consortium partners** for components
- ▶ **Absence** of a wider supporting **ecosystem**

When looking only at the respondents who have launched a product, a service or a product range (N=8), the **development of a business plan** was relatively more challenging, as well as the **absence of a mature AAL market**, the **differences between financial systems across countries**, and **privacy and security** concerns. Another challenge mentioned several times by the respondents was the context created by the Covid-19 pandemic.

This pattern is more or less in line with the 2021 edition, however, **the absence of a mature AAL market was less of a challenge now**. On the other hand, the lack of external funding was a challenge for more respondents in the current survey.



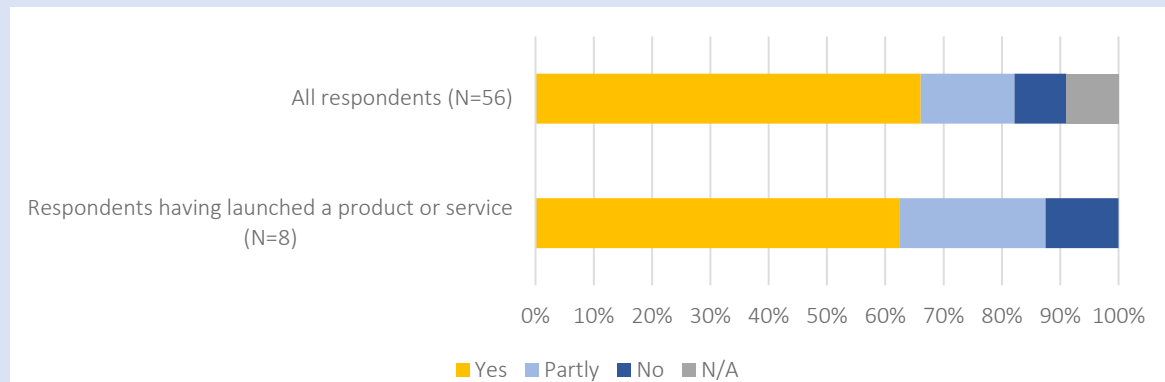
Share of respondents (N=56) having encountered **challenges when bringing an AAL solution to the market:**



## CONTRIBUTION OF THE AAL PROGRAMME TO REDUCING BARRIERS

The AAL Programme aims to help reduce the above-mentioned barriers, and according to respondents it has reached its goal in a considerable number of cases.

The majority of respondents acknowledge that the AAL Programme has helped to reduce any of the barriers to bring their AAL solution(s) to the market (based on analysis of open question).



According to the respondents, **the AAL Programme mainly reduces barriers** by supporting business plan development, giving testing opportunities, increasing the level of technological maturity, creating an ecosystem and facilitating knowledge sharing. This is in line with the findings of the 2021 survey. The first elements relate to solution development and commercialisation, while the latter elements relate more to ecosystem development.

Several **external factors** were also mentioned in this context, where AAL was not able to reduce these barriers: issues related to the lack of openness in healthcare systems towards new and especially digital technologies, a lack of (follow-up) funding, etc.

## OPPORTUNITIES FOR FURTHER REDUCING BARRIERS AND FUTURE DEVELOPMENT

To further overcome these barriers, the participants refer to more **guidance towards external funding sources**, such as business angel networks, as well as more guidance **in marketing and communication towards end-consumers**. In addition to these suggestions respondents also mentioned (among others): the need for more knowledge sharing (including on AAL failures) and knowledge repositories, less administration (e.g. deliverables) and more flexibility (enabling a full focus on experimentation), providing more mentors, making clearer agreements between partners on the go-to-market strategy from the start, and finding entrepreneurs that can further develop solutions researched in AAL projects.

These suggested pathways are in line with the specific needs indicated by respondents expecting to launch one or more AAL product(s) or service(s) in the coming year (N=5):

- ▶ Additional finance
- ▶ Set-up of a partnership with large(r) strategic partners
- ▶ A more mature AAL market
- ▶ (Further) development of a strategy for upscaling of production/provision of services
- ▶ (Further) set-up of a sales/commercial network



Although progress was made, the identified system-level barriers like the absence of a wider supporting ecosystem and mature AAL market show that **there is still a gap in terms of maturity of the AAL market and the wider ecosystem. At the same time, the absence of a mature AAL market was less of a challenge in comparison to the 2021 impact assessment, with may indicate further advancement in this field.** Whereas AAL1 focused mainly on technological development and testing, AAL2 moved towards a more market-oriented approach (cf. above). Moreover, the results in this impact assessment suggest the further maturing of the AAL market from AAL1 to AAL2. A next step remains to focus on transformations in the ecosystems themselves, how they are organised and strengthened in the longer run, as well as to generate deeper co-creation and co-ownership within the entire system and to develop a stronger mindset for uptake and transferability of innovations. This entails **work towards more fully-developed and integrated care ecosystems across Europe, which is taken up in the follow-up European Partnership on Transforming Health and Care Systems (THCS)**<sup>4</sup>. The strengths of the AAL Programme in terms of improved collaboration and networking and user-centered development constitute an excellent basis for this.

## 2.2. Methodological progress and learnings for AAL impact assessment

The fourth edition of the AAL impact assessment implemented one main novelty in the methodology, namely the **compilation of 14 AAL success stories**, according to three different stages of maturity:

- ▶ **Type 1** success stories: successful projects that are **about to reach the market**, looking for buyers.
- ▶ **Type 2** success stories: projects that still **need a last push to reach the market**, looking for investors.
- ▶ **Type 3** success stories: projects that **are not close to the market yet**, looking for partners to develop the project further.

Also a few minor adjustments were made to the **survey questionnaire** compared to the 2021 edition, mainly to accommodate the success story compilation.

Below, these methodological elements are explained in more detail, as well as the **strengths and limitations** of the resulting data and the overall **learnings** for the AAL impact assessments.

### COMPILATION OF 14 AAL SUCCESS STORIES

On the basis of **desk research** and the **analyses of the 2021 and 2023 surveys**, and in **close collaboration** with the AAL Association Management Unit and National Contact Points, 14 AAL success stories were selected (see Figure 2).

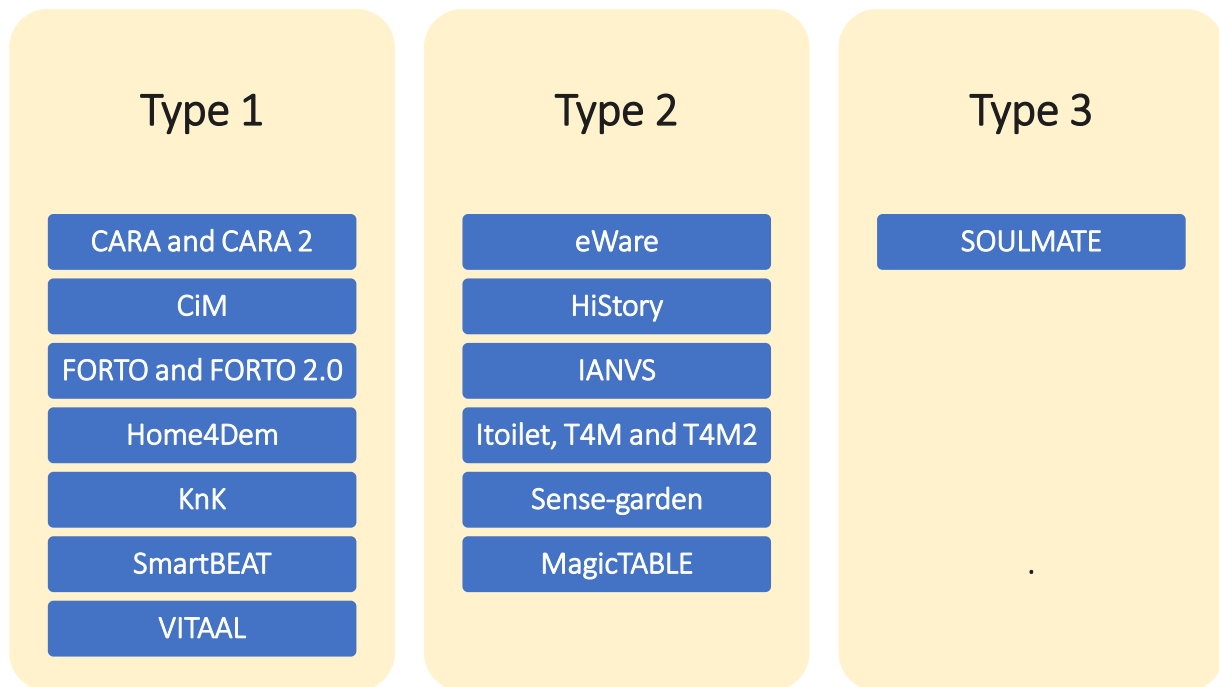
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<sup>4</sup> The European Partnership on transforming health and care systems (THCS) is a Cofund action under the Horizon Europe Programme designed to support coordinated national and regional research and innovation programmes along with capacity building, networking, dissemination and other key activities to support health and care systems transformation. The general objective of THCS is to contribute to the transition towards more sustainable, efficient, resilient, inclusive, innovative and high-quality people-centred health and care systems equally accessible to all people. See: [THCS \(thcspartnership.eu\)](https://thcspartnership.eu).





