SHOW: Large-scale deployment of Automated Shared Mobility

Ride2Autonomy Workshop
09.03.2022

Dr Henriette Cornet – UITP

SHOW in a nutshell

Deployment of shared, connected and electrified automated vehicles to advance sustainable urban mobility

- 70 partners from 13 EU-countries
- January 2020 – December 2023
- Real-life urban demo in 20 cities
- H2020 R&I programme GA No 875530
- 30 Mio. EUR funding

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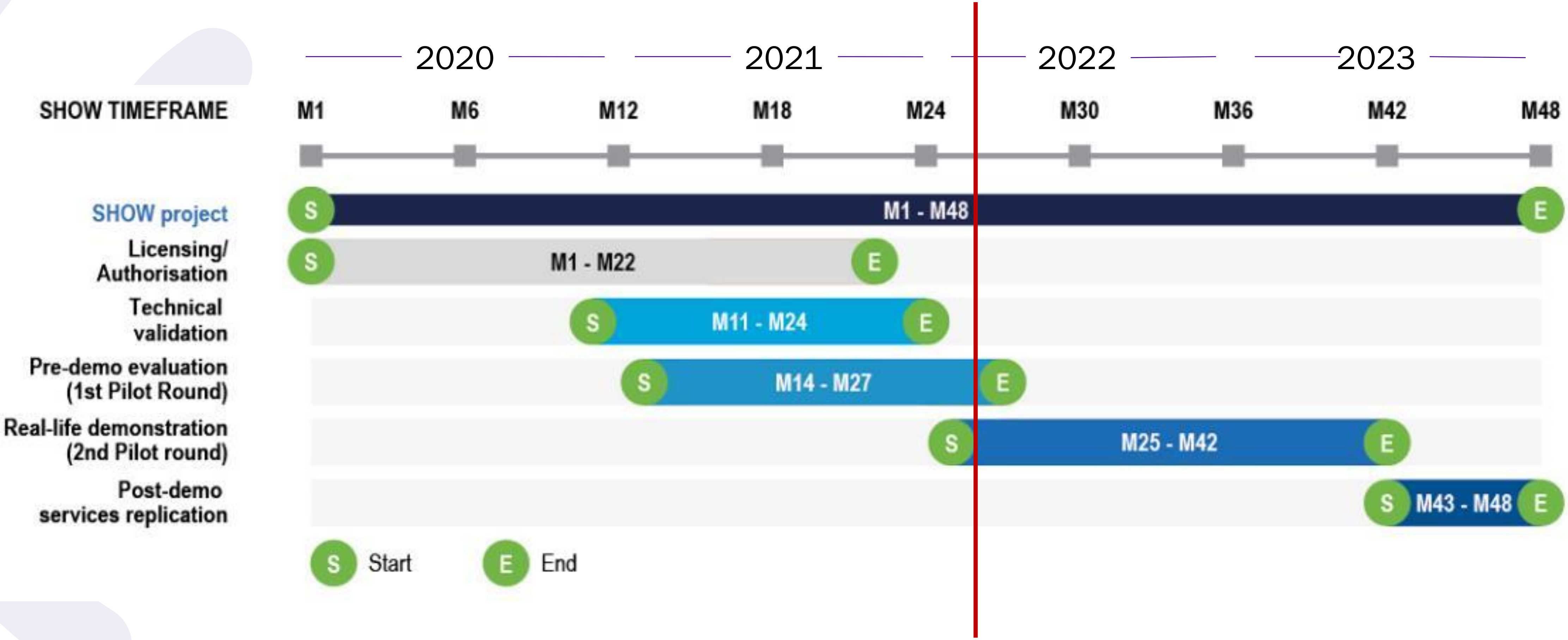
SHOW aims to be the **biggest and most holistic** ever real life CCAV urban demonstration initiative in Europe

Develop technical solutions & business models to enhance travelers' experience

Deploy connected and electrified fleets of AVs for shared mobility

Conduct long real-life urban demonstrations over 2022 and 2023

Demonstration Plan



Real-life demonstrations started in several cities already, more to follow this year!

SHOW AUTOMATED URBAN MOBILITY

Demo Sites

70
Automated Vehicles

Robotaxis, buses,
and shuttles
for persons & goods

First lessons learned from VTI – Sweden

- **Avoid hard braking:** extra problematic for fragile elderly and persons with a need to be able to predict what is going to happen next on board.
- **Make sure there is a standard of the use of sound:** Persons with hearing problems do not know if the AVs is close behind or signal that it is about to stop, and blind persons do not understand what the sound is aimed to solve.
- **The driver role will be different:** they have to support to get on / off, they need to inform when to get off/on, they are considered as the link to a safe/secure ride.
- **The mounting of wheelchairs is not safe** since no backrest exist and hence backward facing is not possible.

