

urban planning for aging well in cities innovative solutions supporting cities' transition

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Activities URBANAGE



URBANAGE is a European Horizon 2020 project that investigates how digital technology can address the **needs of ageing people in the urban environment**.



Helsinki (FI)



Santander (ES)



Flanders (B)



How?

A Digital Twin data-driven decision-support tool, to be adopted by public servants and other stakeholders will be developed, combining multidimensional Big Data analysis, models and simulations with Artificial Intelligence algorithms, and visualizations.

Helsinki Use cases

- IoT device for participatory urban planning OC
- 2. Travel time matrix for accessibility planning CS

Santander Use cases

- 1. Age friendly route planner
- Long term urban planning tool applying the Urbanage Age Friendliness index to the city digital twin

Flanders Use cases

- 1. Determination of a green comfort index score
- 2. City services planning for older people





Co-creation for identification of challenges, user requirements and potential solutions/3 workshops 3 pilots





CC1 OLDER CITIZENS

Identify needs and challenges experienced by older adults related to ageing in cities





CC2 CIVIL SERVANTS

Identify their current way of working and barriers encountered with respect to new technologies and data + validate relevant WHO indicators for age-friendly cities





CC3 CIVIL SERVANTS & OLDER CITIZENS

Creation of user journeys to prioritize user requirements based on importance and technical feasibility.





CC1 Older Citizens







I-want-to-be-able-to-plan-a-route-that-takes-into-account-potential-disabilities

I-want-to-know-where-the-sunny-areas-are

I-want-a-safe-walking-pavement-to-walk-on-during-the-winter

I-want-my-sidewalks-to-be-free-of-obstacles-(snow, ice, no-sanding, ploughed-snow)¤

 $I\cdot want \cdot to \cdot report \cdot and \cdot get \cdot feedback \cdot from \cdot my \cdot city \cdot when \cdot and \cdot where \cdot I \cdot can \cdot encounterobstacles. \texttt{X}$

I·don't·want·non-pedestrians·to·move·on·the·sidewalk.¤

I-want-drivers-to-respect-the-stop-signs.X

I-want-a-safe-infrastructure-to-use-the-buses.X

I-want·to·feel·safe·in·public·space·by·not·being·exposed·to·drug·users·and·drug·dealers.¤

I-want-to-know-who-I-should-report-to-when-I-don't-feel-safe-in-a-place.¤

 $I{\cdot}want{\cdot}to{\cdot}know{\cdot}how{\cdot}what{\cdot}the{\cdot}distance{\cdot}is{\cdot}between{\cdot}point{\cdot}A{\cdot}and{\cdot}point{\cdot}B. \texttt{X}$

I-want-to-have-well-maintained-and-up-to-date-street-signs.X

I-want-to-have-more-places-where-i-can-sit-downX

I-want-to-test-the-final-device-that-I-will-be-using-to-report-data.X

I-want-to-be-informed-about-the-obstacles-i-come-along-during-a-walkX

I-want-a-simple-interface-that-does-not-require-many-inputs.X

 $I-want-to-participate-in-the-decision-making-process-of-my-city,-particularly-regarding-my-needs-as-older-people. \\ (by-having-physical-workshops,-questionnaires-and/or-phone-interviews.) \\ \texttt{x}$

Introduction
to the
URBANAGE
project and
the goals of
the pilot



Discuss meaning of 'age-friendly city' to older adults



Discuss ideal (long-term) scenario / vision on 'age-friendly city'



Identify
common
challenges
related to
accessibility as
experienced
by older adults



Translate challenges and issues into user requirements



Grant Agreement n. 101004590

CC2 Civil Servants

Information about older adults in the public domain

Services need to remain accessible

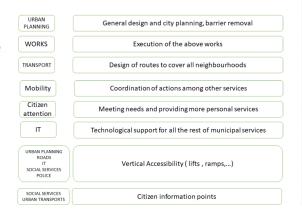
Historical centers cannot be easily made accessible