Figure 2: Overview of the 14 selected AAL success stories by type



In order to compile these success stories:

- ▶ 15 interviews<sup>5</sup> were conducted with the selected projects' main business partners<sup>6</sup>:
  - A **tailored interview questionnaire** was developed for each of type of success story. A topic list was sent to the interviewees prior to the interviews (see Annex A.4).
  - In order to prepare for the interviews, the interview team studied all relevant background material on the project at hand, as well as the responses of the interviewees to the AAL 2021 or 2023 surveys (if available).
- ▶ Following the interviews, the research team drafted the **interview notes** as well as a set of **key messages on the impact of AAL participation** in the project concerned, which were sent to the interviewees for validation. All interview notes that are incorporated in the success stories, as well as the key messages on impact, have been **validated by the interviewees**. However, all interviewees requested the opportunity for a final validation of their success story before actual publication by the AAL Association.
- ▶ All relevant project information, the responses to the AAL 2021 or 2023 surveys (if available), the validated interview notes and the key messages on impact were all **integrated in a success story report** (for each selected project). The template for these success story reports is organised per impact dimension and can be found in Annex A.5. The success story reports are intended to serve as input for the further development of communication material on these success stories.

<sup>5</sup> For VITAAL, 2 interviews were conducted with the 2 main business partners.

<sup>6</sup> For SOULMATE, iToilet/T4M/T4M2 and FORTO, duo-interviews were conducted with the business partner and project coordinator/research partner. For MagicTable and e-Ware, we conducted an interview with the project coordinator.



## UPDATE OF THE SURVEY QUESTIONNAIRE

Certain small changes have been made to the survey questionnaire as compared to the 2021 questionnaire:

- ▶ In order to accommodate the identification of success stories of the AAL Programme along certain criteria, two new categories were introduced to the question “Has your organisation launched an AAL product/service to market that resulted from this project?”, specifically the following options: “No, but my organisation is looking for partners to develop the product or solution further” and “No, but the topic/result of the AAL project has become a part of the strategy of my organisation”. Respondents were moreover asked to provide their contact information in case they would agree to be included as a success story.
- ▶ Small formulation changes were made (e.g. ‘cost efficiencies of care organisations’ became ‘increased efficiency and sustainability of support and care systems’).
- ▶ A question was added for expected AAL product/service to be able to identify which elements would support them in the effective launch of their expected AAL product/ service (e.g. additional finance, further elaboration of a commercialisation strategy, a wider support system, etc.).
- ▶ The questions about the AAL Support Actions were adapted to reflect the current AAL Support Actions (e.g. the Market Observatory was no longer included).

## STRENGTHS AND LIMITATIONS OF THE RESULTING DATA

As in the 2021 impact assessment, a good survey response rate and coverage was reached in the 2023 impact assessment. The main **strengths** of the collected data include:

- ▶ Good coverage of projects and participants;
- ▶ Consistency with past editions to capture evolution over time (with minor refinements compared to the 2021 edition);
- ▶ Systematic coverage and consideration of the key elements in the intervention logic and of the role of the Support Actions.

Also, the findings of the 2023 survey proved generally **very consistent** with the 2021 survey results. These elements strengthen the **reliability and credibility** of the results of the impact assessment.

Nevertheless, the survey data have **limitations** that need to be taken into account in the interpretation of the results:

- ▶ **Absolute numbers** of observations can become small for specific subgroups and indicators for these subgroups need to be interpreted with caution;
- ▶ Although end-user organisations and researcher organisations are not a priori excluded from the survey, the questionnaire takes an explicit **supply-side focus** to assess impacts in terms of bringing solutions to the market, their commercialisation and uptake as well as networking effects.
  - Demand-side effects are thus not explicitly covered in the scope of this study.
  - Evidence on impacts with end-users was collected in an indirect manner, asking products/service developers/suppliers how they think that their solution makes an impact on end-users – both in the survey and in the success stories.



## LEARNINGS FOR AAL IMPACT ASSESSMENT

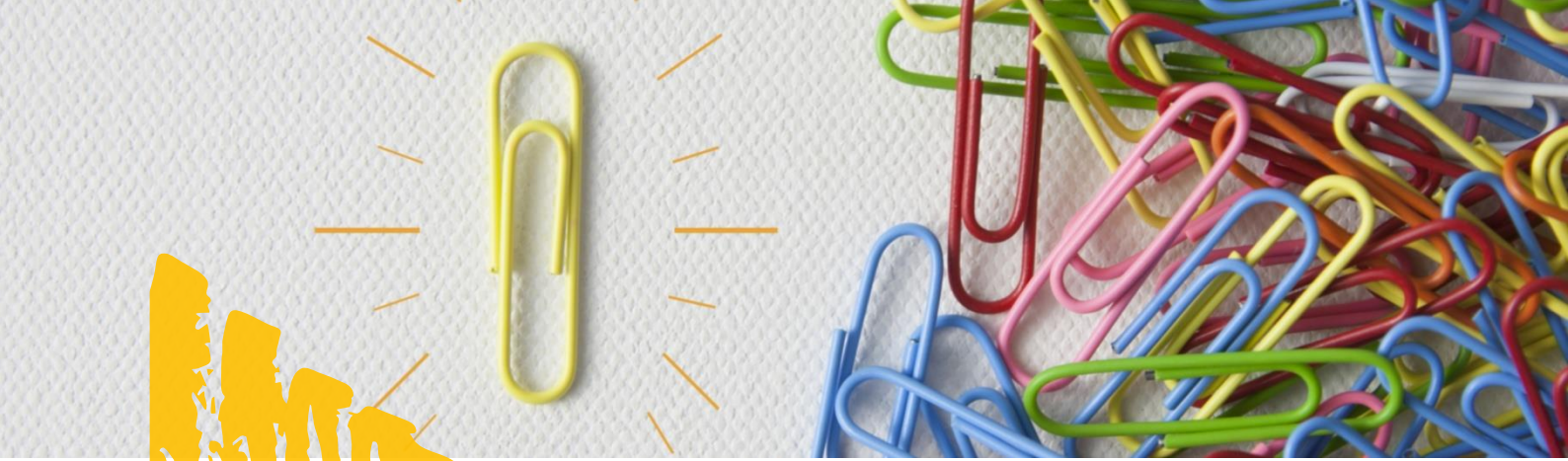
Although steps for refinement of the framework and methodology in the 2021 edition had already led to considerably improvements in the third edition of the AAL impact assessment, and further minor refinements in the 2023 edition were implemented to accommodate the (new) success stories approach in this edition, learnings for future impact assessment can still be drawn from this experience. The main **learnings** are:

- ▶ **THE OPPORTUNITY TO COVER THE DEMAND-SIDE EFFECTS MORE EXPLICITLY TO COMPLEMENT THE SURVEY AND SUCCESS STORY INFORMATION ON THE SUPPLY-SIDE.** This could be done via a separate, targeted survey of the end-users/organisations involved in the AAL projects. However, to capture insights from the broader group of paying customers and end-users that are not necessarily part of a project, but have implemented a solution, a comprehensive case study approach (based on desk research and interviews) would be more appropriate. This would allow to complement the supply-side survey and success story information with a more broad and direct view on the value of the AAL solutions for paying customers or end-users, the impact it has in their work or life, and the barriers they faced to implement or use the solution.
- ▶ **THE OPPORTUNITY TO CAPTURE EVOLVING INSIGHTS ON THE SYSTEM LEVEL.** To identify system needs and feed a more strategic discussion, interviews with the key stakeholders in the ecosystem would be useful. This would allow to position the findings from the impact assessment in a broader context, to complement insights on the framework conditions, ecosystem development and future-oriented strategic considerations, and to thus identify further opportunities and learnings for AAL.









