



Certified smart and integrated living environments for ageing well

Stakeholder Workshop – Event report

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Executive Summary

Homes4Life (H4L) project aims at addressing the challenge of ageing in place for older people, in a living environment that corresponds to needs and preferences that evolve over time. It will do so by contributing to the development of a new European certification scheme (CS), based on an inspirational and realistic long-term vision of people's needs and requirements in a holistic life-course approach. It will also help developing better living environments integrating construction and digital solutions where this is beneficial.

As part of Task 2.2, H4L partners have organised a "Stakeholder workshop" which objective was to expose the first results obtained in Tasks 2.1, 2.3 and 2.4¹, but also to receive all the opinions, comments and inputs from the audience. H4L partners will use this material to fine-tune their research, to understand each stakeholder's concerns, etc., in order to draw the most coherent, inclusive and functional CS.

The workshop gathered 58 participants in Brussels, among them expert members of the H4L expert board and stakeholders from a wide array of sectors (older people networks, public authorities, research institutes, consulting firms etc.) all across the EU. It was divided in 3 sessions covering the different parts of the preliminary work:

- Session 1: Age-friendly housing today and tomorrow
- Session 2: Vision 2040 for age-friendly environment in Europe: potential scenarios and the stakeholder roles
- Session 3: From taxonomy to certification - priorities and concerns.

The inputs of the participants have been gathered during roundtable sessions by Homes4Life partners and compiled in this report. Partners especially expected feedbacks on the following aspects:

- Level of awareness of stakeholders
- Propositions of success factors and barriers for the implementation of the CS
- Comments about the Vision 2040 already prepared by the consortium
- Input on what the role of each stakeholder should be in the definition and implementation of a CS on age-friendly housing (AFH)
- Priority areas and requirement for the development of a taxonomy and CS
- Implications for the operational characteristics of the CS.

¹ Task 2.1: "Vision – Desktop research"; Task 2.3: "Vision document" ; Task 2.4: "Working taxonomy".

Even if many diverse inputs have been provided, a few of them seem to particularly stand out. They are briefly commented below².

- **An overall positive feedback** was received on the idea of a CS, the first works carried out and the vision 2040. To be noted though: the terminology should be clarified in order to avoid confusion between e.g. “vision”, “certification scheme” and “taxonomy”.
- The **level of awareness around these topics seems to be growing in Europe**: ageing population and AFH is a pan European matter. Significant differences in the context and management can be noticed among countries or regions though.
- **Most initiatives seem to emerge at a local level**, apart from a few initiatives from front runners. Many local projects across Europe have been shared by attendees.
- The **public sector is seen as the principal driver** to change practices, to disseminate on the topic of age-friendliness, to implement related-policies, but also to share on the potential benefits of a CS.
- However, **oppositions were observed on regulations**. Most stakeholders consider they are needed to draw standards and encourage housing adaptation. But some were opposed to such CS: they do not welcome an extra regulation, whereas their local requirements/standards/CS are already working. They can see them as potential interferences, and consider design guidelines potentially more efficient.
- Though **all stakeholders have a role to play in the improvement of the situation**, most seem open to exchange and share good practices, for instance through adapted new platforms.
- **The potential lack of funding** is a main concern for stakeholders. A financial system and incentives must be found, in order to launch projects. Tenants and landlords especially might not have enough resources to start renovation works on their properties.
- The **lack of information/knowledge** is also a major barrier to the adaptation of housing. Not only from the tenant or landlords, but also from the construction sector, architects, etc.
- **Technologies and ICT** might bring answers or new possibilities. Therefore, they must be fully integrated into the CS. Provided that the readiness and savviness of end users is taken into account, as well as their affordability.

² NB: those elements do not necessarily reflect the opinions of the Homes4Life consortiums, but the sole opinion of participants who brought them.



- Concerning the **form of the CS**, four notions seemed to particularly stand out for most participants:
 - **holistic approach**, covering all parameters and opinions
 - **simplicity**, enabling all stakeholder to implement it with little effort and resource
 - **adaptability**, for all kinds of buildings, owners, uses, etc.
 - **inclusiveness**, so that all stakeholders and inhabitants can participate. Psychological factors concerning older people (e.g. acceptance of ageing) should be considered in this reflexion.

With these feedbacks and discussions, the Homes4Life consortium will move forward to the next steps of the project. The collaboration with the stakeholder group will contribute to the development of the KPIs framework.



Acronyms and abbreviations

AFH	Age-Friendly Housing
CS	Certification Scheme
H4L	Homes4Life
ICT	Information and Communication Technologies
IoT	Internet of Things
WHO	World Health Organisation

1 Introduction

Our living environments have a tremendous impact on our health and wellbeing. Ensuring their suitability and adaptability to people's needs and preferences – including when these needs and preferences evolve over time – is one of the most effective approaches to respond to challenges brought to us by Europe's ageing demographics.

