



Engaging citizens as co-creators of CCAM in real-life living lab environments

3rd European Conference on Connected and Automated Driving (EUCAD2021)

Session BO9: Accessible & Meaningful: what does it take to make CCAM stand for Citizen's Choice?

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Productivity losses due to road congestion can amount to 1-2% of EU's GDP
(Christidis and Ibáñez Rivas, 2012)

Mobility fuels our **economy and society**.
But our **car-centred mobility** comes with significant **negative side effects**: road accidents, pollutant and greenhouse gas emissions, congestion.

New **transport technologies and policies** are offered as a solution but often they are not tailored to **citizens' real needs and expectations**. It is hard to develop impactful solutions without **experimenting them first in real-life** settings.

*Of the more than 27,000 European Citizens interviewed, **56%** declared they would not be ready to use CAVs and **76%** stated they would not feel comfortable travelling in a **CAV without human supervision**.
(Eurobarometer 496, 2020)*

*“**Connected Automated Driving** is seen as one of the **key technologies and major technological advancements** influencing and shaping our **future mobility and quality of life**” (ERTRAC. Connected Automated Driving Roadmap 2019)*

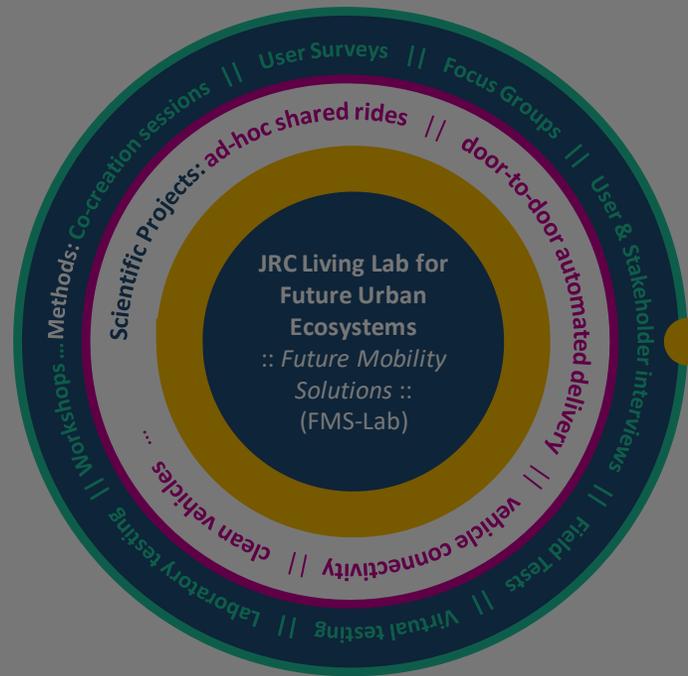
*“**CCAM** can provide **mobility for all**, give back **valuable time** and **improve road safety**” (European commission's Sustainable and Smart Mobility Strategy, 2020)*



What if we could engage **EU citizens** as **co-creators** of new mobility solutions in **real-life living lab environments**?

*“The involvement and commitment of the **public and of all stakeholders** is crucial to the success of the European Green Deal... **game-changing policies** only work if citizens are fully involved in designing them” (European Commission, 2019)*

We implemented the **Future Mobility Solutions Living Lab (FMS-Lab)** at the Joint Research Centre site in Ispra (Italy) to engage **citizens and relevant players** in the **co-creation** of innovative **mobility solutions**.



BRUSSELS



PETTEN



GEEL



SEVILLE



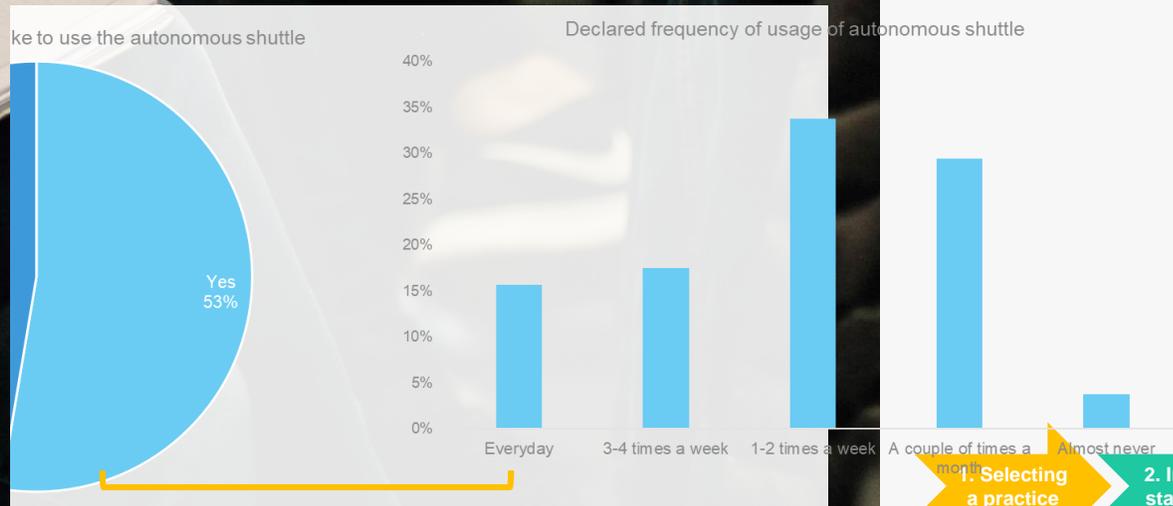
KARLSRUHE



ISPRA

Almost 60%
of respondents would use an on-demand **autonomous delivery service**

53%
would use an autonomous shuttle on site



We started by launching a **survey on mobility habits and needs** at the JRC Ispra site because we wanted to **understand the mobility context**, including pre and expected post-pandemic commuting practices amongst JRC Ispra site staff.



