Digital Transformation & Silver Economy

SME opportunities to empowering citizens and building a healthier society

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Unit H3, eHealth, Well Being and Ageing

Silver SMEs final event – 21 February 2023
Session 1: The challenges of ageing in the EU rural areas

EU policy framework

Digital, data & ageing

European Commission

A Europe fit for the digital age

PRIORITY

Empowering people with a new generation of technologies

Ursula von der Leyen,
European Commission President

THIS IS EUROPE'S DIGITAL DECADE

#DigitalEU

The European Commission is working on a digital transformation that will benefit everyone. Digital solutions that put people first will

- open up new opportunities for businesses
- encourage the development of trustworthy technology
- foster an open and democratic society
- enable a vibrant and sustainable economy
- help fight climate change and achieve the green transition

European Commission

Digital Decade targets 2030

DIGITAL SKILLS

Adults with basic digital skills

NOW 56%
TARGET 80%

Employed ICT specialists

NOW 8.4 million
TARGET 20 million

DIGITAL INFRASTRUCTURES

Gigabit network coverage

NOW 59%
TARGET 100% of households

5G coverage

NOW 14%
TARGET 100% of populated areas
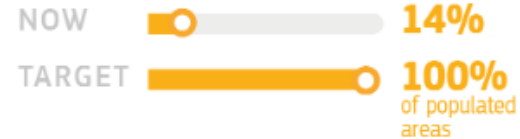
The EU production of semiconductors, including processors, makes up

NOW 10%
TARGET ≥ 20% of world production in value

There are **10,000 edge nodes** in the EU for **better, secure and sustainable data processing.**

By 2025, the first EU computer **with quantum acceleration** is paving the way for cutting-edge quantum capabilities.

