SHOW 3ʳᵈ Pan-European Workshop

Dr Henriette Cornet
SHOW Coordinator &
Thematic Area Leader Automated Mobility | UITP

Madrid | 19 October 2022

Agenda

Start	End	Time	Item	Speaker
9:30 AM	10:00 AM	0:30	Welcome coffee	
10:00 AM	10:15 AM	0:15	Welcome by the SHOW Coordinator and Technical Manager	Henriette Cornet, UITP Angelos Bekiaris, CERTH/HIT
			Stakerholders' mission and vision for Automated Mobility:	
10:15 AM	10:25 AM	0:10	Introduction by EMT	Alberto Alonso Poza, EMT
10:25 AM	10:35 AM	0:10	Introduction by Madrid City Council	Fernando Herrero, Madrid City Council
10:35 AM	10:45 AM	0:10	Introduction by the European Commission	Suzanna Kraak, European Commission
10:45 AM	11:15 AM	0:30	First insights and lessons learned from SHOW	Anna Anund, VTI Pekka Eloranta, SITOWISE
11:15 AM	11:45 AM	0:30	Coffee break	
11:45 AM	12:15 PM	0:30	First insights and lessons learned from SHOW	Marek Vanžura, CDV Florian Kuhnt, FZI
12:15 PM	12:35 PM	0:20	The ABSOLUT project - Insights from Leipzig	Mario Nowack, Leipzig Transport Authority
12:35 PM	12:55 PM	0:20	The Ride2Autonomy project - Insights from Barcelona	Giel Mertens, Pendel Mobility
12:55 PM	1:55 PM	1:00	Lunch break	

Agenda

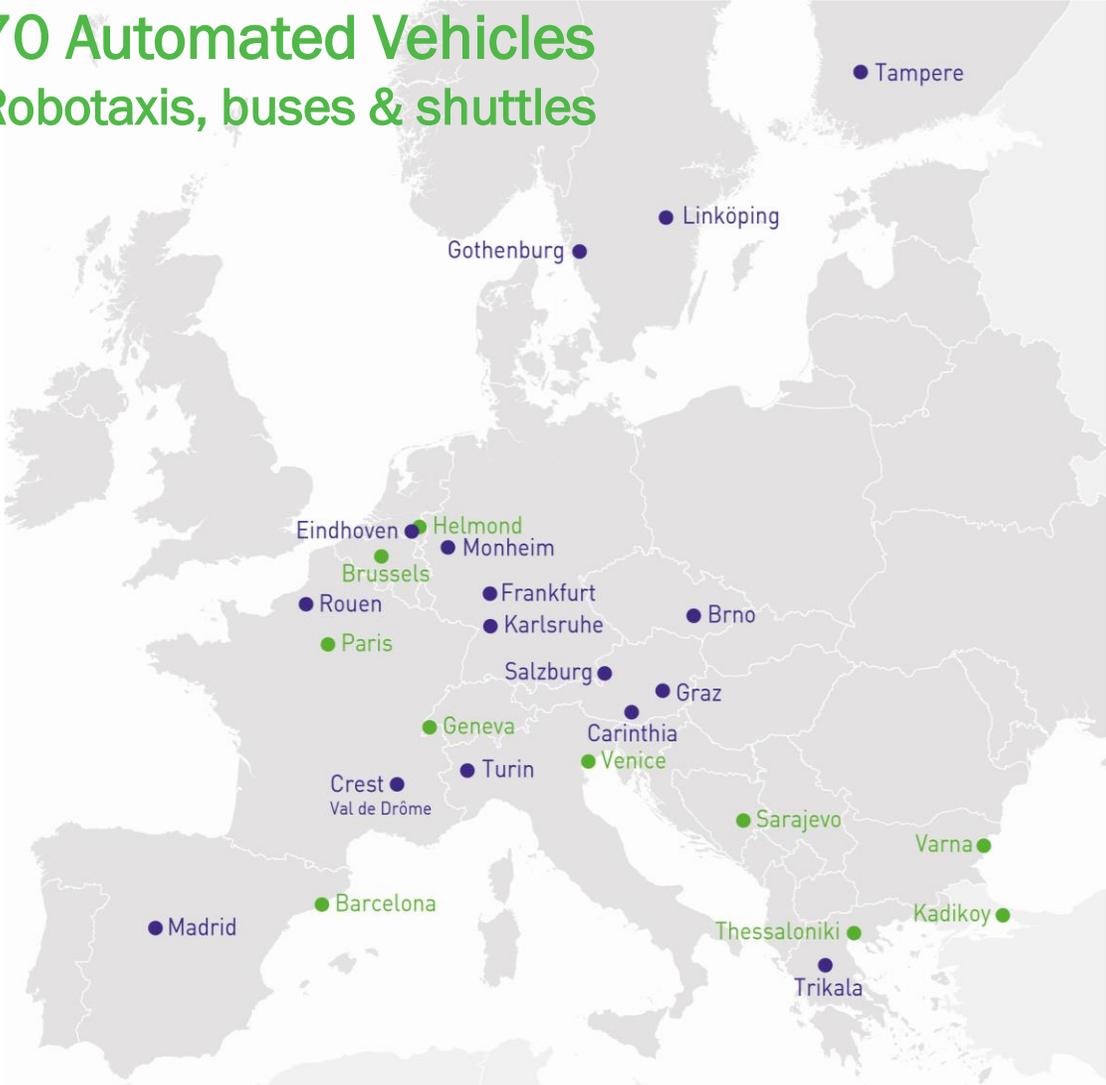|				
12:55 PM	1:55 PM	1:00	Lunch break	
1:55 PM	2:55 PM	1:00	Panel discussion	Maria Gkemou, CERTH/HIT, Sergio Fernández Balaguer, EMT, Suzanna Kraak, European Commission & Mario Nowack, Leipzig Transport Authority
2:55 PM	3:25 PM	0:30	SHOW activities in Madrid	Sergio Fernández Balaguer, EMT Lucia Isasi, Tecnalia Borja Gorriz, Irizar Mauro Gil, Indra
3:25 PM	3:40 PM	0:15	Adjournment	
3:40 PM	4:00 PM	0:20	Meeting outside the hotel	
4:00 PM			Bus transfer to Carabanchel bus depot	

