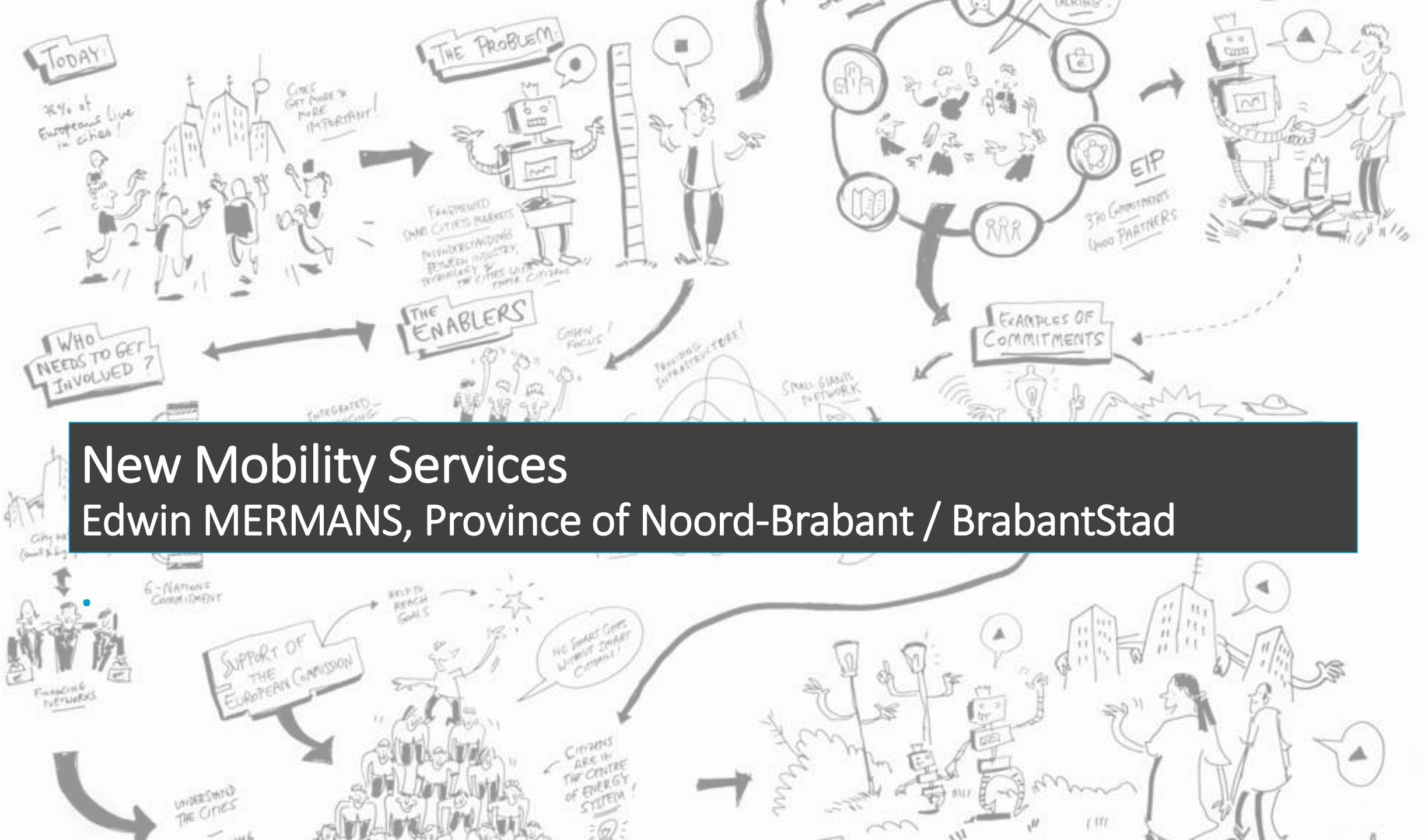


New Mobility Services

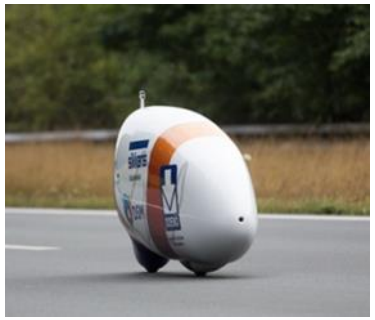
Edwin MERMANS, Province of Noord-Brabant / BrabantStad

Why

Today's cities face challenges in terms of congestion, lack of space, growing population, air quality, noise, liveability, social inclusion, health, economic development and creation of jobs.