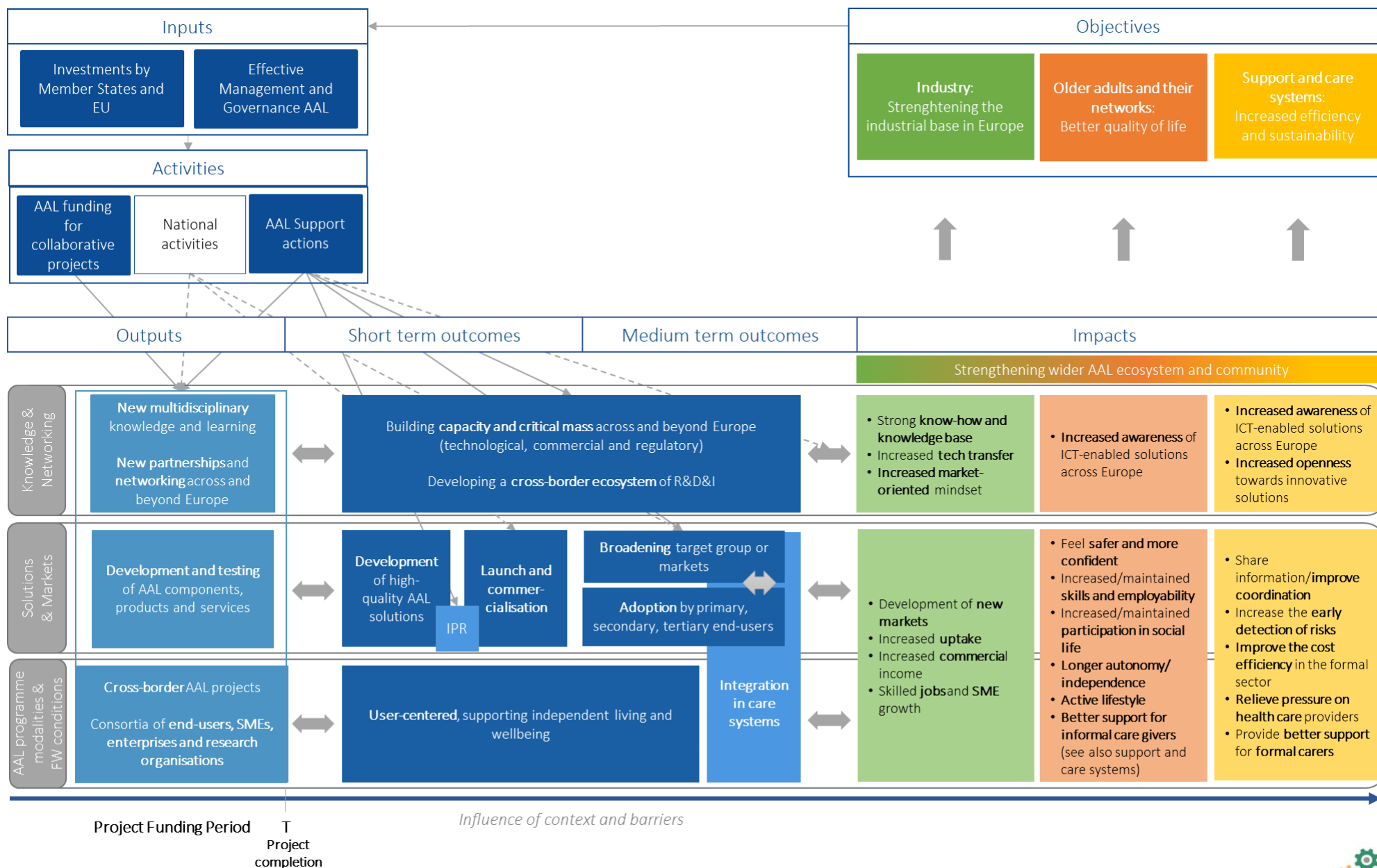
## A.1 / Impact assessment framework for the AAL Programme

The starting point of the impact assessment of the AAL Programme, is its intervention logic. What does the Programme aim to achieve? How does it work, which actions are taken? And which results are expected from this? By structuring the objectives and activities of the Programme as well as its expected results, a transparent framework for the impact assessment is built. The logic model clearly shows the factors that are relevant to measure when assessing the impact of the AAL Programme.

In the figure below, the intervention logic of the AAL Programme is visualised. This intervention logic is applied throughout the study as framework for the data collection and analysis, and has not changed compared to the 2021 impact assessment of the AAL Programme.



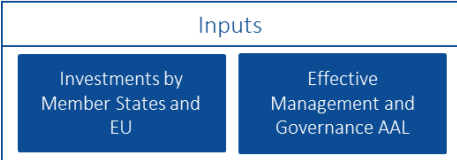
Figure 3: Impact assessment framework for the AAL Programme





In the following paragraphs, the different elements of this logic model (inputs, activities, outputs, outcomes and impacts) are explained.

**INPUTS**



In the AAL Programme, the AAL Management Unit **implements and manages** the programme and support activities. The **funding** of the projects in itself is implemented at national level. Projects partners can apply to their National Funding Agency to ask for funding. Eligibility of the proposals is checked at national level, the evaluation of the proposals is done at central level.

**ACTIVITIES**



In the case of the AAL Programme, activities include the collaborative projects, AAL support activities and national activities.

Since 2008, more than 309 **projects** that aim for end-user involvement and a market introduction within 2 to 3 years, have been funded in the framework of the programme. In the projects, industry, researchers and end-users from different Member States cooperate to bring solutions.

Moreover, **AAL Support Activities** target participants and help them in different phases of the project. They each contribute to the realisation of outputs, outcome and impacts in the model:

- ▶ **AAL Forum - European Week of Active and Healthy Ageing:** knowledge sharing, networking, strengthening the ecosystem
- ▶ **AAL2Business:** supporting user-involvement in development and testing of AAL products and services, facilitating commercialisation, IPR, business modelling, launch and upscaling, developing insights in the investor’s point of view, etc.
- ▶ **Smart Aging Prize- AAL Challenge Prize:** reputation, visibility and awareness raising

In addition, the AAL Programme connects different **activities at national level** which contribute to the realisation of its objectives, e.g. national programme calls, national policies, events, workshops, support mechanisms, etc. As these are not a managed by the AAL Association, but do play an important complementary and leveraging role, the national activities are included in an unfilled rectangle in the model. In addition, dashed arrows indicate their leverage on several outcome of the AAL projects (e.g. launch, upscaling, adoption and broadening of the solutions).