SHOW in a nutshell

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

Coordinated by UITP

70 partners from 13 EU-countries

January 2020 – December 2023

30 Mio. EUR funding from European Commission

SHOW is the largest initiative for shared Automated Mobility in Europe

70 Automated Vehicles
Robotaxis, buses & shuttles

Tampere
Linköping
Gothenburg
Eindhoven • Helmond
Monheim
Brussels
Rouen • Frankfurt
Paris • Karlsruhe • Brno
Salzburg
Graz
Geneva • Carinthia
Turin • Venice
Crest
Val de Drôme
Sarajevo
Varna
Barcelona
Kadikoy
Madrid Thessaloniki
Trikala

SHOW real-life demos have started and attract public & policy makers' attention

SHOW has impact beyond the European boarders

National Cheng Kung University

Beijing Jiaotong Technical University

George Institute of Health
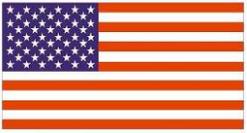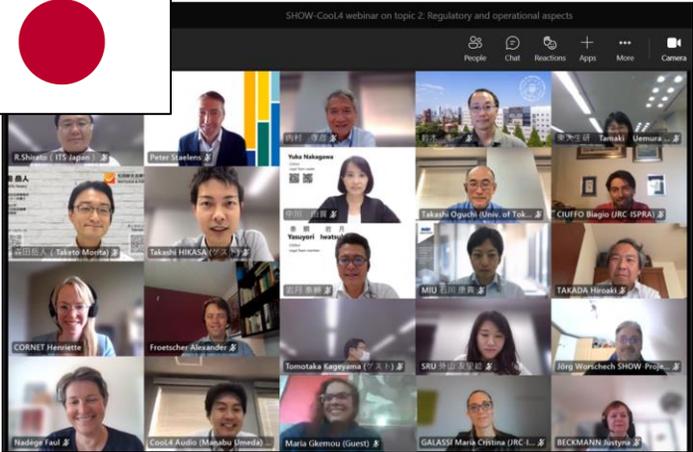
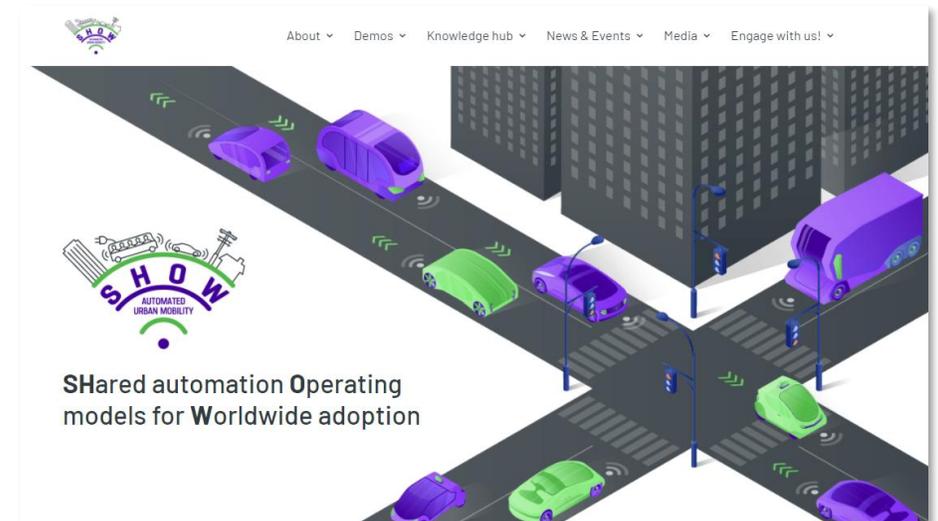University of San Francisco
Volpe center / US DOT