Homes4Life addresses this challenge by contributing to the development of a new European certification scheme. It will be based on an inspirational and realistic long-term vision of people's needs and requirements in a holistic life-course approach. It will also help developing better living environments integrating construction and digital solutions where this is beneficial.

As part of Task 2.2, Homes4Life partners have organised a “Stakeholder workshop” which objective was to expose the first results obtained in Tasks 2.1 “Vision – Desktop research”, 2.3 “Vision document” and 2.4 “Working taxonomy”, but also to receive all the opinions, comments and inputs from the audience. This should enable Homes4Life partners to better target topics to tackle in their research, to hear about existing certification examples, to understand each stakeholder's concerns, etc., i.e. to draw the most coherent, inclusive and functional Homes4Life certification scheme.

The workshop took place on Tuesday, 11th June 2019 in Brussels at “Science 14” venue (14b rue de la Science, 1040, Brussels). It gathered 58 attendees, among which Homes4Life partners and 9 members of the expert board. The other attendees came from a wide array of sectors: health-related associations, older people networks, research institutes, universities, consulting firms, public authorities, economic sector, engineering, etc. (see in [Appendix 1](#): Organisations and countries represented).

The workshop was organised around 3 sessions. Each one consisted in one presentation of the topic, followed by discussions in small groups (roundtables):

- Session 1: Age-friendly housing today and tomorrow
- Session 2: Vision 2040 for age-friendly environment in Europe: potential scenarios and the stakeholder roles
- Session 3: From taxonomy to certification - priorities and concerns

See also [Appendix 2](#): Agenda of the workshop and [Appendix 3](#): Pictures of the workshop.

In this report, we will summarize the main inputs provided by the workshop attendees. It does not necessarily reflect the opinions of the Homes4Life consortiums, but the sole opinion of participants. The consortium will try to take into account the different points of view when developing the Homes4Life certification scheme.

2 Session 1 – Age-friendly housing today and tomorrow

2.1 Level of awareness

Participants were firstly asked about the level of awareness of age-friendly housing in their sectors, group of persons represented, countries and places they might know.

Very diverse levels of awareness across European countries and regions

European countries have witnessed the rising issue of population ageing and thus the level of awareness globally grows. However, during discussions, it clearly appeared that very different levels of awareness can be identified among Member States.

Important differences can be observed as well within a same country. Awareness and subsequent actions are mostly seen at a local or regional level. This is especially the case in Spain, where regions are autonomous. Similar situations have been reported in the UK, USA and Canada. Likewise, initiatives from the private sector (health-care and construction sectors) can also be found at a local level. Hospitals and research centres appear to be, potentially, good drivers of raising awareness.

Awareness can remain very theoretical. Even if public authorities know about the ageing-related issues and even if studies are made, concrete actions are not always initiated. There is besides a general lack of pro-activity: making people aware of age-friendly housing is important, but also making them anticipate long enough the potential adaptation of their houses long before the apparition of issues linked to ageing (disability, accessibility, etc.).

Inconsistencies and other priorities

There seems to be incomplete legislations and/or low level of implementation of age-friendly measures. Age-friendliness is, indeed, not a priority in the political agenda. It is overthrown by other pressing issues such as climate change, social housing, energy poverty, making housing affordable for young people, etc. There seems to be a relatively high awareness in Belgium, but authorities still consider housing when it is about poverty, hardly ever in the ageing context. Other programmes are sometimes only partial. For example, in the Basque Country (Spain), a programme aims at removing accessibility barriers, which mostly focuses on bathroom adaptations.

At the same time, several countries, such as the UK, have seen tremendous budget cuts in public institutions, weakening the wiggle room for solid housing adaptations. Thus, adaptations become the only responsibility of inhabitants.

Finally, officials show signs of confusion when it comes to the definition of age-friendliness. It is often confused with disability, which results in enforcing policies concerning only accessibility. Subsidies in Spain and France are available, but it is reported that they are mostly about accessibility too.



Examples of initiatives

Even though workshop attendees pointed a global lack of awareness or a lack of holistic projects/programmes, many other brief examples in European countries have been provided. Almost all of them emerge from public authorities' initiatives:

- Slovenia has adapted homes and then proposed them to 65+ seniors
- In Asturias (Spain), it is since December 2018 mandatory for all type of constructions and buildings to be adapted and accessible to all types of populations, with subsidies made available for such adaptations
- In Bizkaia (Spain), authorities have started to measure the number of people under this kind of needs and policies have been adapted.
- In the UK, many initiatives have emerged such as housing associations, strong telecare network, wheelchair accessibility policies, retirement villages, etc.
- Other initiatives have been established in Finland, in the Netherlands, Italy and Spain, but mostly at a local or regional level.

But if the “sustainability” of buildings is certified already (examples: WELL and BREEAM certification schemes for sustainability in office buildings ; the Netherlands imposing to have an energy label A to E when an owner sells his house), the notion of “age-friendliness” is not yet really – or at least holistically – being certified.

It is interesting to note that, according to an attendee, the initiatives and offers of adapted houses is mainly done outside big cities (at least in France). It is successful there, with a good implication of social housing. But it has not reached large cities yet, where the visibility – and consequently the power of influence on other places – would be much higher.