DIGITAL TRANSFORMATION OF BUSINESSES

BUSINESSES USING

Cloud computing services

NOW 26%
TARGET 75%

Big data

NOW 14%
TARGET 75%

Artificial Intelligence

NOW 25%
TARGET 75%

SMEs with at least a basic level of digital intensity

NOW 60%
TARGET > 90%

There are

NOW 122
TARGET **Double** the number of unicorn startups in Europe

DIGITALISATION OF PUBLIC SERVICES

Online access to key public services (related to career, studying, family, regular business operations, moving)
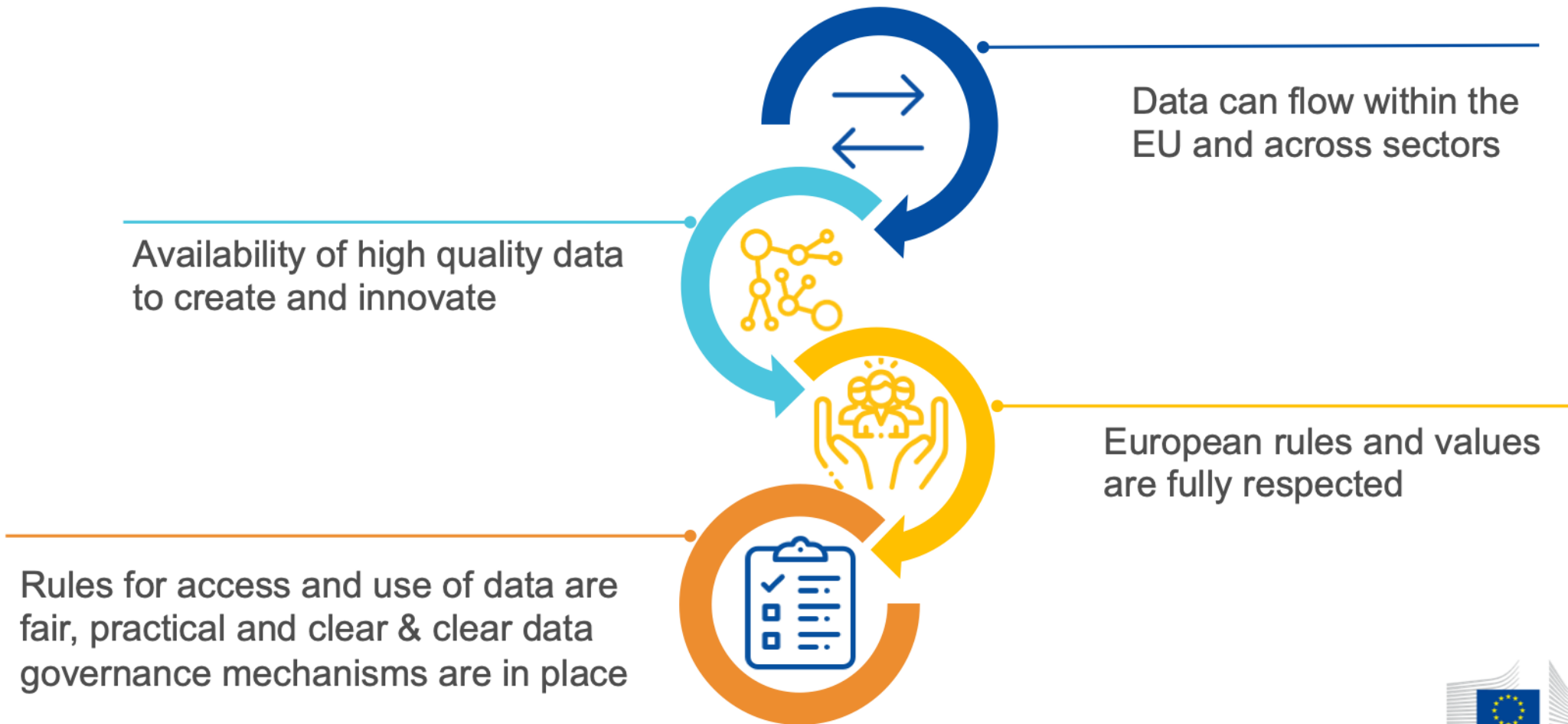
NOW 75/100 services for citizens   84/100 services for businesses
TARGET **All** services for citizens and businesses

TARGET 100% of Europeans with access to digital health records &

80% using a digital id

European data strategy

Making the EU a role model for a society empowered by data

A common European data space, a single market for data

Data can flow within the EU and across sectors

Availability of high quality data to create and innovate

European rules and values are fully respected

Rules for access and use of data are fair, practical and clear & clear data governance mechanisms are in place

European Commission

Health Data Space

OBJECTIVES

✓ Empower individuals through better digital access to their personal health data; support free movement by ensuring that health data follow people;

✓ Unleash the data economy by fostering a genuine single market for digital health services and products;

✓ Set up strict rules for the use of individual's non-identifiable health data for research, innovation, policy-making and regulatory activities.

Better diagnosis and treatment, improved patient safety, continuity of care and improved healthcare efficiency

Empower **individuals** to have control over their health data

Enable **health professionals** to have access to relevant health data

Electronic health records

Health data from apps and medical devices

Health data in registries

Assist **policy makers and regulators** in accessing relevant non-identifiable health data

Facilitate access to non-identifiable health data for **researchers and innovators**

Better health policy, greater opportunities for research and innovation

European Commission

EC Policies

- COUNCIL RECOMMENDATION on access to affordable high-quality long-term care – Q4 2022

- EU Care Initiative – Q3 2022

- Green Paper on Active Ageing, Q1 2021

- Long Term Vision on Rural Areas, Q2 2021

- Report on Demographic Change, June 2020

- Council Conclusions on "Mainstreaming Ageing in Public Policies", January 2021

- EPSCO - Council conclusions 'Human Rights, Participation and Well-Being of Older Persons in the Era of Digitalisation', 09 October 2020 (German Presidency)

- EPSCO – Council conclusions on "Demographic Challenges – the Way Ahead", 06 June 2020 (Croatian Presidency)

- EPSCO - Council conclusions on the Economy of Wellbeing, 24 October 2019 (Finnish Presidency)

- COM(2012) 83 : Taking forward the Strategic Implementation Plan of the European Innovation Partnership on Active and Healthy Ageing