Thank you!

Dr Henriette Cornet | UITP
SHOW Project Coordinator
Thematic Area Leader Automated Mobility

Connect with us and check out our activities

SHOW: Demo preview in Karlsruhe

SHared automation Operating models for Worldwide adoption

https://show-project.eu/

SHOW 3rd Pan-European Workshop

Dr Evangelos Bekiaris
SHOW Technical & Innovation Manager & Director of CERTH / HIT

Madrid | 19.10.2022

SHOW will **deploy** more than **70 SAE L4 AVs** for both **passenger** and **cargo** transport in **dedicated lanes** and **mixed traffic**, connected to a wide range of supporting infrastructure (**5G, IoT**) and operating under **traffic speeds** ranging from **18** to over **50km/h.**

Use Cases in SHOW

- Automated mobility in cities
  - Under normal / complex traffic & environmental conditions
  - With interfaces with road users including VRU
  - Connecting to Operation Centre remote supervision (& tele-operation) & to TMC
  - Applying platooning
  - Seamless autonomous transport chains of automated PT, DRT, MaaS, LaaS

- Automated mixed mobility in cities
  - For persons and goods (mixed spatial/temporal mobility)

- Added-value services
  - Big data/AI based services for passengers & cargo
  - Automated parking & depot management
  - Automated services at bus stops
 - COVID free services

Where we stand... (1/2)

- **Local architectures and ecosystems** established

- **Business models** explored, validated – new ones emerging as well

- **Vehicle advancements are reflected in vehicle demonstrators across the sites to get validated** (frequent s/w updates)

- **Permits, infrastructure preparation and technical validation** almost closed in all sites

- **Data collection methods and tools in place**
  - On-line surveys, Interviews, Stakeholder Workshops – addressing all key actors experience (passengers, operators, safety drivers, ...)
  - **Dashboard** (for performance data logging and visualization in public) – Check out at: https://show-project.eu/show-dashboard/
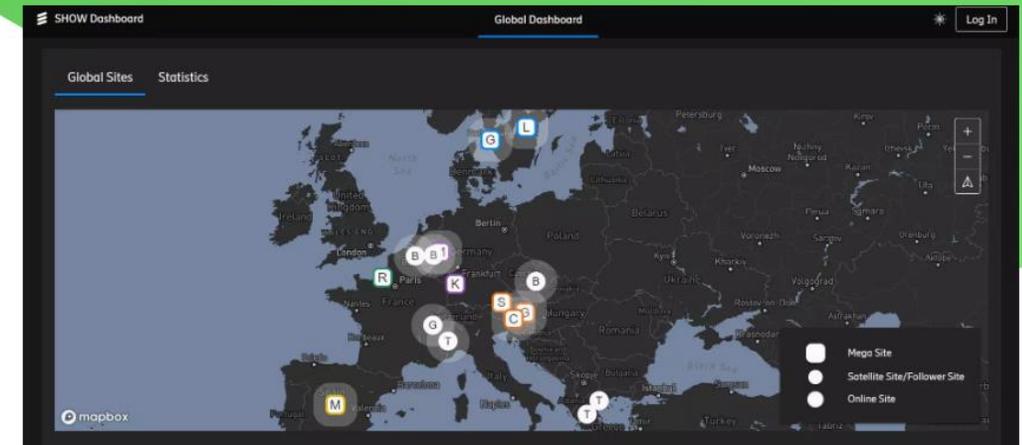
Where we stand... (2/2)

- **Pre-demo** (1st rehearsal public round of test sites prior to fully open to public operation) **is closing for the majority of the test sites**