2.2 Obstacles and success factors

Participants were asked to give their thoughts on what could be the success factors and the main barriers to a good certification scheme.

2.2.1 Obstacles

Funding capacity and economical parameters

Funding appeared to be one of the main issues that stakeholders identified. Populations tend to rely more on their local public institutions to implement social policies such as housing adaptation. However, many budget cuts at national and local level have made it difficult to undertake efficient measures. Besides, important shares of the building stock are owned privately. It seems rather complicated for the public sector to invest in them, unless a national regulation made age-friendly housing adaptation compulsory.



There are also very little financial incentives for adaptation. Older people don't necessarily have the money to renovate their houses. Thus, they might need a loan from their bank, which can be much more complicated than for other age categories because of the risk their life expectancy represents. In parallel, many private landlords can't afford to invest in adaptation because they rely on the rents for their pension.

Technologies

Despite its usefulness, the general use of technology to help keep people at home may have some downsides and limits. It has been observed that IoT and ICTs are, most of the time, focused on energy efficiency and not so much on home comfort. Investments often lack a holistic approach on smart homes and do not take into account other dimensions than "smartness". The lack of technology literacy by this age group represents another barrier, that could be toned down through trainings.

Housing market

The state of the housing market is not at the advantage of older people and adaptation projects. Currently, the housing market and social services tend to be disconnected, which results in a building environment poorly adapted to the needs of the final users. Especially in rural areas which have little access to technology, transports, services, etc.

There is also a significant housing shortage all over Europe. The existing stock is massively inappropriate to disabled and older people. Swedish cities are identified for instance as clogged housing markets, making it especially difficult for younger and older people. This issue apparently occurred because of the large market deregulation. In some countries, such as Malta, private companies lowered the number of new constructions projects, which had for consequence to increase prices of the existing stock and to make their business more profitable. On this issue, Belgium is reported to be the most democratized market in Europe.

Regulations

There is a significant antagonism of ideology among the workshop participants when it comes to regulation. Some stakeholders consider that policy makers need to set the level and draw up standards to encourage housing adaptation. That is the case for Malta, when government provided massive funding to create affordable rentals for older people. However, others think that regulations for buildings can be an interference especially for people lacking of law savviness. Some stakeholders consider that a certification is not the way to go and that design guidelines might be more efficient. This means that imposing a certification scheme might not be the best way, and that it could be more beneficial to leave it voluntary-based, at least at an early stage. Besides, it is never within the powers of its developers whether a certification scheme, norm or guideline becomes mandatory. That is a governmental prerogative (international, national, regional, local governments).



Psychological aspects and lack of alternatives

Ageing is a sensitive topic and the psychological impact it has on people should be taken into account. People are very attached to their home and might not want to move to a more adapted type of housing. Pushing older people to adapt their home can be hurtful, as they might not be ready yet to accept the idea of needing extra support for the future.

Also, the trend has mostly been to increase nursing homes, where older people don't always accept to go. Since they usually don't know what can be done to stay in their current house nor the direct benefits on their daily lives, they basically don't see anything in between their current unsuitable house and a retirement home.

Relationship between stakeholders

All the stakeholders concerned by age-friendly housing don't necessarily "speak the same language". The private sector is seen by participants either as the main driver or as an untrustworthy body. For the latter case, the main argument was that private companies only invest in profitable projects: accessibility and age-adaptation will be disregarded because of a low return on investment, the housing price will significantly rise, or homes will be smaller in order to sell as many units as possible. This kind of opposition can be a strong barrier to the implementation of a certification scheme.

Education

Finally, an aspect shared by many was the lack of trained professionals that are needed to implement a certification scheme, to design and construct age-friendly houses, but also to inform end-users about the benefits of age-friendly housing. Stakeholders must develop trainings adapted to the new needs of such projects.

2.2.2 Success factors

Success factors are actually drivers that the certification scheme should include or take into consideration, in order to overcome obstacles covering the same categories previously looked at.

Funding capacity and economical parameters

Implementing new standards, renovating or building new buildings is very costly. Therefore, the access to funding, whether it is for individuals, private sector or public authorities, seems to be the main concern of stakeholders.

Regulations are viewed as the main potential incentive to financing age-friendly housing. The certification is considered as a potential lever to create such regulations, and also to help tenant and older people in obtaining loans from the bank. Some mention that it appears to be economically more viable to keep older people in their home than in care facilities. If proved, this would be another lever to make regulations



evolve. An example can be taken from Finland, where funding is apparently available for home retrofitting for accessibility purposes (e.g. lifts in existing housing stock).

Technologies

Technologies come into the game as a service provider for the people in need of care. Telemedicine through IoT and ICT devices is a potential tool, if combined to a good access to the Internet. This will provide the possibility to maintain people at home and overcome, to a certain extent, the issue of access to health services, doctors, etc.