- EPSCO - Council conclusions on Active Ageing (June 2010)

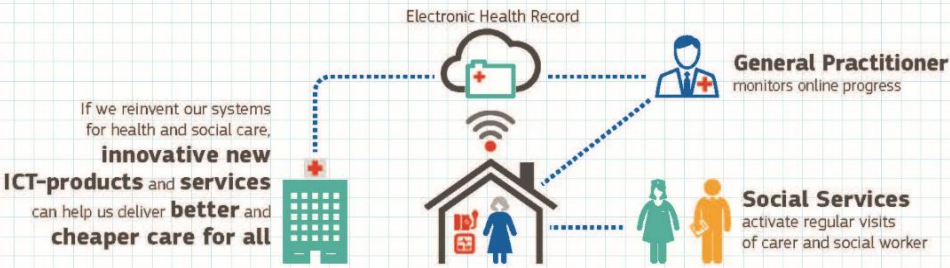- ECOFIN - Conclusions on age-related spending (May 2018)

ACCOMPANY
Beyond Silos
Carewell
CARER+
DEM@CARE
eWALL
FARSEEING
FATE
GIRAFF+
GrowMeUp
I-DON'T'T-FALL
INCA
inCASA
iStopFalls
I-SUPPORT
PERSSILAA
IN LIFE LONG LASTING MEMORIES
MARIO RADIO
ROBOT-ERA
SILVER
SOCIABLE
STOP AND GO
UNIVERSAAL

EU actions & initiatives

Ageing Well in the Digital World

MEETING THE CHALLENGE

We are living longer than ever before. In the past decade society has taken a leap forward in becoming more aware of some of the challenges that come with an ageing population and has started to address them.

The Active Assisted Living Programme, AAL, has been at the forefront of these efforts. Here we highlight some of the programme's achievements over the last ten years as a European support funding programme, while also providing a glimpse into the future.

Europe's ageing population presents many challenges

RETIREMENT 30%
Population is economically inactive in 2017, compared to 25% in 2007

LONELINESS 14%
Households who are composed of one person aged 65+

CHRONIC DISEASE 50%
People aged 55-74 who have a long-standing illness or health problem

CARE 446,000
will have 24-hour care needs by 2035, up from 233,000 in 2015

SEEING THE OPPORTUNITIES

Longer life is a gift, providing many opportunities for older people and the rest of society. AAL has funded the development of innovative applications and services thanks to the increased possibilities offered by digital technologies. These solutions help us continue to live our lives the way we want to as we get older.

SPENDING
Europeans over the age of 65 have a spending capacity of €3.7trillion

TECHNOLOGY
Older people are adapting their homes to be smart – the market is already worth €15.5billion

EMPLOYMENT
In 2015, the silver economy sustained 78 million jobs in Europe

GLOBAL SPEND
European tourists aged 65+ spend on average €53 a day - €66 billion a year

AAL PROGRAMME

European Commission

Objectives

Foster the emergence of innovative ICT-based products, services and systems for ageing well at home, in the community, and at work.

Create a critical mass of research, development and innovation at EU level in technologies and services for ageing well, including the establishment of a favourable environment for participation of SMEs.

Help create the market conditions for the industrial exploitation of healthy ageing products by providing a European framework that supports the development of standardised solutions and facilitates their adaptation to local, regional and national levels to account for varying social preferences and regulatory requirements.

