SIP-adus 2020

A Snapshot on Automated Mobility Policies

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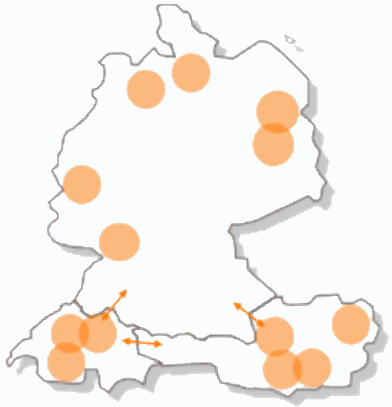
A Snapshot on Automated Mobility Policies

1. A **Strategic Planning** perspective for Cities
2. A common **legal framework** – from testing **towards operations (SHOW project)**
3. A look into **public procurement** options

Our Starting Point: A City-led-Dialogue on Automated Mobility

Collaboration Frame: Connected and automated Mobility in Cities

- Strategic Allignment
- Common measures & common ressources
- Learning and knowledge exchange
- Common positions & Anwareness



New Partners

New Spaces

New Data

New Governance

New Partners
International actors in a local mobility eco-system

Leading questions

- **Why** do cities decide for **specific cooperations** – or against? Along which **criteria**?
- Do cities **coordinate** to have a common approach **towards industries**? Or is it a race for “the best“ partners to be frontrunner?
- Should cities **engage** actively – or is it better to **wait** for what might come?
- How to manage the **balance** between neccessary privilegs/**concessions** and neutrality/**openess**/fairness?

Establish an appropriate **dialogue**

Start within a country / Region - **coordinate with other regions**

Establish Cooperation **accross sectors**

Go for Pilots - foster a „**light-weight“ regulation** & sandboxes

Public Transport is **not the only** backbone

Re-define „green transport“

Deep dive into „**data for evidence**“

New Spaces
Hot Spots of Transformation

Leading questions

- Which mobility offers and transport segments will **benefit from automation**?
- What‘s happening along **your curbs**? Where should you provide **HUBs** for multimodal offers?
- Which **areas/districts** will benefit?
- Which options towards **re-use of** (public) **space** could this generate?
- What will be the **impacts** of new offers on **urban structures and functionalities**?

Foster **district-based offers**

Elaborate on Use-Cases and **their target-groups and spatial dimension**?

Urban fringe & axes as priorities

Automated Drivability (ODD +)

Define/**select your hot-spots** (by/for whom)

Optimize processes (waste, cleaning,...)

Prepare for „on demand“ early (look into **planning needs**)

New Data
21st Century City Assets

Leading questions

- Which are **specific data needs** for cties?
- How to get a clear perspective on **data values** for (new) business models and mobility offers?
- Which potential **benefits & insights** could you gain for your responsabiities and duties?
- **Which data** should be made **accessible/open**, which should be kept private or in abusiness domain?
- **How will you organise** data handling & analytics?

Get the data and use it – **Capacity Building**

Eat your own Food – first to improve your own service domains

Dashboard: What to monitor? **How to influence?**

Push towards **public-private** developments

„**Gravitation matters**“ – learn and engage towards „personal habits & biases“ - cooperate with big platforms

European/**international standards – know-how**

City-led „**mobility-data-strategy**“

New Governance:
Learn and act beyond usual boundaries

Leading questions

- Is there a **demand** for **new institutions** to take care about automated mobility offers and managment?
- How to **organise effective collaboration** with other stakeholders?
- Which mechanisms or institutions do we need for "**responsability-benefit-brokerage**"?
- How could **Living Labs** help to **scale & transfer** promising solutions?

Private L4 vs. L4-Service
Cities have to develop appropriate tools

Multi-Level collaboration (EC-State-City) – establish alliances! Connect differnt sector platforms

Operate Living Labs /engage from public side to for new learning perspective (performance based)

Organise **Transformation** (automation included)

Data superiority – digital layer of a city's public space

Be clear on **your Future Vision** on „Mobility, Space & Life-Style"

SHOW – A Common regulatory Framework for > 20 Pilots

A joint legal, regulatory, institutional and ethical framework for deploying CCAVs

Analyse existing legal/institutional Frameworks

- Procedures & elements

Testing → Conditional Operations (Systems perspective)

- Gaps
- Recomendations

Operations

- regulatory aspects
- operations framework

Specific Focus: Ethics & privacy

- data protection
- system security
- Gender & equity

SHOW – Framework for Pilots

- We use a comprehensive **system orientated** approach (e.g. vehicle, infrastructure, operational procedure) with focus on operational safety
- In the future, comprehensive permit application procedures for **automated transport services** will be demanded
- Technical permit application procedures for vehicles are only one part of the show, **functional interaction** with infrastructure must be considered!