Housing Market

For the certification scheme to be efficient, the housing market needs to be conditioned. It is necessary to ensure good quality housing, that are flexible enough to easily welcome future renovations. Then, all public housing construction programmes must ensure a decent access to services (public transport, supermarket, public administration, etc), even in overcrowded cities.

Regulations

Public authorities have a major role in incentivizing stakeholders. Strong policies could help make or keep housing adaptation affordable by imposing standards for new and existing buildings. It could help regulate the demand by imposing a greater rate of adapted housing in neglected areas.

However, some reported that regulation can make home adaptation more difficult because owners don't always have the technical and financial capacity to change their old building/ house. Regulation should, thus, be mainly enforced on public and/or new buildings. Adapted legislation should be planned for the older housing stock, probably on a step by step approach. In other words, for these participants, we should establish high standards for new buildings but only lower ones for existing ones, at least in a first phase.

Psychological aspects

Public authorities are the best positioned to raise awareness among all stakeholders – from users to builders. The health sector is at the forefront of this awareness campaign as they are more trusted by the targeted population.

However, a project in Spain led by a large private pension funds features ethnographic research on how people make decisions and want to live in the future. This shows that a large private actor can also be a champion and a leading force that attracts other stakeholders.

3 Session 2 – Vision 2040 for age friendly environment in Europe: potential scenarios and the stakeholder roles

3.1 Opinion on the vision presented

Participants were firstly asked to express their opinion about the vision 2040 presented in session 2. The vision described different scenarios, based on 4 “stereotypes” that reflect different levels of acceptance and implementation of age-friendly housing: “frontrunners”, “happy many”, “happy few” and “lion’s den”³.

The vision and its 4 scenarios

Most participants agreed with the proposed vision and have appreciated the separation between the 4 scenarios. However, several group discussions mentioned that it is hard to disagree with it, since it is still very broad. They advised to propose a less global vision, more focused on the end users and more concrete. In order to make it more intuitive, given that contexts are very different across Europe, it should contain clear example solutions and be more specific.

Very opposed ideas have been then expressed concerning which groups should be the main focus of the certification scheme, i.e. which one(s) should be better supported in order to enable the best impact and global uptake. Part of the attendees see the “front runners” as a main target, since they will represent attractive examples and provide good practices that can later be promoted around Europe. Others would prefer to focus on the happy few and happy many, since they represent a high volume and a large uptake potential. Finally, for other stakeholders, the category that needs the most a special attention is the “lions’ den”, that a certification scheme shouldn’t leave behind.

With those 4 categories, the objective should also be to ease the evolution towards upper groups, in order to have a more efficient general improvement of the situation. Therefore, groups should remain open and we should provide a costs/benefits assessment of moving from one position to another (outlining the possible/necessary steps). Attendees defended that it is more relevant to identify and analyse potentials for improvement than to make a static assessment of current performance. This holds true as a general principle for the development of the certification scheme.

³ Further information about the 4 scenarios in Homes4Life deliverable D2.1.



Prerequisite of the vision & uncertainties about the future

It is necessary to propose a 2040 vision, but also hard to estimate the needs in the future. Since we can observe extremely fast changes lately, we have to ask ourselves questions about how the society will look like within a few years. For example, what will mean a household in terms of family size, of way of living, of mobility, etc.? Will we still have the same values? What will be the technology savviness of older people (do we consider that they will be able to use the technologies provided by the standards)? How expensive will be renting a house? Etc.

For some attendees, the vision was not clear enough about those assumptions. It needs to be more operational. A progressive approach based on historical and cultural contexts should be included.

No need to reinvent the wheel

Many participants mentioned that there is no point in invented something totally new. It would make more sense to re-use (and adapt) what has already been done by others, or base our work on good practices already known. Some countries have very advanced schemes already across Europe. Some are very specific, other much wider. An interesting initiative has been launched by the project DigitalHealthEurope⁴. It enables to link two authorities (twinning system): one that has already implemented solutions regionally or nationally, that will share its experience with another one ("twinning adopter") that wishes to innovate digital health services too.

The Netherlands do have regulations concerning accessibility, but very few for other aspects of age-friendliness. Some of them are even self-certification schemes⁵, which can also be found in Rhône-Alpes Region (France) as well.

Misunderstandings

A few people at one table did not fully understand the presentation. They especially wondered:

- If the categories were about people or places, since the terminology was confusing
- If the stereotypes described different scenarios to be applied by 2040, or current contexts/typologies
- Where would it be applied, by whom and how it would operate

⁴ <https://digitalhealtheuropa.eu/>

⁵ "The principles of self-certification are based on giving people who are competent in their field the ability to self-certify that their work complies with the building regulations without the need to submit a building notice and thus incurring local authority inspections or fees": https://www.planningportal.co.uk/info/200137/how_to_get_approval/77/where_to_get_approval/4

- If our objective was to come up with a new certification scheme, or to be integrated into existing certificates, e.g. mandatory energy performance certificates (EPC)?