AAL Programme

Ageing Well in the Digital World

- Responding to the demographic challenge

- Linking Technology with Ageing – EU AgeTech Industry

- User-driven innovation, close to market, SME participation

Coordinator: AAL Association (international asbl under Belgian law), website: http://www.aal-europe.eu/

Achievements AAL2 - Key Facts & Figuers

21 Participating States
16 EU MS
3 H2020 ass.
2 third-countries

Networking & community building
4800 AAL2 forum participants

AAL
Ageing well in the digital world

151 transnational R&D Projects funded
61% bringing solutions to the market

AAL Support Actions portfolio
65 projects benefited from AAL2Business support

Project Beneficiaries
40% SMEs
26% end-users
26% R&D&I actors
5% Large enterprises

Key facts (2014 – 2021)*:

- AAL2 brings together top research performing entities with SMEs & user-organisations

- Project beneficiaries: 40% SMEs, 26% end-users, 26 R&D&I actors, 5% Large enterprises

- 56.2% of AAL participants have not participated in H2020 before (62.8 for SMEs)

- Since 2014, total programme investments of EUR 308 million of public funding (121M Participating States, 109M EC and 78M beneficiaries)

Achievement booklet: http://www.aal-europe.eu/wp-content/uploads/2020/04/REVISED_AAL_8pp_new_goals_A4_LEGACY-DOCUMENT_ready.pdf

European Commission

*activities continue till mid-2025
40% of the projects are still ongoing (status end 2021)

SenseGarden

Sense-Garden creates garden-like spaces, which are adapted to dementia patient's personal memories. In this way, they facilitate creating awareness through activating senses, like sight, touch, hearing, balance and smell. Sense-Garden triggers past memories to remind dementia patients of important social connections, facts and experiences, which **improves their ability to communicate with their family and professional caretakers**. The visits in the Sense-Garden room take place together with a caregiver, a professional or family member.

Check it out: sense-garden.eu

Fearless

The Fearless Comfort System is a sensory alarm that detects accidents in the homes of some of society's most vulnerable people who wish to live in their preferred environment. Its uncomplicated design and concept illustrate the importance of simplicity when creating a commercially viable product.

Check it out:
aal-europe.eu/fearless
cogvis.ai
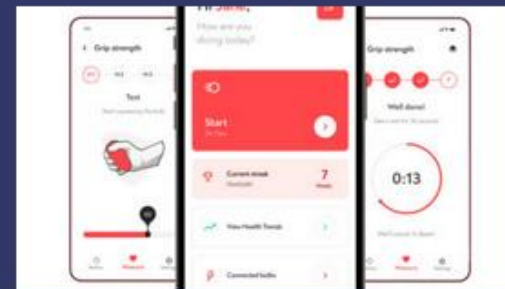
FORTO 2.0

FORTO 2.0 offers a commercial-grade muscle fatigability self-assessment system, with effective longitudinal data recording, prone to act as an early warning system for diminishing resistance to and delayed recovery from health stressors. Loss of intrinsic capacity is a health condition associated with ageing, rapidly growing in prevalence. It leads **to loss of independence, putting significant pressure on social and healthcare structures, due to increasing demand for services and related escalating costs.**
eFORTO is a unique novel approach to measure the capacity to recruit available reserves, by means of a user-friendly device, mobile app, and progress monitoring and analytics platform. It can be used independently by older adults or in a supervised care pathway.

Check it out: eforto.com

THCS

Enabling health and care systems transformation through research and innovation

EU Partnership on Transforming Health and Care Systems

High-quality, fairly accessible, sustainable, efficient, resilient and inclusive health and care systems for all.

2023-2030

- Increase funding opportunities and strengthen the research and innovation community
- Fill knowledge gaps
- Increase the ability to implement innovation
- Intensify cooperation among countries and beyond healthcare
- Increase stakeholders' involvement

THCS works embracing the whole knowledge and innovation cycle from fundamental research to implementation and transfer of innovation

European Commission

https://www.thcspartnership.eu/

Active and Healthy Ageing (AHA) Market challenges

ASPECT	DISCUSSION
Market complexity	AHA market in the EU was widely deemed to be **a difficult market to navigate in**, not only for start-ups but also investors and facilitators, as it is still an emerging one, especially compared to the US market.
Fragmentation	The current EU market was also seen as being **highly fragmented** with several limitations preventing its rapid growth, mainly highlighting complex and individually regulated healthcare systems, inaccessibility of necessary data, and lack of Europe-wide support.
Slow development	It was deemed **a slow market** in terms of the speed of adoption of innovative solutions, and in generating ROI, those two aspects were seen as being highly interdependent.
Target segment specifics	**Older population has** increased price sensitivity, conservatism in decision-making, and lack of trust in innovative solutions, especially technology-based ones, if compared to other segments.

https://innovation4ageing.tehnopol.ee/tools-and-outputs/

European Commission

Tools and Resources

The outcome of the Innovation for Active and Healthy Ageing project is an **innovation scale-up model** that is validated by stakeholders and complemented by:

- Implementation roadmap
- Impact evaluation toolkit
- Strategy for long-term investments.

