A collaboration platform for shaping the next generation sustainable mobility services, based on connectivity, automation and sharing
French Swedish innovation umbrella

Draft aim: Proof of Concept of automated shared mobility - in Swedish-French twin cities

Timeframe for setup project: April-Sept 2019

Contacts: Birger Löfgren (RISE), Eric Wallgren (Vinnova)
RISE (Research Institutes of Sweden) is a network of non-profit, government-owned research institutes with individual specialties and collaborative competences. There are 2,300 employees across 27 sites in Sweden, Norway, and the UK. RISE had a 2017 turnover of 2.7 billion Swedish kronor.

Birger Löfgren
Research Manager - Sustainable Transports
“smart accessibility, sustainable urban mobility and transportation, technical solutions for resilient systems, innovation for social inclusion and citizen participation.”

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“Our partnership will strongly encourage city-to-city, local and regional collaboration to achieve our mission.”
5G Remote Driving

Swedish Prime Minister Stefan Löfven remotely driving a vehicle in Sweden from Paris – connected with 5G and Connected Traffic Tower.

Swedish - French partnership on innovation and sustainable solutions.
Remote control/support - Automated shared mobility

Four specific aspects need to be demonstrated for larger scale market penetration:

- **Technical implementation** - e.g. in control tower, integration in vehicles, connection to telecommunication

- **Practical use and interface to people** - regarding operation in control tower, operation in vehicles, customer and road-user experience

- **Policy interpretation and development** - for allowing remote control assisted self-driving buses

- **Safety** - the integrity of vehicles, control tower and network, cybersecurity.
Workshop in Stockholm in May

Public transport stakeholders formulated and ranked goals suitable for bilateral shared mobility innovation projects:

”People without access to cars in rural areas will be able to connect to each other and/or commuter hubs, within 30 minutes”

”Citizens can travel door-to-door feeling safe using shared mobility”

”A family experiences shared mobility as the preferred choice, independent of disposable income”

”For a PTA to run a sustainable business model for an AV line within 2”
Functions/Values of a bilateral umbrella in Drive Sweden (from workshop)

- Breaking down the political handshake to operational level
- Identify parallel development needs - collaborate – setting common goals
- Create frames for funding calls
- Enabler for market development & lobbying - pushing the idea and pushing the system/stakeholders
- Supporting function for cities (identify funding opportunities, creating connection between partners in projects).
- Positioning existing initiatives
- Public affairs - relationships
What’s next

- Vinnova / BPI call
- Feedback on setup of the umbrella from corporations and public sector / cities (existing and new members of Drive Sweden & Alliance for Urban Sustainability)
- Startup meeting in Q3

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Alliance for Urban Sustainability: a network of Swedish and French cities.

**From France:** Grenoble, La Rochelle, St. Brieuc and Strasbourg.

**From Sweden:** Borås, Gothenburg, Linköping, and Umeå

Contact:
Deborah Cornland,
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Drive Sweden Innovation Cloud enables Drive Sweden partners to jointly develop and demonstrate new services within Automated Mobility.

**Key functionality**
- Easy onboarding of partners
- Sharing of data to build a connected ecosystem
- Billing services engine
- Live Visualization of data, traffic and KPIs
- Advanced functionality including geofencing, rule engine, connectivity management and AI support
Drive Sweden Innovation Cloud

- **Connected Services**
  - Analytics
  - Connected Automation
  - AI
    - Connected Aut Fleets
    - Connected Infra
    - MaaS support
    - Other services

- **Digital Twin**

- **Cloud Infrastructure**

- **Automate**
  - using AI applied on digital twin

- **Share**
  - data and functionality in joint ecosystem

- **Connect**
  - vehicles, partners, and infrastructure

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**Connected Infrastructure**

**Connected vehicles**

**Connected Automated Fleets**

**Automated Mobility Services**

Drive Sweden Innovation Cloud

Connected Infrastructure

Connectivity Management

Cloud Infrastructure

Connected Services

Analytics

Connected Automation

AI

Partner onboarding

Partner Services using Innovation Cloud

Test Site Stockholm

LIMA Gothenburg

AD Aware

ASTA Zero

Connected Automated Truck

Connected (4G, 5G)

Connected vehicles

Connected Automated Fleets

Automated Mobility Services

Digital Twin

Vehicle and Fleet APIs

Connected (4G, 5G)

Connected vehicles

Connected Automated Fleets

Automated Mobility Services
A systematic approach for transportation transformation

**Connect**
- Connecting all parts of the transportation infrastructure

**Co-creating through Innovation Cloud**
- Making sure that all parts work in unison with each other

**Automated Mobility**
- Supporting connected automation in transport
It's not all about driverless vehicles. This is a completely new approach to mobility. We are on the threshold of a radical shift, and it's happening fast. In just a few years the world will change. We will see entirely new mobility business models enabling sustainable societies.