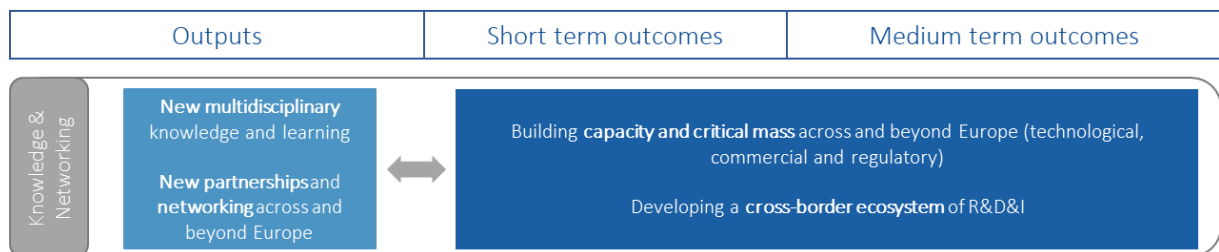
## OUTPUTS AND OUTCOMES

In the logic model of the AAL Programme, outputs are defined as the project-level results that are expected to be generated during the project. Short-term outcomes are results stemming directly from project completion and mid-term outcomes are results generated more indirectly from AAL project completion.

The realisation of short- and medium-term outcomes can depend on external factors of context and barriers, such as the availability of funding from internal or external investors, the regulatory framework, the business cycle, market developments, competition, sales and marketing efforts, etc.

In the logic model, **the outputs, outcomes and impacts are clustered according to their timing and the dimension on which they act:**

### ► Knowledge base and networking:

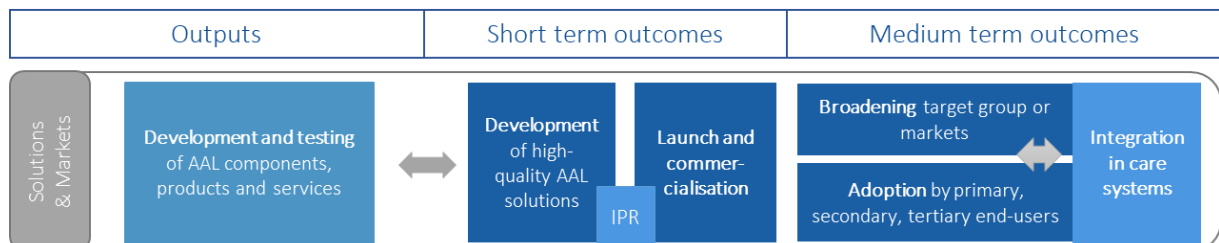


The enabling factors of **(multidisciplinary) knowledge creation and learning** during the project, will lead to the development of **capacity and critical mass** across and beyond Europe in the short and medium run.

At the same time, new **networking and partnerships** across Europe support the development of a **strong cross-border ecosystem** of R&D&I in the short and medium run.

The Support Actions contribute to these outcomes by enhancing knowledge-sharing and networking (AAL Forum), reputation and visibility (Smart Ageing Prize and Challenge Prize) and knowledge building on business development and commercialisation (AAL2Business).

### ► Solutions and markets:



During the project funding period and shortly after, **components, products or services are developed and tested** as outputs of the projects. AAL solutions are further developed and their quality is further improved, with the aim of **bringing them to market**.

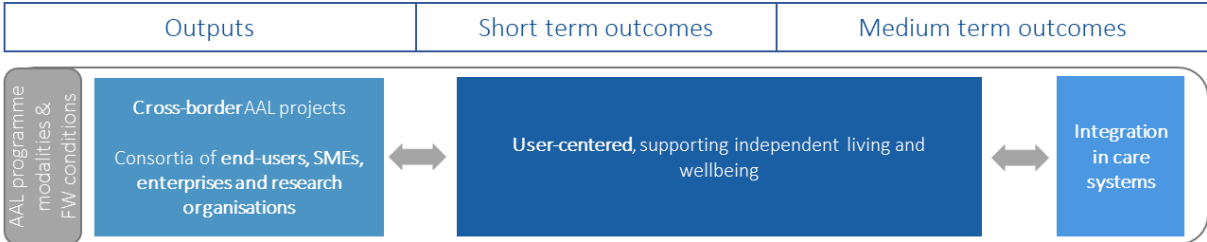
Development and testing will lead in the short run to outcomes in terms of **commercialisation** and **launch** in the market(s) and in the medium run to further **broadening** for new groups or markets,



**adoption** of the solutions by the end-users and **integration in the care system** with local/national governments and insurers embedding AAL solution in their policies.

The Support Actions contribute to the development of solutions by supporting the involvement of end-users in the development of products or services. In addition, they facilitate enterprises to **bridge the innovation gap**, i.e. to move from the development of solutions to their launch and commercialisation. By offering training and market intelligence to participating (and other) enterprises, the Support Actions have an impact on organisations’ capabilities in terms of **regulatory conditions (IPR), market intelligence, business modelling, commercialisation and upscaling** (AAL2Business).

▶ AAL Programme modalities & framework conditions:



External framework conditions as well as the modalities specified for the projects within the AAL Programme can steer the realisation of certain outcomes or impacts. The AAL projects are collaborative in the sense that they bring together businesses, researchers and end-users. The projects involve participants from different EU Member or Associated States. In order to be eligible for AAL funding, the projects must in addition fulfil the following criteria:

- ▶ Time-to-market perspective of a maximum of two to three years after the end of the project
- ▶ Indicative total budget of €1-7 million, with max. €3.0 million AAL Programme funding
- ▶ Proactive end-user involvement throughout the life of the project
- ▶ Sound trial, testing and evaluation of added value performed during the project
- ▶ Defined market segment(s), use cases and target groups(s) for a viable business model

The modalities of the AAL Programme, in particular the **cross-border cooperation** on AAL projects and the **involvement of end-users, SMEs, enterprises and research organisations** lead to the development of solutions that are particularly **relevant and user-friendly**. User-centeredness of solutions will contribute to their **integration in care systems** in the medium term. The Support Actions **support the user-involvement** in the development and testing of products and services.



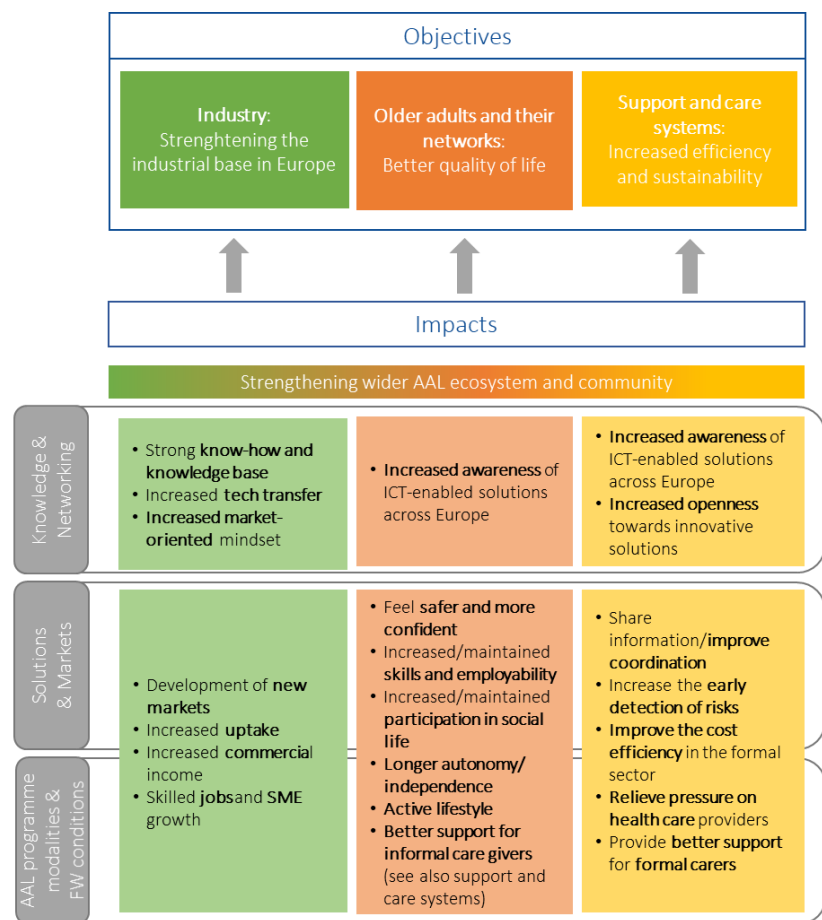
## IMPACT

In the logic model of the AAL Programme, the three main impact dimensions of the AAL Programme are defined as:

- ▶ Better **quality of life** for older people and their networks
- ▶ Increased **efficiency and sustainability** of support and care system
- ▶ Strengthening the **industrial base** in Europe

These impacts reflect the three main objectives of the programme and the three main end-user groups (older adults and their networks, the support and care system and industry, respectively).