On this page you can find general resources, such as IN-4-AHA's data protection policy and a link to our general feedback survey.

To find more, browse the tabs **"project outputs"** and **"external resources"** for an overview of project outputs and relevant materials for AHA produced outside of the project. Make sure to check our interactive **participatory design toolkit**, the **innovation scale-up playbook**, and the **IN-4-AHA scale-up model**.

Empowering the innovation for scaling active and healthy ageing

https://innovation4ageing.tehnopol.ee/tools-and-outputs/

Horizon Europe - Destination 1: Topics in 2023 – 2024

- HORIZON-HLTH-2023-STAYHLTH-01-01: single stage
  The Silver Deal - Person-centred health and care in European regions

  - Closure: **13 April 2023**
  - Instrument: RIA
  - Tot: 40M€
  - Project size: 15-20 M€

Info day recording: *https://www.youtube.com/watch?v=qPDIjNmrm9M*

- HORIZON-HLTH-2024-STAYHLTH-01-05-two-stage:
  Personalised prevention for non-communicable diseases - addressing areas of unmet needs using multiple data sources

  - Closure:
  - Instrument: RIA
  - Tot: 50M€
  - Project size: 8-12M€

- HORIZON-HLTH-2024-STAYHLTH-01-02: two stage
  Towards a holistic support to children and adolescents' health and care provisions in an increasingly digital society

  - Closure:
  - Instrument: RIA
  - Tot: 30M€
  - Project size: 8-10 M€

European Commission

Digital Europe Programme

Main objectives

strategic autonomy

Ensure broad take-up of digital technologies across all regions of EU

In deploying latest technologies to offer best services to citizens and business

Achieve scale through collective co-investments

Given the size of investments needed, scale required and risks involved Europe needs to pool the resources together

Regain control over Europe's value chains

and ensure Europe's technological sovereignty

Support SMEs to acquire or access the latest technologies and skills

More than 400,000 EU vacancies in these fields

Better address Europe's economic and societal challenges

E.g. climate, health, mobility and public services

Compete globally

Other regions of the world invest huge amount of public capital in advanced technologies. For example, the US and China spend € 10-20 billion annually on AI alone

European Digital innovation hubs (EDIH)

Test before invest:

Testing HPC, AI, cybersecurity, blockchain for public admin

Facilitate agile procurement through working with smaller GovTech suppliers

Giving advice on digital by default

Skills and training:

Awareness raising about the potential of AI, HPC, cybersecurity and European CEF DSIs.

Training public administrations on CEF DSIs, once only principle, Single Digital Gateway, eIDAS, etc.

DIHs as one-stop-shops

Support to find investments:

DIHs could help public administrations develop specifications for joint innovation procurement (PPI/PCP)

Innovation ecosystem and networking opportunities

Replicating locally developed digital public services via DIHs

Offering CEF DSIs to SMEs Liaising with DIH of other specialisation

Creating a strong EU network of DIH

- European Digital Innovation Hubs provide technological expertise and experimentation facilities to enable the digital transformation of the industry and the public sector

- H2020 funded 166 DIH, covering 94 regions

- Digital Europe Programme will expand this network to 240 DIH, covering 240 regions

- The Digital Innovation Hubs will be interlinked to the EEN and Startup Europe networks