The terminology was also not always understood. Therefore, the links between the vision and the taxonomy wasn't clear (do they feed each other, or are they separated?). Finally, it has been raised that it would be more intuitive to represent scenarios displayed on an axes system. However, it has not been mentioned what those axes should be, nor how many.

3.2 Role of the stakeholders

In this second question, participants were asked what the role of each stakeholder should be in the definition and implementation of a certification scheme on age-friendly housing.

Participants agreed that the cooperation of all the many stakeholders involved in the process is a crucial success factor. But everyone is conscious of the implementation difficulties, due to the large range of responsibilities and interests. Here below are a few shared and non-shared of those responsibilities given by the participants.

A common effort

Each kind of stakeholder should first of all analyse what it is currently doing and identify what it could improve in terms of attitudes, policy making, business model, conditions for purchasing services at home, taxation system for rental housing, corporate taxes for builders, etc. Then they should see certifications as a way to facilitate these changes.

Stakeholders of all sector should work together, in order to enable this holistic approach targeting all domains: age, health, energy, accessibility, etc. Therefore, structures that can enable this multi-stakeholders discussion have to be built. For example, at least in a 1st step, organise a webinar to initiate a virtual ecosystem. This could take the form of co-creation platforms such as living labs. We could apparently take as an example what is done in the health and care field. Also, one-stop shops could be created, together with public authorities.

All voices should participate in this process. It is e.g. important that stakeholder ensure the participation of older persons themselves and of marginalized groups such as women living alone with a small budget. Visiting older people homes / centres could be a good starting point.

The uptake of new standards and technologies also implies to train properly engineers, architects, social innovators, digital innovators, carers, construction workers, etc. that can be concerned by age-friendly housing. It is a common responsibility for stakeholders to ensure the emergence of such training.



Stakeholders - maybe more from the public and non-profit sectors - should as well see themselves as facilitators for the uptake of technologies and standards. The design and implementation of standards is of course necessary. But we also need to share show cases, success stories, disruptive examples, etc. and to disseminate good practices. If we want to reach a 2040 vision, we need a very clear narrative of what has to be done and of the potential benefits (especially economic benefits).

Public authorities and non-profit sector

Public authorities and social housing are often seen as the most important stakeholder. The private sector must be included, but should not have the last word on social strategies, as it is the sole role of public entities. It is important, as well, to determine the role of each stakeholder as such initiative have many different intertwined actors. As such, implementation has to be closely monitored by public authorities.

Public authorities have the capacity to propose or impose regulations, technical rules, new laws, policies, etc. on a vast array of identified issues: accessibility, rehabilitation of buildings, energy efficiency, etc. Therefore, they can significantly make the situation evolve.

Besides, public authorities should have an important role concerning the promotion of the certifications and raise the awareness on the benefits of age-friendly housing. This can be done across Europe, within a Region or among private companies (e.g. initiatives launched by Housing Europe).

Also, the on-site position of public authorities should enable them to help other stakeholder in defining what "housing" means and in drawing appropriate public procurement schemes. They can thus team up with non-profit stakeholders, in order to implement a real needs, skills and capabilities assessment. Those will enable to provide clear guidelines and support to future users.

Finally, the role of public authorities is also financial. They should invest in age-friendly housing and give tax breaks (e.g. reduction in corporate tax or rent reductions) to incentivize property owners to certify the property using the H4L-scheme too.

Private sector

Construction companies should always be present within the discussions, given that they are the ones in contact with clients. Together, they will identify the problems, decide to modify an existing building, etc. They can therefore assess if a certification scheme can be implemented and to which extent.

Also, the private sector has the potential to invest in projects that stimulate age-friendly housing. But they of course have to develop an adapted business model. The finance sector for instance should identify the right and most promising test beds and provide them financial support.

Standards must be well understood by builders and technicians. Therefore, trainings have to be developed in parallel. Also, insurance companies, banks, real estates and

developers might be interested in the certification in order to contract upon an assessment of age-friendly housing.

Finally, the ICT industry should provide standards for the technologies that will provide new services to the people. It is not well organised today. They must also explain their technologies and how they can benefit to age-friendly housing or “all age” housing.

3.3 Expectations from the certification scheme

In a third question, participants were asked to present their expectations concerning the certification scheme. Since many answers to this question had actually already been discussed in the two previous questions, only the additional inputs are presented below.

It has been repeated during roundtables that a certification scheme should be “need-based”, i.e. led by the needs of final users (older people) and not by the solutions themselves. Therefore, stakeholders should ask first to the people what they want, before developing standards and technologies. Such needs, that can be translated into indicators, might simply concern the lifestyle, being warm, cooking, cleaning, access to the toilet or shower, etc.

EuroACE for instance promotes the transformation of EPC (Energy Performance Certificates) into BRP (Building Renovation Passport). The latter are more dynamic documents which show the energy performance of a building, making as well recommendations on renovation works over time, personalised/adapted to the inhabitant. EuroACE insist that, through BRPs, renovation works should always take into account the inhabitant's opinion and needs. This could enable to couple energy improvement with accessibility, age-friendly, reconversion, etc. during renovations.