They include both direct and indirect results enabled by the Programme and take into account impacts of solutions incorporating components developed in the AAL Programme.



Even though the relation is not always direct or linear, activities, outputs and outcomes can be better linked to impacts by clustering them per end-user group and dimension. The logic narrative of how and at which level activities, outputs and outcomes are expected to lead to the realisation of impacts, becomes more transparent.

For the AAL Programme, this means the following:

- ▶ For **industry**, the following impacts are expected:
  - At the level of solutions and markets, the development and adoption of solutions, and their integration in the care system, allows to develop **new markets** and increase the **uptake of AAL solutions**, thus leading to an increased **commercial income, skilled jobs and SME growth**.
  - At the level of knowledge base and networking, the development of a critical mass and cross-border ecosystem in the short run, allows more generally to **strengthen the knowledge base** and to increase **technology transfer** at national level and across actors in Europe. The more interlinked the networks become, the easier knowledge is transferred within the network. The AAL Programme is expected to contribute to this process by encouraging partnerships and cooperation across Europe and between industry, research organisations and users.

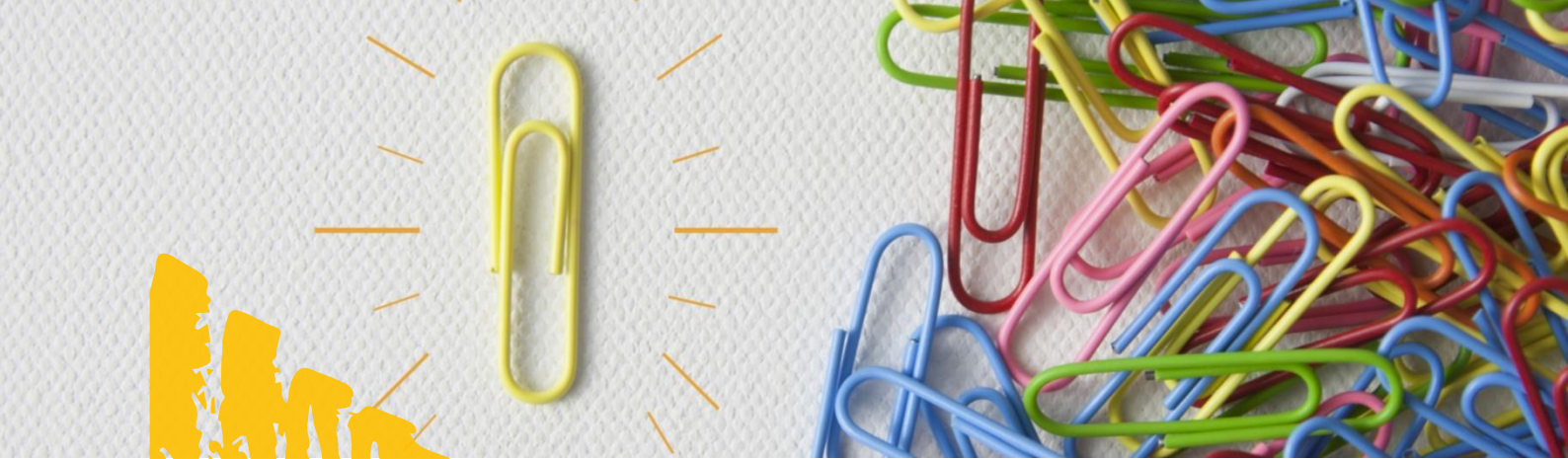


- The **Support Actions** leverage some of these impacts: by offering training and market insights with participating (and other) enterprises, the Support Actions have an impact on enterprises and organisations' **knowhow and knowledge and their market-oriented mindset** (cf. outcomes: understanding of the investor's point of view, capabilities in terms of market intelligence, business modelling, commercialisation and upscaling).
- ▶ For older adults and their networks:
  - At the level of markets and solutions, the development of solutions in AAL-funded projects - following the objectives and modalities specified in the AAL Programme - will result in solutions that allow older adults to feel **safer and more confident**, to increase or maintain **their skills and employability** and their **participation in social life**, to remain **autonomous and independent** longer and to lead an **active lifestyle**.
  - Also **informal care givers** in the networks of the older adults are **better supported** through these solutions, which is an impact in itself, but also **contributes indirectly** to the realisation of the above impacts for the older adults (e.g. autonomy and independence).
  - Adoption of these solutions and their integration in care systems are important outcomes in the medium run that will result in a larger group of older adults across Europe having **access to these solutions**. These outcomes will therefore have an **influence on the scope and extent** to which the above impacts are realised.
  - The AAL Programme modality of user-centered development that is at the heart of the AAL projects, ensures the relevance of the products and services for the users and facilitates the extent to which they can be commercialised across (and beyond) Europe. This **modality** thus further **leverages the uptake of products and services, and by this the extent to which impacts for the older adults and their networks will be realised**.
  - Finally, the above impacts, including those of the Support Actions, will also have an influence on the ecosystem for as far as they lead to **increased awareness** of older adults and their informal care givers regarding AAL solutions.
- ▶ Similarly, for support and care systems:
  - The development of solutions in AAL-funded projects, following the objectives and modalities specified in the AAL Programme, will result in solutions that allow to increase **early detection of risks**, improve the **cost efficiency** in the formal sector, **relieve pressure** on health care providers and provide **better support** for formal and informal carers.
  - As described above, adoption and user-centered development, support the **uptake** and will have an influence on the scope and **extent to which the above impacts are realised**.
  - At the level of knowledge base and networking, the involvement of user-groups and the development of a cross-border ecosystem, is expected to lead to an **increased awareness, trust and openness as regards innovative solutions** in the market among the carers in the support and care systems. Also here, the Support Actions play a supporting role to realise these impacts.

One overarching impact, involving all three end-user groups, is the **strengthening of the wider AAL ecosystem and community**. This impact is expected to result from the increased knowledge sharing and capacity building, the cooperation and coordination, and the better understanding across user or stakeholder groups and countries.







## A.2 / Survey methodology and responses

A **survey** has been implemented to gather information on the effects of the AAL Programme as identified in the intervention logic, aiming to collect information on new projects and solutions. The survey was launched on the 4<sup>th</sup> of September 2023 and closed on October 6<sup>th</sup>, 2023. It targeted **all participants from projects finished by the end of 2022**<sup>7</sup>.

The survey **questionnaire** was structured as shown in the box on the right.

**179 participants involved in one of the 25 projects finished by December 2022 received the invitation** to complete the full survey. A close follow-up was ensured by IDEA Consult and the AAL Management Unit to reach a maximum of participants and, by this, increase the reliability of the analysis.

- ▶ **Products/services/components:**
  - Number
  - Characteristics
  - Impact on target groups
  - Impact on revenues
  - Number and type of end-users/paying customers or in case of components: organisations or sectors
- ▶ **Expected products/services:**
  - Timing
  - Characteristics
  - Expected impact on revenues
  - Expected number of end-users/paying customers
- ▶ **Barriers, learnings and general outcomes/impacts** of the programme
- ▶ Participation in and contribution of **Support Actions**

This resulted in **57 complete responses and 3 partial responses**. The survey thus obtained a high **response rate of 33.5%**<sup>8</sup>. In the analysis of the survey only the complete responses are considered. Further, one complete response was found to be invalid<sup>9</sup> and was not considered for the analysis, and another complete response was found partly invalid<sup>10</sup> and thus was partly not considered for the analysis. The total number of respondents in the analysis therefore varies between 55 and 56.

