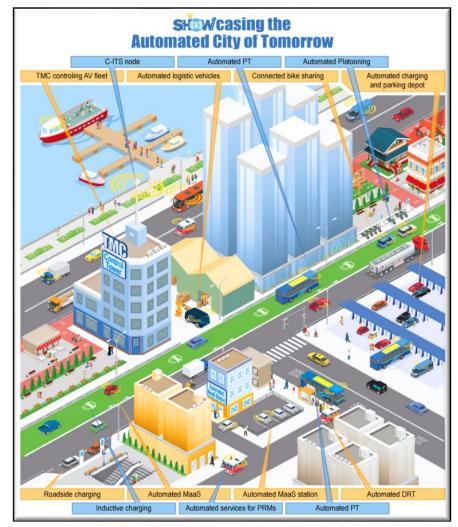


SHared automation Operating models for Worldwide adoption



SHOW H2020 Project

- 48 Months, 36 M€ budget.
- 69 partners from 13 Countries.
- linkedin.com/company/showh2020/
- https://twitter.com/SHOW_H2020







Vision

SHOW Vision is to support the deployment of automation in urban transport chains through demonstration of real-life scenarios to promote seamless and resilient sustainable mobility.





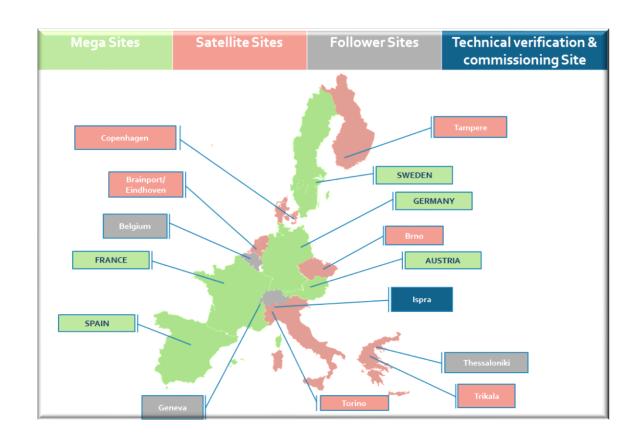
Sites

Mega Sites:

- Germany Mannheim, Karlsruhe, Aachen
- Austria Graz, Salzburg, Vienna
- Sweden Kista, Lindköping
- Spain Madrid
- France Rennes, Rouen

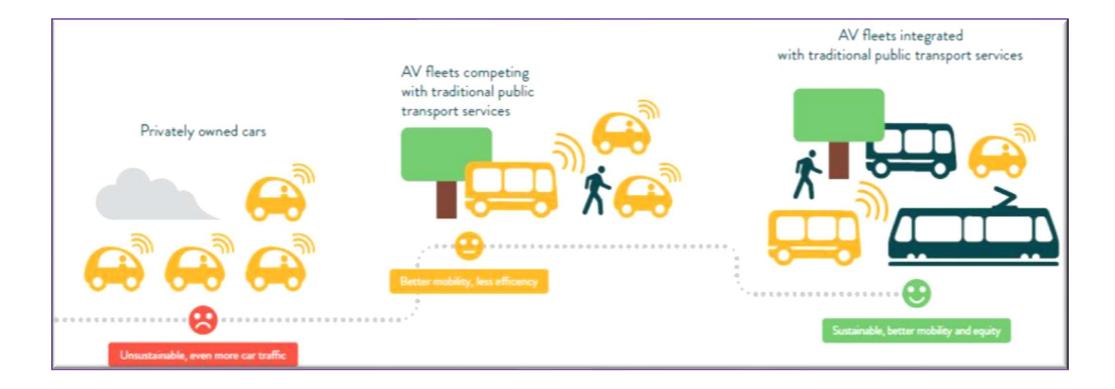
Satellite Sites:

- Netherlands Brainport
- Czech Brno
- Denmark Copenhagen
- Greece Trikala
- Italy Turin
- Finland Tampere