Large-scale deployment of New Mobility Services (NMS) is part of the solution in dealing with these challenges. C-ITS, automated driving, MaaS, shared mobility concepts and smart bicycle solutions can be a game changer in how we use our public space.

Specially small- and medium sized cities (50.000 - 400.000 inhabitants) will profit more from embracing NMS.



Challenges:

- Bringing theory to practice.

- All stakeholders have to be brought together in a learning-by-doing multi stakeholder ecosystem.

- Interoperability and creating a sustainable business model. Involving the right industrial partners.

- Diversity between urban areas in Europe is large. Implementation always needs to be adapted to local circumstances

- User involvement is crucial. Adoption of user centric design models is required in the 'learning by doing' concepts.

- Role of private and public responsibilities will change in the domain of mobility during this transition.

Objectives

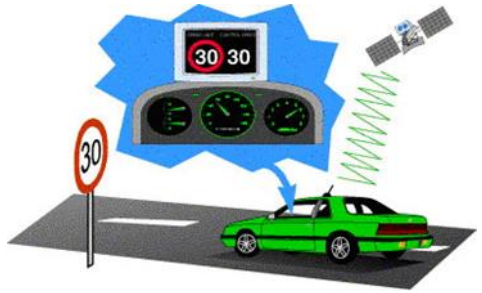
Mobility / spatial

Improve accessibility of cities for citizens and transport of goods and decrease congestion in the urban context.

Improve liveability and the quality of the spatial domain.

More efficient use of space in the urban context.

Offer cost effective solutions both for individual as well as collective mobility needs.



Climate / environment

Be sustainable in the view of environmental issues: Decrease emission of CO2 to achieve the Paris climate goals and improve air quality in cities with reduced concentrations of PM2,5 , NOx and O3.

Social / health

Improve health of citizens because of cleaner air and increased physical exercise because of shift to walking and biking.

Boost social inclusion and quality of life because of improved mobility for vulnerable citizens such as disabled persons and older adults.

Economical

Increase economical opportunities in cities because of better accessibility and higher quality of the spatial domain.

Create new business opportunities for the development of New Mobility Services, tools and products.

Be sustainable in the view of a sound business model and business case and use if needed most advanced technology.

Domains

1. **Technology enablers for NMS**

Facilitate research, testing and piloting of CCAM (Cooperative Connected Automated Mobility), MaaS and integration of both as enablers for NMS. For example: car sharing or ride hailing as part of MaaS will be much more efficient with driverless vehicles. Drones could completely change current urban delivery systems.

2. **Data**

In order to come to NMS data are key. The NMS initiative will explore best practices to collect, use and share data needed for NMS. Privacy protection, security, safety and public and private collaboration are some of the key aspects.

3. **Legislation and private-public collaboration**

NMS and innovation will only happen if both public and private partners are open to new cooperation models. For public authorities challenges are among others:

To give space to experiments with technology and living labs in terms of legislation and exceptions.

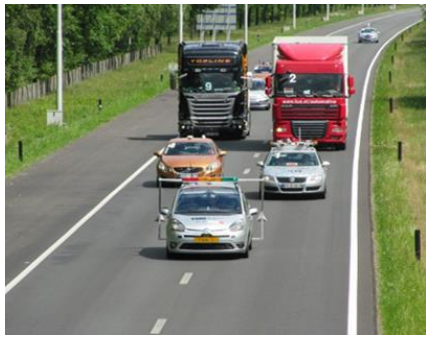
To give space to pilots regarding changing roles of public authorities: Focus on policy key performance indicators and service level agreements with industry instead of well-defined procurement of services. For example: traffic management as a service.