The social focus seemed important for the attendees too: such certifications can enable to increase the social cohesion and integration. The scheme should also not only be a technology label, but something broader, that raises awareness about the society and ageing.

Finally, the economical aspect of such a certification scheme has been discussed. It was agreed that an economic model and financing standards also have to be developed, in order to ease the uptake of AFH.

4 Session 3 – From Taxonomy to Certification: priorities and concerns

Participants were asked to react to the proposed taxonomy and certification scheme. Their inputs were expected to answer to main questions: what are the priority areas for development of taxonomy and certification requirements? What does that imply for the operational characteristics of the certification scheme?

4.1 Shape of the certification scheme

Simple

Stakeholders' discussions led to the conclusion that the certification needs to be simple enough to understandable by all, providing decent and affordable standards. Participants were afraid that the scheme, in its current state, might be too complicated to implement for social housing organization and private individuals. Also, the goals and how it is useful for each stakeholder has to be clearly put up front. Designers, architects and manufacturers might also experience difficulties because of the multiplication of certifications. The solution proposed is to have a single certification scheme, merging or be inspired by all the ones already implemented. Simplicity would enable as well to avoid potential contradictions or overlaps within the whole certification scheme.

For some, simple could be achieved by being only a check list of requirements easy to verify, such as having windows or doors large enough or on stairs and bathrooms safety (e.g. in the UK). Others argue that there are too many categories in the taxonomy. For them, the focus should be on elements on which the tenants/owners have a direct impact.

The idea of “not reinventing the wheel” has been brought again in the discussion, given that some persons consider easier to get inspiration from what has already been done elsewhere and to create a much broader version of it.

Affordable

A main concern for the workshop attendees was also that we must be careful that the standardization does not have too much of an effect on housing prices. As it has already been mentioned previously, older people can constitute an economically fragile category, that cannot afford expensive modification of their homes or to rent a new more expensive house.

Standardized and reliable

The taxonomy could be based on already existing tools such as the “[Active Ageing Index](#)”. Such action could help identifying what an age-friendly home enables to do.

The Active Ageing Index could present clear and more accurate results from living in an age-friendly home and adapt certifications accordingly.

More guidance needed

What owners want, at least for private individuals, is not to be constantly judged, but to be helped to reach standards on a clear and simple way. This is not the case currently, especially concerning renovations. Therefore, they would like to be assisted during all the process. If a “check-list” scheme is adopted, it should be instructive and provide guidance to achieve renovations up to the expected standards.

Quantifiable... or not

There are however two opposed visions concerning the quantifiable character of the certification. On one hand, it seems quite simple within a “check-list” to impose figures or thresholds to respect for many aspects of an age-friendly housing. Some stakeholders consider that quantifying parameters/requirements is the only way to make the certification scheme efficient or even applicable.

On the other hand, some argue that it is not always possible to provide numbers, especially when it comes to softer requirements, such as feeling safe at home, a requirement often mentioned by end-users at the round tables. It is therefore important to leave space as well for more simple orientations (e.g. visibility of stairs, proximity with transports, well-being, etc.).

4.2 Targeting the right buildings

The stakeholders consider that certification schemes for age-friendly housing have to cover all the building types where older people are living. But since older people usually are not planning on moving in to new places, the certification should target the existing stock in priority. Obviously, considering the age and state of the existing building stock, it would be easier to implement it in new constructions.

In the future, it might become compulsory to adopt standards on age-friendliness. This concerns the existing building stock of course, but we should be careful not to weaken owners of those buildings which can anyway not meet all the criteria, and hence significantly reduce the value of the building. Certain aspects should not disqualify buildings: if a lift can physically not be installed (e.g. the Grachtenpanden – Dutch houses located beside an urban canal), should it directly exclude a building from being certified?

Discussions came around the idea that the certifiability of homes should be measured in increments, adapted to the target type of building and to possible future evolutions. This point needs to be clarified to avoid resistance from home owners.

The certification scheme will have to be noticeably different depending on who predominantly owns the building stock. In countries like the Netherlands, a large part of the building stock is built by the government. This share represents only a tiny part of the building stock e.g. in Belgium, where it is mostly private. The CS will need to adapt whether it has to convince public or private stakeholders. It could therefore be interesting to define initially a typology by building type and owner

According to the audience, the extent of the certification scheme should be better defined: the question of the right targets also implies to define what is considered within a building. For several participants, a building cannot be separated from its environment and inhabitants. But how far does the “environment” lead us, for example considering the question of accessibility and transportation? How to certify the “social” aspects? And how to certify things whose evolutions/changes which cannot be controlled? Long discussions have been held around this issue. These questions should be considered in order to assess how the building and its purpose will be inserted into the neighbourhood, district, village or city.

One approach would be to certify only the “house”, not the “home”⁶. Another proposition was to have a modular system, enabling to have separate categories of dwelling, buildings, surroundings, etc., and to certify different fields, since many of them will be out of our scope (e.g. it will be complex to certify a building for having an easy access to health services, given that health centres might migrate at some point. This is out of the control of property developers).

