

Guidelines for age-friendly smart homes

The context

"Generally it is the environment that is disabling rather than the nature of the impairment itself."

M/473 EN, Ref. Ares(2010)578264 - 10/09/2010

This statement shows that environments that cannot adapt to different needs must be seen as the cause of disability. Therefore the environment needs to change by being accessible to all through **the development of age-friendly smart homes and environments.**

PROGRESSIVE ethical principles in the context of age-friendly smart homes

Autonomy and Empowerment

Smart homes carry the potential to promote the empowerment and support the autonomy and independence of older people. Existing standards that relate to smart homes focus mainly on the provider side. European standards on competencies of care providers are still missing. In moving forward with smart homes – in order to ensure that they consider issues around AHA – it is considered essential that the impact of older people needs to be better addressed. Therefore a European standard focusing on everyone but allowing for flexibility in relation to particular needs that may be experienced by significant numbers of older people could be of great help.

Inclusion, Non-Discrimination, Social Impact

The co-creation of products, services and also standards with older people as a relevant target group is highly important. The PROGRESSIVE guide on co-production aims to encourage national standardisation committees to reach out underrepresented user categories, offering the possibility to increase the value of the standardization work and to result in better products and services. For an inclusion it is also highly important to include all stakeholders. Accessibility of information and telecommunication and usability of public websites and their content are essential to offer an inclusion of older people and therefore prevent the digital divide.

Accessibility and Usability

Accessibility and usability is one key element for allowing social inclusion, care, protection, support, autonomy and empowerment with the use of ICT. Since the European Commission addresses accessibility in the European Disability Strategy 2010-2020 – where the Commission points to the potential use of standardisation as a tool to optimise accessibility, not only of the built environment, but also ICT – many standards already exist in the field. Nevertheless it remains very important to address accessibility and usability in new standards, for which the CEN/CLC Guide 6 can be applied.

Care, Protection and Support

Standards on specific health causes such as dementia ("Code of practice for the recognition of dementia-friendly communities in England") exist on national level. On international level they are under development since the ISO/TC 314/WG 2 focuses on Dementia inclusive communities. Furthermore informal standards such as guidelines, e.g. on how to implement integrated healthcare services, are available nationally. ICT in a smart home environment can offer support also in prevention and thus, when applied correctly, can have a positive effect on the health of older adults.



Interoperability

Interoperability for ICT on AHA – in PROGRESSIVE systematised using the 'LOST' (legal, organizational, technical and semantic interoperability) approach is an essential factor likewise in the smart home environment. Interoperability is not only important for AHA but for ICT in general.

Privacy, Safety, Security

As smart homes are founded on ICT and characterized by an increasing potential range of sensors and devices, issues of privacy, safety and security come to the fore. Standards addressing ICT for AHA for smart homes that are age-friendly in all above mentioned criteria are relevant to bring the needs to application, pointing on highly important aspects such as accessibility and enable privacy and safety to gather and respond not just to information that helps with the management of the home (energy or water usage, for instance) but also to information that relates to personal behaviours, lifestyles and their well-being.

Guidelines

The following guidelines for standards around ICT for AHA for age-friendly smart homes are specifically addressed to the **working group members** of the technical committees at international, European and/or national level developing standards that touch upon the **interconnected fields of ICT, AHA and smart homes**. These guidelines are meant to be considered at the **early stage** of the **standard development**.

1. In the standard, are the key elements of 'accessibility' and 'usability' addressed?

This means that the requirements should specifically take into account the accessibility and usability of the products, systems, services, etc. that is specified in the standard, thus avoiding the exclusion of certain user groups and generally improving its user-friendliness. These two elements are also the basis for promoting social inclusion, care, protection, support, autonomy or empowerment. For practical guidance, the CEN/CLC Guide 6 'Guidelines for standards developers to address the needs of older persons and persons with disabilities' should be consulted.

2. Does the standard address other key issues, such as interoperability, privacy, safety, security?

These aspects are important for ICT in general and especially in a smart-home environment in which a range of ICT products are interconnected and need to work seamlessly, safe and secure regardless of the provider or type of product.

3. Could the standard be relevant across borders?

This question should raise awareness on the importance of triggering standardization work on European and international level rather than focusing on national approaches.

4. Do numerous standards, guides, specifications and other documents exist regarding your topic?

In this case, the documents should be harmonised as too many guidelines are not user-friendly and harmonisation of the already existing standards and guidelines is crucial to promote the use or the development of tools beyond national borders.

5. Involve the users in co-design of standards where appropriate.

End users and age-friendly communities should be involved in the developing process of standards to ensure that the standardised products, systems and services cater to the real needs of older people. For practical guidance on how to involve these groups in the standardisation work the PROGRESSIVE 'Guidelines for user co-production in standards' can be used.

For more information or to receive a copy of the PROGRESSIVE Guidelines for age-friendly smart homes, contact:



info@progressivestandards.org



www.progressivestandards.org



[@ProgressiveAHA](https://twitter.com/ProgressiveAHA)