EDIH catalogue: https://european-digital-innovation-hubs.ec.europa.eu/home

DEI HEALTH & CARE CLUSTER

HORIZON **2020**
LE PROGRAMME DE RECHERCHE ET
D'INNOVATION DE L'UNION EUROPÉENNE

SMARTBEAR
€ 22.379.512
CNR
(Italy)
2019-2023

SHAPES
€ 20.944.318
University of Ireland
Maynooth (Ireland)
2019-2023

InteropEHRate
EHR in people's hands across Europe
€ 7.192.592
Engineering
(Italy)
2019-2022

Smart4Health
€ 21.781.120
UNINOVA
(Portugal)
2019-2023

ACTIVAGE PROJECT
€ 25.202.348
Medtronic Iberica
(Spain)
2017-2020

GATE KEEPER
€ 22.596.059
Medtronic Iberica
(Spain)
2019-2023

pharaon
€ 21.319.813
Scuola Superiore S.
Anna (Italy)
2019-2023

ADLIFE
€ 7.450.948
Kronikgune
(Spain)
2020-2023

FAITH
€ 4.831.233
Waterford Institute of
Technology (Ireland)
2020-2022

Health&Care
Cluster
> 150 M€

## Large Scale Pilots **> 87 M€**

- Very large <u>innovation actions</u>
- Focus on <u>open</u> platforms and <u>standard-based</u> solutions
- <u>Value-chain</u> approach
- A set of compelling <u>use cases</u> with evidence of impact
- Cascading Funding (<u>open calls</u>)

https://www.opendei.eu/projects/healthcare-sector-new/

Commission programmes and initiatives

- ***European Care Strategy* acknowledges the importance of roll-out of accessible digital solutions** in the provision of care services, in all care settings like home, community-based and residential care. (Sept 2022) and "***Green Paper on Ageing***" promoting a **life-course approach to ageing** and the need to lead **healthy and active lives** throughout the whole lifespan. (Jan 2021)

- [Flagship Support Instrument on "Person- Centred Integrated Care"](#) (May 2022), to promote reforms in EU Member States in support of national and regional administrations in investigating, designing and implementing **strategies for integrating health, social care and long-term care**, including through the means of enhanced **integration of digital solutions**.

- **DIGITAL** support of deployment and up-take of new solutions through funding actions that accelerate the adoption and best use of digital technologies, also in the health and care sector, involving the entire value chain both from supply chain and demand side perspective

  - 'Testing and Experimentation Facilities (TEF)'

  - 'European Digital Innovation Hubs' (EDIH)

  - Digitisation of European Industries - Large Scale Pilots on Active and Healthy Living cluster ([DEI Healthy Living](#)) , focusing on: Platform building, Data-powered business ecosystem, large scale piloting and standardisation

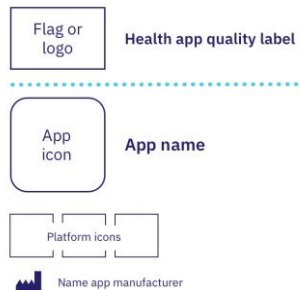- Support of Digital technologies in **Horizon Europe** R&D&I framework Programme, cluster 1 Health
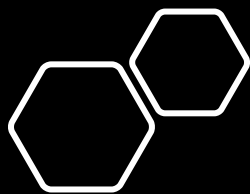
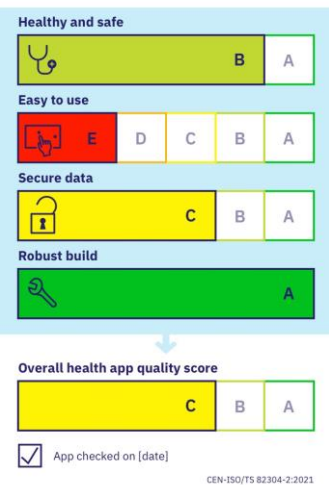# Certification for Ageing in Place