4.3 Focus and scope of the scheme

All the workshop attendees agreed that a certification scheme is needed. But given that they were coming from very diverse sectors, their visions of what should be entailed were very different, though not necessarily contradictory.

Well-being

For several stakeholders, the primary focus of the certification scheme should be on the well-being of inhabitant and “liveability” of buildings. This is of course related to social, economic and dignity aspects. A proposition was actually made to certify, or at list index, the notion of “liveability”. Information about it can be found for instance in the Active Ageing Index.

⁶ The term “home” would encompass different forms of living environments (apartments, house, etc.), infusing a sense of belonging to the place where people live and have their memories.

Scale and replicability

An important aspect was the scale and potential of replicability. In the frame of Homes4Life, some would favour a very specific certification scheme that takes into account the local environment, context, cultural specificities and existing local policies. If this is not the case, they would consider that the scheme would have little chances to be efficient or accepted (including clear local specificities would make it easier to understand the functionality of standards).

On the other hand, others don't consider it feasible, as there would be way too many parameters to take into account (or sub-categories). It simply doesn't seem feasible operationally. They would prefer a large-scale scheme, that could be adaptable to all countries and situations. This would be more adapted to a globalised standardisation market.

Holistic approach

Even if some participants would apparently prefer the scheme to focus on just a few criteria, such as health, comfort and accessibility, most were in favour of adopting a holistic approach (like WHO). It seems therefore important to include e-health, socialisation, interoperability, accessibility, care, affordability, etc.

A holistic approach is a matter of coordination, coherence, integration and multi-stakeholder involvement. This was done in the Netherlands by RijksbouwDienst. But older persons themselves need to be considered as key stakeholders, and not only as objects or targets: standards will directly impact their lives. A co-creation process including older and younger persons should be ensured at all stages of a project.

Another name has actually been proposed: the scheme should not just be called "age-friendly" housing, but "designed for all". Because age-friendliness is also about integration, buildings should be adapted to all generations and to the evolution in time of one's age, life and needs changes (life course approach).

New technologies

Connectivity is another important aspect to be studied. Given that new technologies will provide solutions and will play a large role in the future standards, we should include ICT tools (connectivity, telecare, tele solutions), IoT, etc. in the certification scheme.

But participants debated as well the possible antagonisms of technology with psychological aspects. Privacy is something that should not be forgotten and which can lead to rejection from inhabitants (e.g. due to a feeling of intrusion when installing sensors/cameras at home). Technology can be implemented in a respectful/wise way, but this should be carefully studied beforehand.

5 Conclusions

The discussions during this Stakeholder Workshop were fruitful, sometimes leading to passionate debates. H4L objectives received a positive response, confirming that ageing population and age-friendly housing is a pan European matter. Thanks to a very diverse panel, in terms of expertise and cultural background, the inputs spotted a light on the many contextual differences at national and local levels. There have however been confusions with the terminology used: vision, certification scheme and taxonomy. The consortium will have to clarify those terms in future events and reports.

The level of awareness seems to be growing in Europe, but mostly at a local level. Apart from a few initiatives from front runners, policy making and/or implementation seems insufficient. There is still a need to change practices and to disseminate on the topic of age-friendliness, but also to share on the potential benefits of a certification. The public sector is seen as the principal driver, even if each kind of stakeholder has a role to play in improving the situation. There is a common interest in teaming up and in sharing good practices, e.g. through new adapted platforms.

A main concern though is the economical aspect of age-friendliness. Financial systems and incentives must be found, in order to launch projects.

The definition and extent of the certification scheme opened to long conversations and sometimes very opposed views. But four notions seem to particularly stand out:

- holistic approach: because many parameters and opinions have to be taken into account in order for the certification scheme to be relevant.
- simplicity: most stakeholders would like to implement age-friendly concepts, but with little effort, little economic impact, and with the support of authorities.
- adaptable: the building stock is composed of different buildings, owners, uses, etc. The certification should be adapted to all, by being very broad or by allowing an incremental approach.
- inclusiveness: because all stakeholders but especially inhabitants themselves should participate in the debates and express their needs or worries.

Technologies and ICT might bring answers or new possibilities. Therefore, they must be fully part of the certification scheme. It will be important though to take into account the technology readiness and savviness of end users, i.e. older people, in the future.

New and interesting issues have appeared, which will enrich the discussion for the development Homes4Life's certification scheme. The different stakeholder profiles' inputs are very useful in order to continue with the work done until now. The continuous involvement of the experts' board (also involved in this workshop) will guarantee an interactive consultation process during the next steps of the project.