“

Sara, 40 y.o.

I would obviously like to intervene especially in areas that are a bit more complex, such as urban areas, ...



“

Michele, 35 y.o.

...even people with disabilities or younger people even children travelling to school can use automated vehicles, ... they can be just ordered by an application in the smartphone for example



Then we engaged citizens in **focus group discussions** in order to know their diverse expectations and concerns about **connected and automated vehicles**.



E-Shock start-up (part of e-Novia Enterprises Factory)

Phase 1

E-Shock will run **tests** at the JRC Living Lab in Ispra, to calibrate **Rob.Y vehicle dynamics** control systems during manoeuvres like traction, braking and stability, on different road surfaces.

E-Shock and JRC will jointly organize a **demonstration event** involving **citizens** and other **stakeholders**



At present, we are experimenting **an electric automated vehicle platform** because we want to validate the solution and **explore users' attitudes**. The final objective is to deploy **a real mobility service** onsite that citizens can **use and provide feedback**.



The data we have gathered gives a good picture of **citizens'** matters of concern and desires of the future connected and automated mobility

12

Months

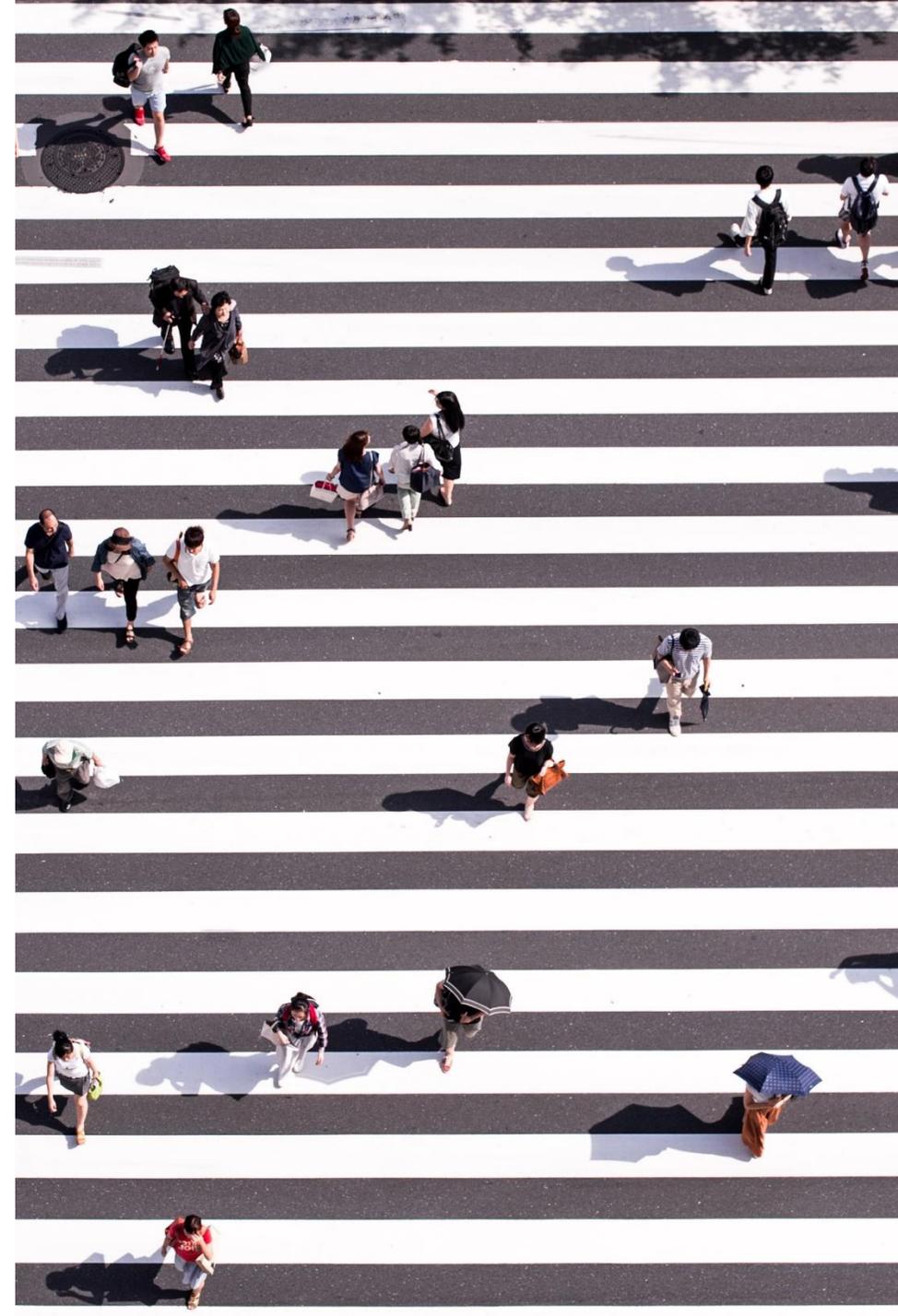
+6000

Users engaged in mobility workshops, surveys and focus group discussions



And we want to engage the whole JRC Ispra population over the course of next year

Thanks to the living lab, we can
get closer to a **safe, sustainable
and smart citizen-centred mobility**



Standard logo



Horizontal logo



Mute logo



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We are the **European Commission's Joint Research Centre**, the science and knowledge service of the Commission which employs scientists to carry out research in order to provide independent scientific advice and support to EU policy.

Thank you



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