Selection of SHOW activities & results achieved so far

- User pre-acceptance survey on-going
- First simulation studies on-going
- Local full architectures and Physical & Digital Infrastructure in place
- Project Dashboard for KPIs visualization operational
- SHOW **follower site** applications received:
  - Barcelona (Spain), Braga (Portugal), Helmond (the Netherlands), Kadikoy (Turkey), Paris (France), Sarajevo (Bosnia and Herzegovina), Varna (Bulgaria), and Venice (Italy)
- WP on application guidelines and policy recommendation starting

Link with "Scalable Model" toolbox Ride2Autonomy

SHOW creates connections beyond the consortium and beyond European borders

- **Concertation** with European projects on CCAM (AVENUE, HARMONY, SPROUT, FRONTIER, and PASCAL) supported by the EC's Horizon Results Booster programme + Ride2Autonomy

- **Twinning** activities with Australia, China, Japan, Singapore, South Korea, Taiwan, and the United States
  - Agreements signed already with Australia, China, Japan and Taiwan
  - Cross-cultural studies and webinars planned on vehicle behaviour, regulations, user acceptance, etc.

SHOW broadens international collaboration and signs MoU with ITS Japan and UTMobI

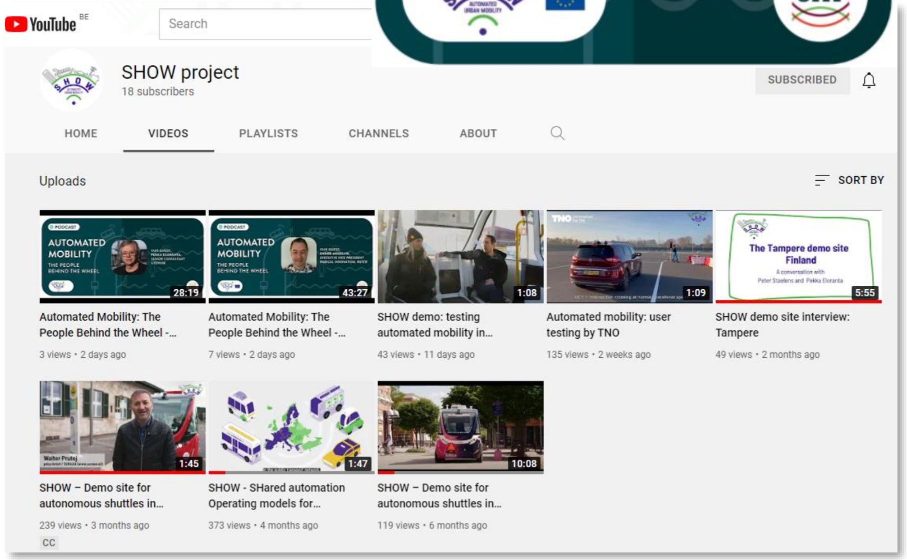
Oct 22, 2021

One of the objectives of the SHOW project is to foster international cooperation on automated mobility, by collaborating with global organisations working on

Dissemination and communication activities

- SHOW multidimensional Stakeholder Forum
  - Participate in large-scale demo events
  - Contribute to European road maps
  - Join: https://show-project.eu/stakeholder-forum/

- Get to know better SHOW project
  - Register to our newsletter on the website https://show-project.eu/
  - Listen and follow the [SHOW podcast](#)and check out our videos on [YouTube](#)



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This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 875530.

SHOW Use Cases

UC1: Automated mobility in cities
• Automated passengers/cargo mobility in Cities under normal traffic & environmental conditions
• Automated passengers/cargo mobility in Cities under complex traffic & environmental conditions
• Interfacing non automated vehicles and travellers (including VRUs)
• Energy sustainable automated passengers/cargo mobility in Cities
• Actual integration to city TMC
• Mixed traffic flows
• Connection to Operation Centre for tele-operation and remote supervision
• Platooning for higher speed connectors in people transport
• Cargo platooning for efficiency
• Seamless autonomous transport chains of Automated PT, DRT, MaaS, LaaS

UC2: Automated mixed mobility in cities
• Automated mixed spatial mobility
• Automated mixed temporal mobility
UC3: Added Value services for Cooperative and Connected Automated mobility in cities
• Self-learning Demand Response Passengers/Cargo mobility
• Big data/AI based added value services for Passengers/ Cargo mobility
• Automated parking applications
• Automated services at bus stops
• Depot management of automated buses

SHOW work structure