<sup>7</sup> Although end-user organisations and researcher organisations are not a priori excluded from the survey, the questionnaire takes an explicit supply-side focus to assess impacts in terms of bringing solutions to the market, their commercialisation and uptake as well as networking effects. Demand-side effects are thus not explicitly covered in the scope of this study.

<sup>8</sup> This figure includes partial responses.

<sup>9</sup> The respondent was initially in an AAL consortium but did not participate to any AAL project in the end.

<sup>10</sup> The respondent indicated to have launched a product/service, yet this was not the result of the AAL project they responded for.







## Data overview

60 (57)

Number of responses (complete)

34%

Response rate

25 out of 25

Projects covered out of the total

72%

Respondents who participated in Support Actions

**All projects are covered in the responses:** there was at least one complete response for each of the 25 projects. Moreover, the coordinator of each project has completed the survey. Table 1 shows the number of complete responses per project.

In addition, **73%** of the respondents having entirely completed the questionnaire (N=56) for their AAL Programme participation, have also participated in **AAL Support Actions**. Table 2 shows the number of participants in each of the four Support Actions (AAL2 Business, AAL Forum and/or European Week of Active and Healthy Ageing, Smart ageing prize and/or AAL Challenge Prize).

Table 1: Number of complete responses per project in the survey

Acronym	#	Acronym	#	Acronym	#
AgeWell	2	INCARE	2	SOULMATE	3
CARA-II	3	IOANNA	2	TACTILE	2
CARU cares	1	LIFANA	2	TURNTABLE	4
COGNIVITRA	1	PELOSHA	4	VINCI	3
DAPAS	1	POSITIVE	2	VITAAL	2
ELLA4LIFE	3	POSTHCARD	1		
FreeWalker	5	ReMIND	1		
HiStory	2	RESILIENT	2		
i evAALution	2	SALSA	2		
IANVS	3	SFL	2		

Note: One complete response was only considered for a subset of responses given that some responses were deemed to be invalid: the respondent indicated to have launched a product/service, yet this was not the result of the AAL project they responded for. One other complete response was not considered as the survey responses were deemed to be invalid: the respondent was initially in an AAL consortium but did not participate to any AAL project in the end.

Source: IDEA Consult based on 2023 AAL Impact Assessment survey



Table 2: Number of participants per Support Action

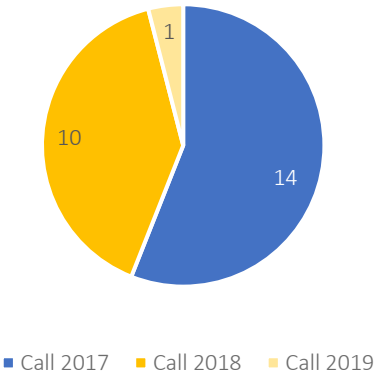
AAL2 Business	AAL Forum and/or European Week of Active and Healthy Ageing	Smart Ageing Prize and/or AAL Challenge Prize
30	36	5

Source: IDEA Consult based on survey data

Overall, many of the responses point at the launch or planned launch of a product, service or component based on the AAL project. **47% of respondents mention the launch or planned launch of a solution**, either in the organisation (35%) or by a partner or spin-off (13%).

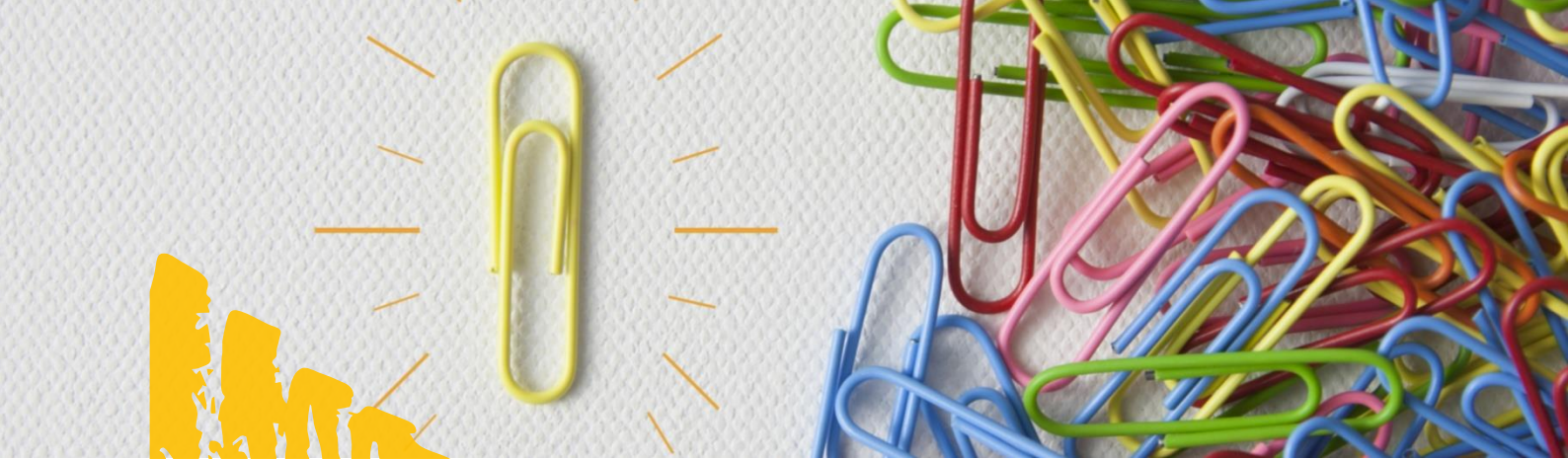
The projects targeted in the survey resulted from **three Calls: 2017, 2018 and 2019**. More than half of the projects (14) were projects launched as part of the 2017 Call, 10 projects were issued from the 2018 Call and 1 project was launched in the 2019 Call.

Figure 4: Projects per call



Source: IDEA Consult based on AAL monitoring data





### A.3 / List of solutions developed based on participation in the AAL Programme

Examples of solutions brought to the market or very close to market introduction, are listed below. We have indicated which of these solutions were researched and elaborated as success stories:

- ▶ *Success story VITAAL: [Dividat Senso Play and Assessment](#)* (Launched in 2021 and 2022 respectively), a solution for training motor and cognitive functions which connects the body and mind through simultaneous physical and cognitive exercises. Dividat Senso Assessment provides various physical and cognitive tests which are integrated in a digital case management system. This set of performance metrics gives a comprehensive view of a person's physical and cognitive performance as well as outcome management.
- ▶ *Success story CARA and CARA 2: [SelfTest](#)* (launched in 2022), an online psycho-cognitive capacity measurement tool, suitable for seniors to test their skillset (relevant for safe driving) in a stress-free home environment.
- ▶ *Success story SmartBEAT: [RemeCare Heart Failure](#)* (launched in 2021), a remote patient monitoring service for patients with chronic heart failure. Heart failure patients use RemeCare to improve their medication compliance, and to monitor their vital parameters and heart failure symptoms. The use of the app ensures that communication between healthcare providers and patients is improved.
- ▶ *Success story KnK: [123family](#)* (launched in 2020), a videocall app suitable for people without digital skills and or with dementia.
- ▶ *Success story CiM: [James Telecare](#)* (launched in 2018), an emergency call system, a watch, which ensures safety of older adults, health monitoring and social integration.
- ▶ *Success story Home4Dem: The [DomoCare](#) product range* (launched between 2017 – 2021), a safety and care service platform for seniors living at home (alert systems for home and outside, systems for health monitoring, sleep assessment and combinations thereof).
- ▶ *Success story FORTO and FORTO 2.0: The [Eforto](#) system* is an innovative self-test for monitoring physical reserves and vitality capacity and will be launched in November 2023 as a health product and as a medical device in Q4 2024.
- ▶ *Success Story Sense-Garden: [SENSE-GARDEN](#)* is a therapeutic space addressing care and well-being of people, with focus on mental health. Current users are persons with major neurocognitive disorders and their caregivers. SENSE-GARDEN will be launched in Q2 2024. Pre-launching is already done in Belgium, Norway and the Netherlands.