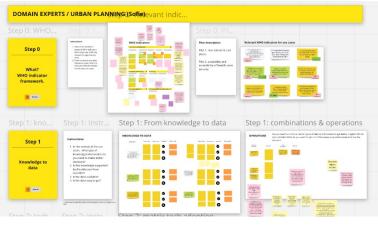
Accessible affordable housing

Increased demand of healthcare services

Social isolation

ICT and domain experts





Introduction to the URBANAGE project and the goals of the pilot



Map current projects and initiatives



Map civil servants' challenges and needs



Map existing and new collaborations



Validate the relevance of the user requirements from CC1

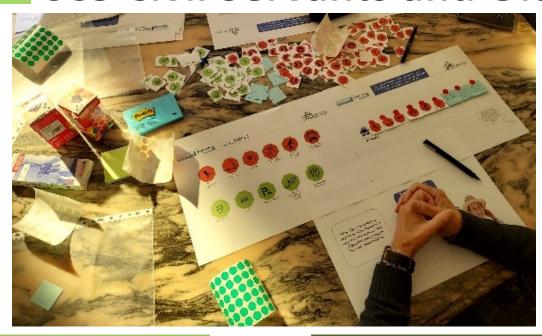


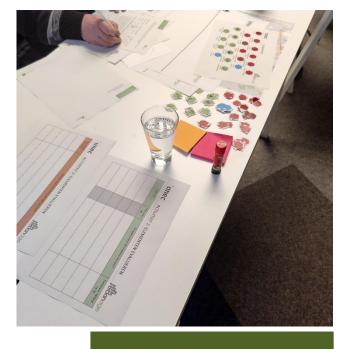
From needs to data and models





CC3 Civil Servants and Older citizens







Introduction to the **URBANAGE** project and the goals of the pilot



Develop user journeys in which the different user requirements (from CC1 & CC2) were integrated as 'elements' to illustrate the journey



Prioritization and validation of the elements (user requirements)





Grant Agreement n. 101004590



Challenge 1 Lack of data about older citizens

Lack of disaggregated anonymised data about older citizens

Where they go?

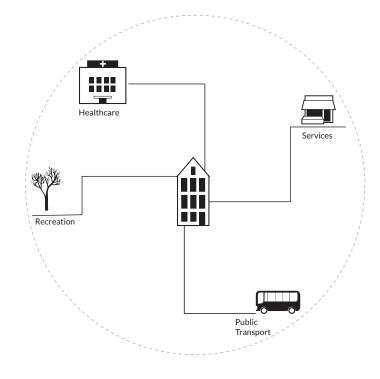
What routes they take?

How far they go?

Who is in isolation?

What activities they join?

What places they visit?





Challenge 2 **Metadata**

Metadata don't always describe what
 I need to know about that object

Is that bench accessible?
handrail, backrest, accessible & even
pavement, not near cycling lane, room for
wheelchair

Pleasant location: on walking routes, parks, but also shopping streets (rest when shopping)

Maintenance status







Challenge 3 Filter the data at the right scale in the right format

- Protocols to filter my data the right scale
 - Building scale
 - Neighborhood scale
 - City scale
 - Regional scale



Challenge 4 Lack or non linkable data about sidewalks and real time maintenance status

- Real time data about the maintenance status and obstacles
- Link my data together
- Lack of data about sidewalks





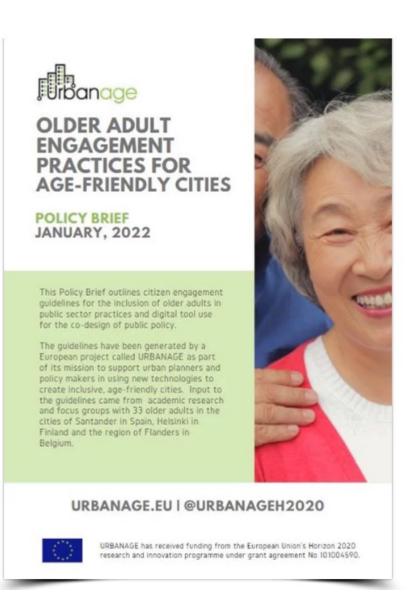


Challenge 5 Models

- What models to use? (air quality, noise)
- How to integrate model outcome? (UI-UX, map viewer)
- How to connect with models? (technical)

Policy brief









Thank you for your attention

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