6 Appendices

6.1 Appendix 1: Organisations and countries represented

Organisations represented during the workshop (total: 43)

AAL - Active and Assisted Living Programme	Homes of the Principality of Asturias (VIPASA)
AARP - American Association of Retired Persons	INTER - Expert centre on accessibility and Universal Design
ADOM	International Society for Telemedicine & eHealth
AGE Platform Europe	Legrand Group
BAGSO - German National Association of Senior Citizens' Organisations	LiCalab Living & Care
Belgian building research institute	Older Women's Network
CERTIVEA	Old'Up
CNL - Confédération Nationale du Logement	Renopact bvba
Council Member Malta	R2M Solution
CSTB - Centre Scientifique et Technique du Bâtiment	RMIT Europe - Royal Melbourne Institute of Technology
Destination Loisirs	Senior International Health Association
Diputacion Foral de Bizkaia	Social Services Council, Asturias
ECTP - European Construction and Technology Platform	Swedish National Pensioners' Organisation - PRO
EHTEL - European eHealth Stakeholder Platform	TECNALIA
EIB - European Investment Bank	Thomas More
EMPIRICA	TNO - Netherlands Organisation for Applied Scientific Research
EPF - European Property Federation	TÜV SÜD Product Service GmbH
ESC	University of Utrecht
Eurideas	UPM - Università Politecnica delle Marche
EUROACE - European Alliance of Companies for Energy Efficiency in Buildings	Vlaamse Ouderenraad - Advisory body for the Flemish elderly policy
Eurocarers	VTT - Technical Research Centre of Finland
European Connected Health Alliance	ZAG - Slovenian National Building and Civil Engineering Institute



Countries represented during the workshop (total: 12)

Belgium
Denmark
Finland
France
Germany
Italy
Luxembourg
Netherlands
Slovenia
Spain
Sweden
United Kingdom

6.2 Appendix 2: Agenda of the workshop

Homes4Life
Stakeholder workshop
 Tuesday 11th June 2019, 13:00-17:30
 "Science 14", rue de la Science 14, Brussels

Objective: Gather experts' inputs in order to consolidate the Vision & Desktop research and the Vision Document for Homes4Life's elaboration of the certification scheme.

13.00 – 13.30	Welcome coffee and registration
13.30 – 13.45	<p style="text-align: center;">Introduction</p> <p style="text-align: center;">Presentation of Homes4Life project + Objectives of the workshop + Agenda and activities</p> <p style="text-align: center;"><u>Speakers:</u> Silvia Urria Uriarte, TECNALIA Alexis David, ECTP</p>
SESSION 1: Age-friendly housing today and tomorrow	
13.45 – 14.00	<p style="text-align: center;">Presentation</p> <p style="text-align: center;"><u>Speaker:</u> Estelle Huchet, AGE Platform</p>
14.00 - 14.35	<p style="text-align: center;">Roundtables</p> <p style="text-align: center;"><u>Moderators:</u> Nhu Tram (AGE Platform), Estelle Huchet (AGE Platform), Menno Hinkema (TNO), Alexander Peine (UU), Nadia Kamel (EUCA), Norman Egter van Wissekerke (TNO)</p>
14.35 – 14.50	<p style="text-align: center;">Wrap-up Session 1</p> <p style="text-align: center;"><u>All moderators</u></p>
14.50 - 15.05	Coffee break
SESSION 2: Vision 2040 for an age-friendly environment in Europe: potential scenarios and the stakeholder roles	
15.05 - 15.20	<p style="text-align: center;">Presentation</p> <p style="text-align: center;"><u>Speaker:</u> Prof. Gian Marco Revel, UPM</p>
15.20 – 15.55	<p style="text-align: center;">Roundtables</p> <p style="text-align: center;"><u>Moderators:</u> Gian Marco Revel (UPM), Sara Casaccia (UPM), Norman Egter van Wissekerke (TNO), Sylvia Urria (TECNALIA), Frans Sengers (UU), Alexander Peine (UU)</p>



15.55 - 16.10	<p>Wrap-up Session 2 <u>All moderators</u></p>
<p>SESSION 3: From taxonomy to certification - priorities and concerns</p>	
16.10 - 16.25	<p><u>Speakers:</u> Menno Hinkema, TNO Christophe Gerard, Certivéa</p>
16.25 - 17.00	<p>Roundtables <u>Moderators:</u> Menno Hinkema (TNO), Nhu Tram (AGE Platform), Estelle Huchet (AGE Platform), Hervé Duret (CSTB), Olatz Nicolas (TECNALIA), Nadia Kamel (EUCA)</p>
17.00 - 17.15	<p>Wrap-up session 3 <u>All moderators</u></p>
<p>Conclusion</p>	
17.15 – 17.30	<p>Conclusion & final Q&A Silvia Urria Uriarte, TECNALIA Alexis David, ECTP</p>

6.3 Appendix 3: Pictures of the workshop



Silvia Urra Uriarte – TECNALIA – presenting the overview of the project



Working session moderated by Dr. Alex Peine – Utrecht University



Homes4Life stakeholders workshop – Multiple parallel sessions



Session report by Prof. Gian Marco Revel – Università Politecnica delle Marche



Session report by Menno Hinkema – TNO



Session presentation by Estelle Huchet – AGE Platform