- **Sites are progressively moving to open public operation** expected to last on average **until end of September 2023**
  - In conjunction with **demo events, open to all**

- **Follower sites are joining SHOW** – matchmaking process for following SHOW site activities and replicating services in their local context
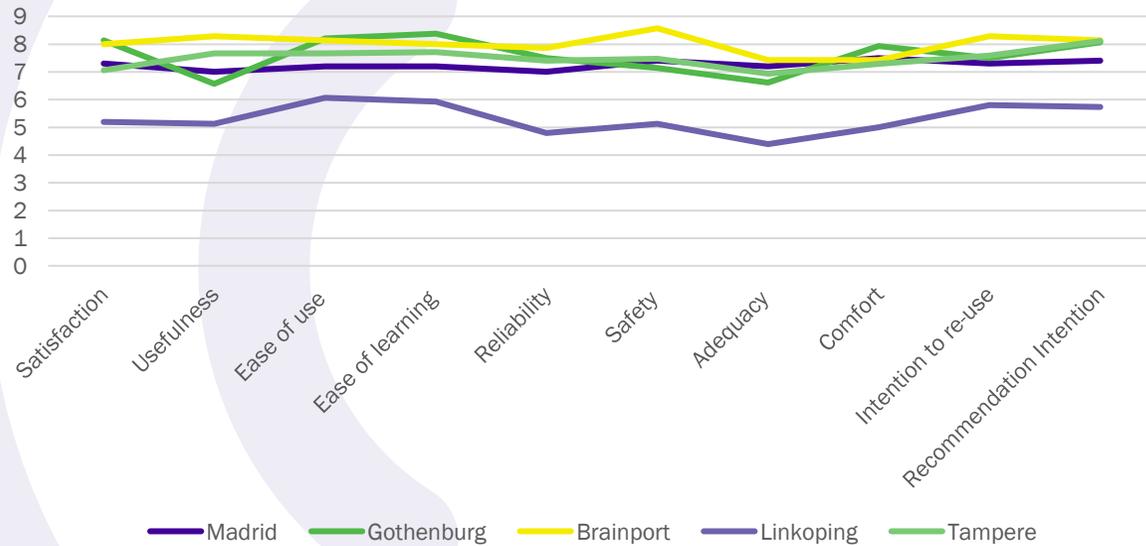
Insight in first results
Performance data

- ≈15km/h average speed
- More than 22,400 passengers have been transported across all test sites already!
- ≈ 100,000 Kms travelled so far for SHOW (in all sites running so far)

- In **5 sites – 14 months** of summative operation so far
  - 6,400 hard breaking events (*threshold = 3m/sec²*)
  - 1 accident leading to slight injury
  - 884 conflicts with other road users (including VRUs) and infrastructure

Insight in first results
User Acceptance Results – An excerpt

Average Scores of Acceptance Factors per Pilot Site in Pre-demonstration Phase [1: less positive - 10: most positive]

Legend: Madrid — Gothenburg — Brainport — Linkoping — Tampere

X-axis categories: Satisfaction, Usefulness, Ease of use, Ease of learning, Reliability, Safety, Adequacy, Comfort, Intention to re-use, Recommendation Intention

Average General Acceptance Score per Pilot Site in Pre-demonstration Phase [1: less positive - 9: most positive]

Bar chart categories: Madrid, Gothenburg, Brainport, Linkoping, Tampere
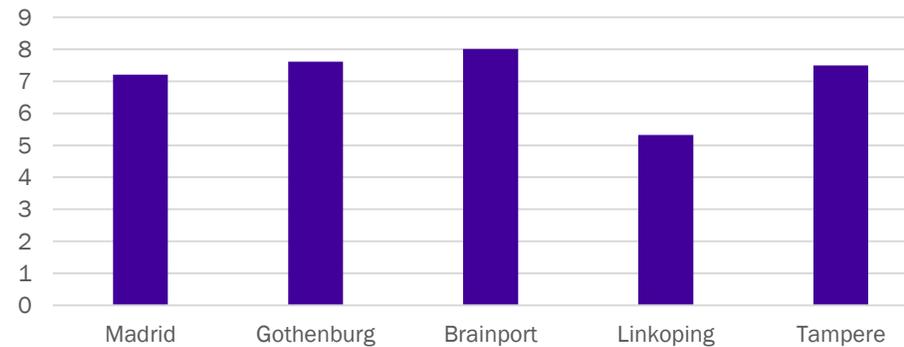
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https://www.imet.gr