4. **Economies of scale**

The NMS initiative will bring together supply and demand of NMS and will enlarge the demand side.

5. **Digital library**

The NMS initiative will act as European database for NMS.



Working approach

The essence of this initiative is to organise a 'learning by doing' approach to demonstrate and deploy NMS. A multi-helix learning ecosystem will be built in which relevant stakeholders are involved from governments, research, industry and civil society. Real partnership is crucial and all partners will bring and take.

Optimal use will be made of existing platforms like the MaaS alliance, C-ITS Deployment platform, existing European projects and databases such as the ITS observatory.

The added is in:

- Facilitate testing and piloting: supply of data - learning from pilots: decide which data are needed, who is the owner of the data, what are privacy issues and development of business cases and models.
- Offer living labs to make the step from research to deployment.
- Facilitate the involvement of users through user centric design.
- Facilitate development of legislation.
- Knowledge sharing and make an inventory of best practices and lessons learned.
- Bring economies of scale and to offer a market place for suppliers of NMS.

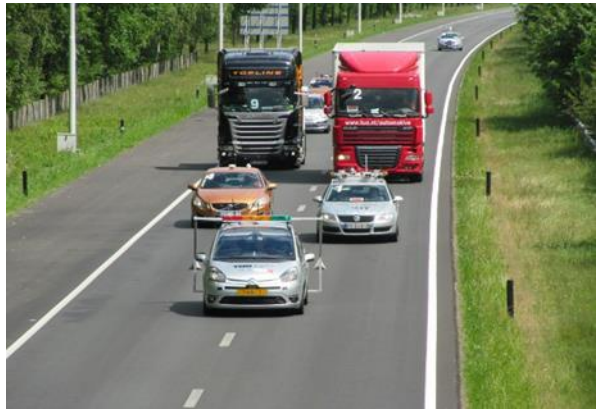
Stakeholders involved

Coordination: BrabantStad (NL):

Local and regional governments

Small and medium sized cities (50.000 - 400.000 inhabitants) / small regions with lower urbanisation level

Larger cities with skills and experience / ShareNorth cities and regions



National governments

Ministries of infrastructure, environment and Mobility/traffic / National Highway Authorities.

Regulation bodies (e.g. vehicle type approval authorities)

Industry

Technology and service providers / Car manufacturers (OEM's) / SME /

1tier-suppliers / Public transport companies / IT, mapping and semiconductor companies / Data connectivity parties

MaaS providers / IRU

Stakeholders involved

Insurance companies

Research and knowledge institutes

Universities / Universities of Applied Sciences / Research institutes e.g. Fraunhofer, TNO

Civil Society - end users.

Associations of car drivers like ANWB and FIA / Road operators / Y4PT, EDF, ECF, EPF, GE Platform /

Associations from bicycle riders and/or pedestrians / of citizens in cities / of older adults /

Trade unions /Organisations for sustainable mobility /

Financers

Investors like banks, pension funds or trusts and regional development agencies. / European Investment Bank?

Impact investors / European subsidies

Network organisations:

ERTICO / Polis - / Eurocities /AER - Assembly of European Regions

January 2018

Mapping of existing alliances, platforms, networks and projects, including products (like roadmaps, white papers, guidelines, etc.) of these groups of NMS in urban context.

Continuously

- Dissemination of the story and mission of the NMS initiative to recruit potential partners via our networks, existing projects, conferences, etc.

- Create partnership, build the community and trust between participants in the process of developing an agenda for collective impact. Decide about the focus for the pilots and deployment.

April 2018

Create an environment that allows mutual understanding of the NMS market actors: both public (like authorities) and private (like technology and service providers) stakeholders, as well as the end users. And that makes the connection between the existing more specialised or focussed initiatives.

September – May 2019

Organise marketplace. With support from the investment consultants look for financing and find investors for the deployment and pilot projects.

End of 2019 / early 2020

Kick off and implementation of a range of projects for pilots and deployment all over Europe.