- ▶ [Anne4Care](#) (launched in 2019), a virtual assistant supporting videocalling, medication and agenda planning and communication, radio and news selection and communication,...
- ▶ [Revita](#) (launched in 2018), a technological platform / monitoring app that brings the hospital and its professionals closer to the patient's home. Users can consult their diaries, obtain reminders, make video calls with professionals and manage their measurements.
- ▶ [Cariot Brush](#) (launched in 2020), a solution to remind users and their carers to brush their teeth. CARIOT BRUSH can identify residents that have not received the minimum oral care needed and remind nursing home caregivers to facilitate the missing toothbrushing actions via an interactive live info screen placed in the guard room of the nursing home. The product however does not seem to be on the market any longer.
- ▶ Palettev2 (launched in 2018), a contact platform for older adults to share interests, activities and visit events together (matching facility). The product however does not seem to be on the market any longer.
- ▶ eLearning Content for "First Aid" (launched in 2019), an online platform offering first aid courses. The product however does not seem to be on the market any longer.
- ▶ Mememtum (launched in 2019), an intelligent and adaptive monitoring for patients through a smartphone application. Mememtum aimed to contribute to the evaluation and tracking of older adults with neurological health issues. The product however does not seem to be on the market any longer.
- ▶ zocAALo (launched in 2019), a service of guiding and certifying the development of apps for older adults' users. It helps identify which application oriented towards older adults can be trusted. ZocAALo also helps developers when creating application for older people. The product however does not seem to be on the market any longer.
- ▶ E-Tec + (planned for 2022), an application to improve healthy life and digital literacy. The product however does not seem to be on the market any longer.
- ▶ Memas, a tablet which displays the time, day and calendar, and other features such as a photo album. Caregivers can set up the service on an administration website. The product however does not seem to be on the market any longer.



## A.4 / AAL success stories: interview topic lists

### 4.1 Interview topic list: Success Story Type 1

#### Impact of AAL participation on knowledge base & networking

- ▶ Did your participation in the AAL project allow you/your organisation to establish **new knowledge and learnings**? If so, how?
- ▶ Did your participation in the AAL project allow you/your organisation to **collaborate with new partners and establish new networks across Europe**?
- ▶ Did participation in the AAL project improve your organisation's **visibility and reputation**? If so, in what way?
- ▶ Did you participate in **AAL support actions** (e.g., AAL2Business, AAL Forum)? If so, how did this participation impact your organisation?

#### Impact of AAL participation on development of solutions

- ▶ About the AAL Solution and its development:
  - Could you **describe the product** that resulted from the AAL project and that was launched on the market?
  - What has been the **impact of AAL on the development of your AAL solution** (e.g., in terms of supporting user adoption, relevance, awareness)? Did the participation in the AAL programme accelerate the time-to-market? if so, how?
  - In **which geographical markets** was the product launched? Did AAL project participation help you to bring your AAL solution to the market in new regions/countries? If so, how?
  - What were the **main challenges** that needed to be overcome to bring the product to the market (e.g., necessary investments, need for new partnerships)? Did participation in the AAL project help you to overcome these challenges? If so, how?
- ▶ End-users
  - What type and how many **end-users** are you targeting and reaching with your product?
  - What has been the **impact of the developed product on end-users**? Please describe/give examples.
  - What type of customers, and how many of your customers, **is currently paying** for your product?
- ▶ Turnover
  - What has been your **total turnover** generated from the product? What turnover do you expect in the coming year?
  - Did the developed product contribute to **the growth of your enterprise** (in terms of jobs or turnover)?
- ▶ **Any other impacts** of project participation that were not yet discussed?



## 4.2 Interview topic list: Success Story Type 2

### Impact of AAL participation on knowledge base & networking

- ▶ Did your participation in the AAL project allow you/your organisation to establish **new knowledge and learnings**? If so, how?
- ▶ Did your participation in the AAL project allow you/your organisation to **collaborate with new partners and establish new networks across Europe**?
- ▶ Did participation in the AAL project improve your organisation's **visibility and reputation**? If so, in what way?
- ▶ Did you participate in **AAL support actions** (e.g., AAL2Business, AAL Forum)? If so, how did this participation impact your organisation?

### Impact of AAL participation on development of solutions

- ▶ About the AAL Solution and its development:
  - Could you **describe your expected product** resulting from the AAL project? When do you expect to launch the AAL solution?
  - What has been the **impact of AAL on the development of your AAL solution** (e.g., in terms of supporting user adoption, relevance, awareness)? Did the participation in the AAL programme accelerate the time-to-market? if so, how?
  - **Which geographical markets** do you target with the AAL solution? Did AAL project participation contribute to opening up to new markets – and if so, how?
  - What are the **necessary next steps to effectively launch** your product (e.g. additional investments, need for new partnerships, etc.)? How did AAL contribute to these?
- ▶ Expected end-users
  - What type and how many **end-users** will your AAL solution target?
  - What is the **intended impact of the developed product on end-users**? Please describe/give examples.
  - Which type of customers, and how many customers, are **expected to pay** for your AAL solution?
- ▶ Expected turnover
  - Which turnover do you expect the first year after the launch?
  - How do you expect the product to contribute to **the growth of your organisation** (in terms of jobs, turnover, markets,...)?
- ▶ How do you see the way forward for your product?
- ▶ **Any other impacts** of project participation that were not yet discussed?





## 4.3 Interview topic list: Success Story Type 3

### Impact of participation in your AAL project on Knowledge base & Networking

- ▶ Did your participation in the AAL project allow you/your organisation to establish **new knowledge and learnings**? If so, in what way?
- ▶ Did your participation in the AAL project allow you/your organisation to collaborate with **new partners and establish new networks across Europe**? If so, in what way?
- ▶ Did participation in the AAL project improve your organisation's **visibility and reputation**? If so, in what way?
- ▶ Did you participate in any **AAL support actions**? Did this impact your organisation? If so, how and in what areas?

### Solutions & Markets

- ▶ About the AAL Solution and its development:
  - Where are you now in the development of your product/concept? What was achieved at the end of the AAL project? What steps have been undertaken since then?
  - Did the participation in the AAL programme accelerate the development of the AAL product or service? If so, in what way?
- ▶ Did participation in the AAL programme support the user adoption, relevance and awareness of your AAL solution? If so, in what way?
- ▶ What are the **expected steps** needed from this stage onwards to further the development of your product/concept (e.g., further prototyping, testing, upscaling, business plan development, new partnerships, attracting investments/loans, IP)?
- ▶ Which **(type of) end-users** will your expected AAL solution target? What is the intended impact on the end-users? Please describe/give examples.
- ▶ Which **(types of) paying customers** will your expected AAL solution target?
- ▶ How do you envisage the expected product to contribute to the growth of your organisation (in terms of jobs, turnover, markets,...)?
- ▶ Which **geographical markets** will you target with the expected AAL solution? Did AAL project participation contribute to opening up these new markets – and if so, how?
- ▶ **Any other impacts** of project participation that were not yet discussed?