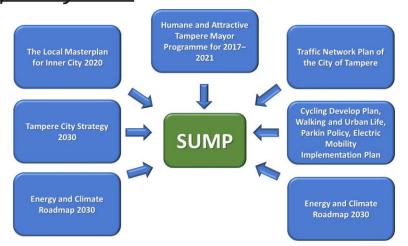
Road to SHOW





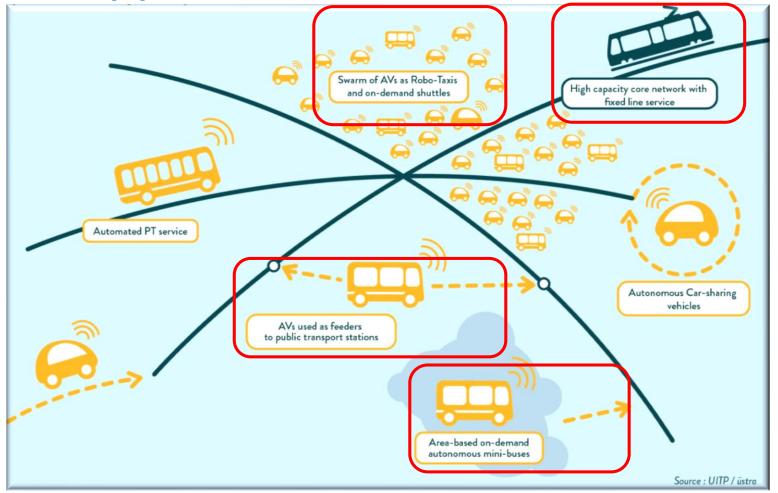
Tampere - Targets

- To support the national activities related to SHOW the City of Tampere and Business Tampere executed in 2019 an initiative to pave the way and prepare development of autonomous feeder transport services for the new tram (Tampereen Ratikka).
- This supported and was <u>based on the strategy and objectives of the City of Tampere</u>.
- Tampere Mayor Programme 2018-2021 states: "The objective is to create a public transport system, where train, tram, bus and city bike services support each other. <u>Demand responsive</u> <u>autonomous buses</u> and city bikes can be used as feeder solutions to the tram line. The objective is to have <u>autonomous buses gradually operating in Tampere by 2021</u>."





Scope and Applications









Tampere Satellite Site

- Use cases: UC1: Autonomous traffic in real city environment, UC2: Multi-actor business environments, UC7: Enhanced services
- Seamless automated feeder transport pilot in Hervanta suburban area will be carried out in connection with the new light rail corridor.
- First there will be fix-route services and later on also DRT services.
- 2-3 shuttles in the Hervanta residential area, plans to have 2-3 pods/shuttles at the Tampere University of Technology & Hermia Science Park area.
- Remote control and tele-operated manoeuvres.
- Both 5G-test network with 10 bases-stations and possibly also ITS G5 units are included in the project and will offer technologies needed for advanced tele-operated manoeuvres.







Achievements so far

- High level strategic decision to develop autonomous feeder service.
- Strategies are related to Sustainable Urban Mobility Planning.
- Physical and digital infra preparations are going on.
- The routes have been decided and are being fine-tuned.
- Pre-pilots have been carried out in Hervanta.
- Disussions and procurement process is going on with the OEM's.
- LTE/5G and ITS G5 and LoRaWAN available in Hervanta.







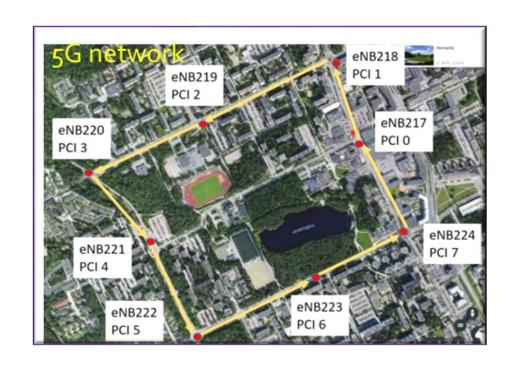
Challenges & barriers

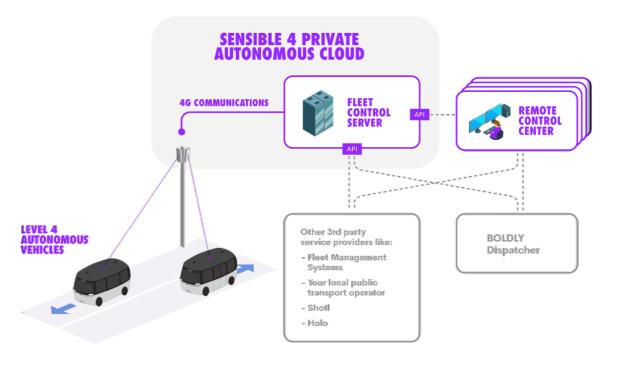
- Obligatory procurement process for vehicles,
- Funding for buses (possible challenge in Covid-19 period).
- TAYS hospital construction did not allow autonomous transport and thus Hermia Science Park and University of Technology will be used.
- Physical & Digital infra preparations need to be carried out.
- Route with traffic lights and partly using the tram line route/corridor
- Challenging time schedule.





Technologies









Thank You



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