Homes4Life has developed the first **European Certification for Ageing in Place**, which has already been tested on **11 pilot buildings across Europe** (France, Spain, Italy, Ireland, Poland and The Netherlands), both in Design and Operational phase.
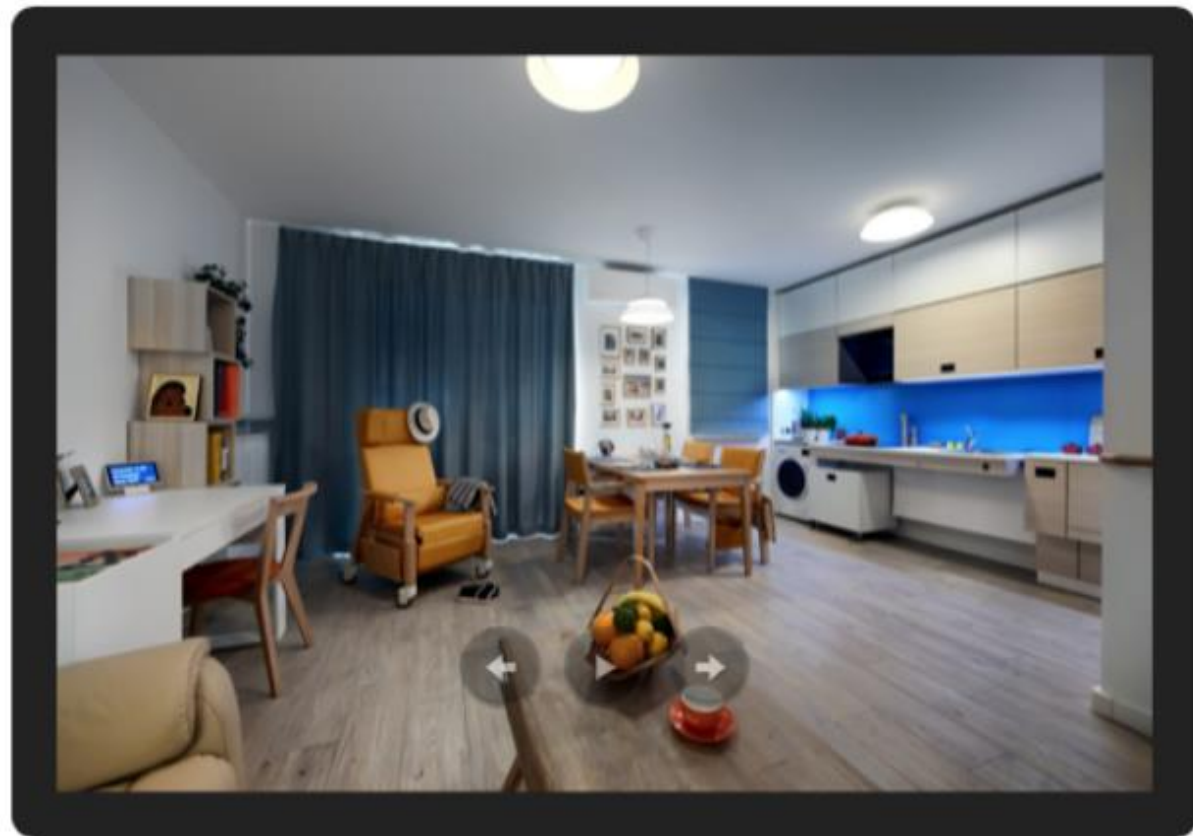
CEN-ISO/TS 82304-2:2021 trusted mHealth label in Europe