## A.5 / AAL success stories: reporting template

### AAL Success Story Template “Title Project”

The interviewee(s) has (have) validated the interview notes and key take-aways on impact but **requests (request) final validation of the success story before actual publication by the AAL A.**

#### Project summary

Success story type	<b>Type 1: AAL products and solutions:</b> successful projects that are <b>about to reach the market</b> → looking for buyers <b>Type 2: AAL projects:</b> projects that still <b>need a last push to reach the market</b> → looking for investors <b>Type 3: AAL concepts:</b> projects that are <b>not close to the market yet</b> → looking for partners to develop the project further
Full project name	
Project link	
Start date	
Project duration	
Total budget	
Short project description	
Number of partners	
Partner names, type and location	
Product type	
Product name	
Product link	
Functional categories	<b>Survey data:</b> <i>Reported functional categories that apply to the AAL product / service in the 2021 / 2023 IA Survey</i>
Product launch year	
Extra information	



## Impacts of AAL Project Participation on [Company Name(s) or Organisation Name(s) of Interviewees]

KEY TAKE-AWAYS ON IMPACT OF AAL PROJECT PARTICIPATION ON [COMPANY OR ORGANISATION NAME(S) OF INTERVIEWEE(S)]	
Sources	<ul style="list-style-type: none"> <li>▶ Interview with:</li> <li>▶ 2021 / 2023 AAL IA Survey, completed by:</li> </ul>
IMPACT OF PARTICIPATION ON KNOWLEDGE CREATION, LEARNING AND NETWORKING	
Main learnings from developing a solution in the context of the AAL-project  & Main impacts at the level of the organisation	<p><b>Survey data:</b></p> <ul style="list-style-type: none"> <li>▶ Answers to Q73 and Q74 [for Q74: only if answering option “yes” was selected] in 2021 IA and to Q74 and Q75 [for Q75: only if answering option “yes” was selected] in 2023 IA Survey</li> <li>▶ Answering options for which “to a great extent” was selected in Q77 in 2021 IA and Q78 in 2023 IA Survey</li> </ul>
	<p><b>Interview insights:</b></p> <p><i>Interviewee(s) answers to the questions:</i></p> <ul style="list-style-type: none"> <li>▶ “Did your participation in the AAL project allow you/your organisation to establish new knowledge and learnings? If so, how?”</li> <li>▶ “Did participation in the AAL project improve your organisation’s visibility and reputation? If so, in what way?”</li> </ul>
Impact on networking & collaboration	<p><b>Survey Data:</b></p> <p><i>Only if respondent indicated answering option “to a great extent” to Q76 in 2021 and Q77 in 2023 IA Survey</i></p>
	<p><b>Interview insights:</b></p> <p><i>Interviewee(s) answers to the question: “Did your participation in the AAL project allow you/your organisation to collaborate with new partners and establish new networks across Europe?”</i></p>
Impact of participation in AAL Support Actions	<p><b>Survey data:</b></p> <ul style="list-style-type: none"> <li>▶ Answers to Q79 in 2021 IA and Q80 in 2023 IA Survey</li> <li>▶ Answering options for which “to a great extent” was selected in Q81, Q82 and Q83 in 2021 IA and Q82 and Q83 in 2023 IA Survey</li> </ul>
	<p><b>Interview data:</b></p> <p><i>Interviewee(s) answers to the question: “Did you participate in AAL support actions (e.g., AAL2Business, AAL Forum)? If so, how did this participation impact your organisation?”</i></p>
IMPACT OF PARTICIPATION ON THE DEVELOPMENT OF SOLUTIONS	
About the AAL solution and its development	
Product description	Interview insights:



	<p><i>Interviewee(s) answers to the question: “Could you describe the (expected (for Type 2 success story)) product that resulted from the AAL project and that was launched on the market?”</i></p> <p><i>For Type 3 success story: “Where are you now in the development of your product/concept? What was achieved at the end of the AAL project? What steps have been undertaken since then?”</i></p>
Impact of AAL on the development of the AAL solution	<p><b>Survey data:</b></p> <p><i>Any of the first four answering options for which “to a great extent” was selected in Q78 in 2021 IA and Q79 in 2023 IA survey</i></p>
	<p><b>Interview insights:</b></p> <p><i>Interviewee(s) answers to the question: “What has been the impact of AAL on the development of your AAL solution (e.g., in terms of supporting user adoption, relevance, awareness)? Did the participation in the AAL programme accelerate the time-to-market? if so, how?”</i></p>
Geographical markets	<p><b>Interview insights:</b></p> <p><i>Interviewee(s) answers to the question:</i></p> <p><i>Type 1 success story: “In which geographical markets was the product launched? Did AAL project participation help you to bring your AAL solution to the market in new regions/countries? If so, how?”</i></p> <p><i>Type 2 / 3 success story: “Which geographical markets do you target with the AAL solution? Did AAL project participation contribute to opening up to new markets – and if so, how?”</i></p>
Challenges encountered	<p><b>Survey data:</b></p> <p><i>Answers to Q70, Q71 in 2021 IA and Q71, Q72 in 2023 IA Survey</i></p>
	<p><b>Interview insights:</b></p> <p><i>Interviewee(s) answers to the question: “What were the main challenges that needed to be overcome to bring the product to the market (e.g., necessary investments, need for new partnerships)? Did participation in the AAL project help you to overcome these challenges? If so, how?”</i></p>
For Type 2 only: Actions needed to launch the developed AAL product/service & Way forward for the AAL product/service	<p><b>Survey data:</b></p> <p><i>Answers to Q46 in 2023 IA Survey</i></p>
	<p><b>Interview insights:</b></p> <p><i>Interviewee(s) answers to the questions:</i></p> <ul style="list-style-type: none"> <li>▶ <i>“What are the necessary next steps to effectively launch your product (e.g. additional investments, need for new partnerships, etc.)? How did AAL contribute to these?”</i></li> <li>▶ <i>“How do you see the way forward for your product?”</i></li> </ul>



For Type 3 only: Actions needed to further develop and launch of the AAL product/service	<b>Interviewee insights:</b> <i>Interviewee(s) answers to the questions: “What are the expected steps needed from this stage onwards to further the development and if applicable already: the launch of your product/concept?”</i>
<b>(Expected) End-users and paying customers</b>	
<b>(Expected) end-users</b>	<b>Interview insights:</b> <i>Interviewee(s) answers to the question:</i>  <i>Type 1 success story: “What type and how many end-users are you targeting and reaching with your product?”</i>  <i>Type 2 success story: “What type and how many end-users will your AAL solution target?”</i>  <i>Type 3 success story: Which (type of) end-users will your expected AAL solution target?”</i>
<b>(Expected) Impact on end-users</b>	<b>Interview insights:</b> <i>Interviewee(s) answers to the question:</i>  <i>Type 1 success story: “What has been the impact of the developed product on end-users? Please describe/give examples.”</i>  <i>Type 2 success story: “What is the intended impact of the developed product on end-users? Please describe/give examples.”</i>  <i>Type 3 success story: “What is the intended impact of the expected product on end-users? Please describe/give examples.”</i>
<b>(Expected) paying customers</b>	<b>Interview insights:</b>  <i>Type 1 success story: “What type of customers, and how many of your customers, is currently paying for your product?”</i>  <i>Type 2 success story: “Which type of customers, and how many customers, are expected to pay for your AAL solution?”</i>  <i>Type 3 success story: “Which type of customers will your expected AAL solution target?”</i>
<b>(Expected) impact on turnover and growth</b>	
<b>(Expected) impact on turnover and growth</b>	<b>Interview insights:</b> <i>Interviewee(s) answers to the questions:</i>  <i>Type 1 success story: What has been your total turnover generated from the product? What turnover do you expect in the coming year? Did the developed product contribute to the growth of your enterprise (in terms of jobs or turnover)?</i>  <i>Type 2 success story: Which turnover do you expect the first year after the launch? How do you expect the product to contribute to the growth of your organisation (in terms of jobs, turnover, markets,...)?</i>



	<i>Type 3 success story: “How do you envisage the expected product to contribute to the growth of your organisation (in terms of jobs, turnover, markets,...)?”</i>
<b>Any other impacts</b>	
	<p><b>Interview insights:</b></p> <p><i>Interviewee(s) answers to the questions: “Any other impacts of project participation that were not yet discussed?”</i></p>