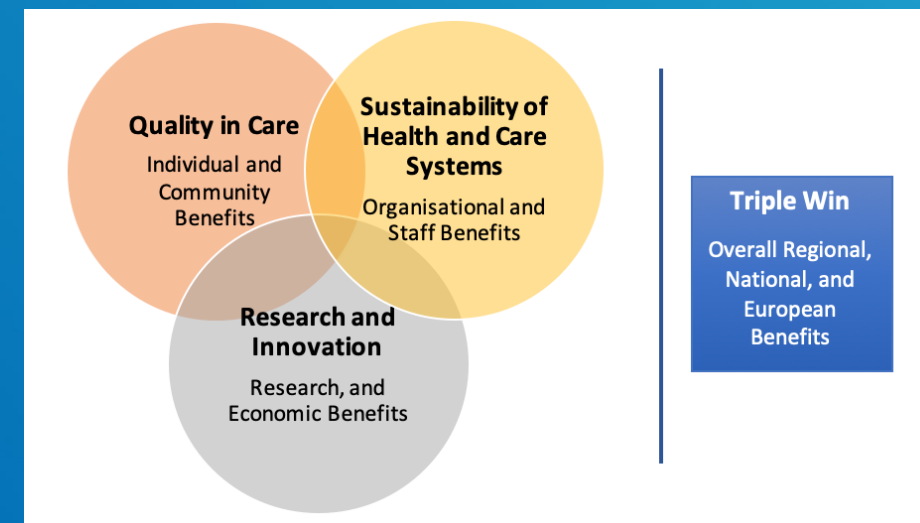|	
Comprehensive	For wellness and medical device apps, not duplicating notified bodies
Evidence-informed	Inspired by EU energy level: recognised and used by 85% EU consumers
Inclusive	Label tested by people with low health literacy
Informative	Score, label and report for quality in a glance to needed detail
Proportionate	At most 81 questions, of which at most 67 score-impacting yes/no questions
Testable	Yes-answers require evidence to be assessed by accredited app assessors
Relevant	Founded in a Delphi study with 83 experts from 8 stakeholder groups
Maintained	

Community & ecosystems

European Commission

Network for Active and Healthy Ageing Reference Site regions

Promoting and Facilitating the implementation and Scaling-Up of Innovation and Digital Solutions to address the life-course approach to active and healthy ageing

- ❖ Stakeholder-driven, dynamic initiative

- ❖ Fostering innovation in local ecosystem

- ❖ Valorizing the work done in each region

Gov/Health/Care/Others

Academic/Research

Industry

Patients/Citizens/Civil Society

Quality in Care
Individual and Community Benefits

Sustainability of Health and Care Systems
Organisational and Staff Benefits

Research and Innovation
Research, and Economic Benefits

Triple Win
Overall Regional, National, and European Benefits

Network for Active and Healthy Ageing Reference Site regions

https://www.rscn.eu/

RSCN
REFERENCE SITE COLLABORATIVE NETWORK

65 Accredited AHA Reference Site Regions

250m Citizens

1,400 public authorities, hospitals, primary and community care providers, social care providers

1,800 SMEs and Start Ups

500 Universities, Colleges and research centres

500 patient, voluntary, and community groups

Don't reinvent the wheel

Transfer of innovative practices & knowledge sharing

- *55 adopters were able to implement digital health and care solutions*

- *results of the 21 twinnings*

- *supported by 24 originators*

TWINNINGS

Knowledge Transfer and Scaling up of Digital Health and Care Solutions

https://digitalhealtheurope.eu/results-and-publications/twinnings-brochure/

Active and Healthy Living in the Digital World

European Innovation Partnership on Active and Healthy Ageing

Active and Healthy Living in the Digital World is a multi-stakeholder information and communication hub for European citizens, innovators, patients, health and care providers, researchers and policy makers engaged in research and innovation, deployment, exchange and dissemination of best practices, innovative solutions, scientific collaboration and policies related to active and healthy living and aging with digital tools. It builds on the achievements of the European Innovation Partnership on Active and Healthy Ageing and promotes active and healthy living throughout the life-course.

Subscribe to our newsletter >

- Wellbeing and Health promotion
- Ecosystems and Reference Sites
- International Cooperation
- Silver Economy & HealthTech
- Age-Friendly environments
- Digital Health Literacy

https://futurium.ec.europa.eu/en/active-and-healthy-living-digital-world

Thank you

Birgit.Morlion@ec.europa.eu

- https://digital-strategy.ec.europa.eu/en/library/silver-economy-study-how-stimulate-economy-hundreds-millions-euros-year
- https://health.ec.europa.eu/ehealth-digital-health-and-care/european-health-data-space_en
- Evaluation of the Active and Assisted Living programme (AAL2) | Shaping Europe's digital future (europa.eu)