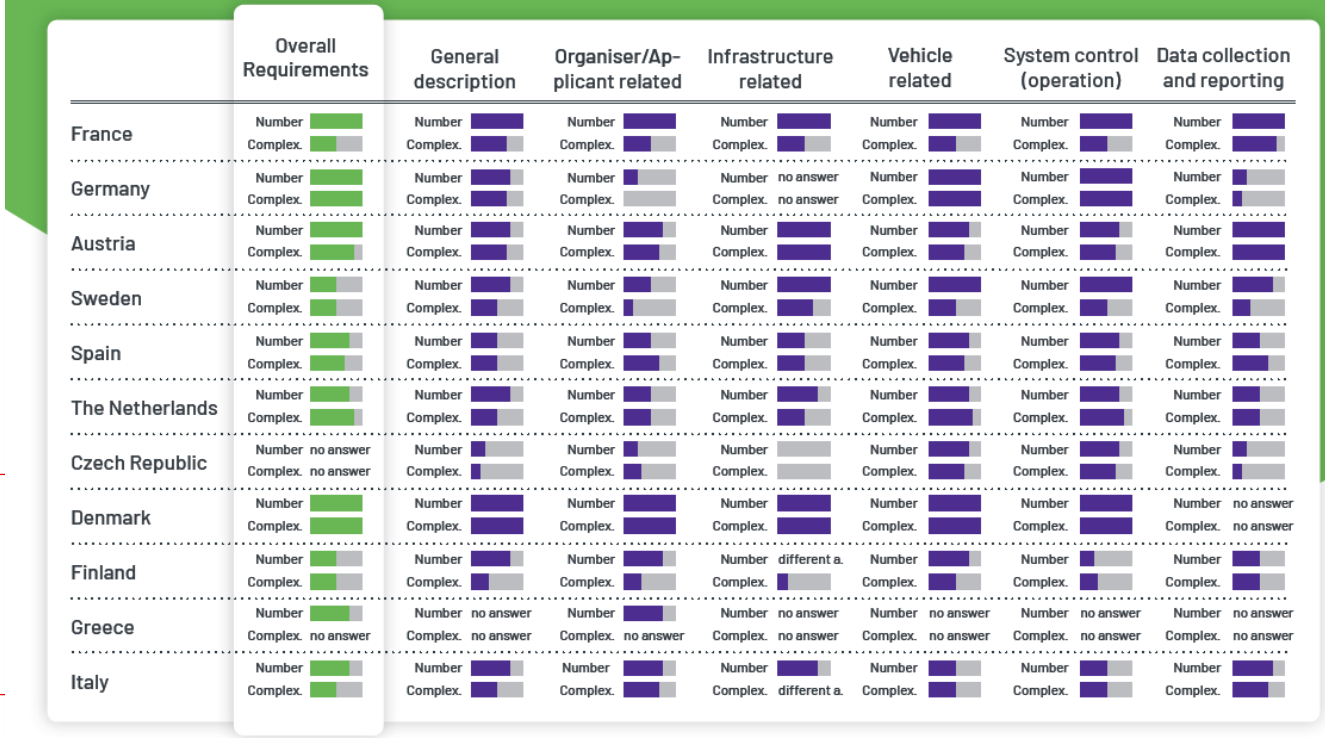
Need of Improvement*

	At least one SHOW partner sees need of Improvement	What could be improved?
France	✓	„Waiting times. Flexibility to make modifications. Streamlined process for second applications with a common baseline. Validity period for authorisations. Communication with the interministerial committee."
Germany	✓	/
Austria	✓	Empowering the current first point of contact AustriaTech to act as a responsible authority making decisions on AV testing/ operating on its own, not on behalf of the legally responsible federal authority BMVIT...comparable to legally authorized car repair shops officially carrying out the § 57a KFG services for car owners ...in order to economise AV application procedures
Sweden	✓	„The authorities are learning by doing (which is good) and thus the process is not perfect yet. Their early experience has led the Agency in charge to introduce a first step, where you express your interest in applying. That kick's off the dialogue - it is followed by a meeting with several representatives from different parts of the Agency where you have an open exchange to familiarize both parties with expectations, what to do, how to do."
Spain	✓	„Less bureaucracy. Only one way to get the permits" - „The DGT is currently working on a new update of the instruction in order to adapt the document to new technologies and systems.
The Netherlands	✓	More clear defintion of safety requirements and add objective pass/fail criteria
Czech Republic	✓	There should be created the whole procedure.
Denmark	✓	On top of administrative process also a political process is required - this is, time consuming .
Finland	✓	More clarity / templates could help in the application process.
Greece	✓	The minimum speed of the Automated Vehicles, the context of the operation.
Italy	✓	/

* According to SHOW partners

There are **vast differences** regarding **number and complexity of requirements** that have to be fulfilled

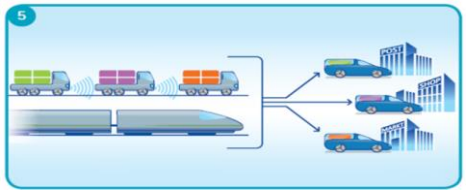
Number and Complexity of Requirements

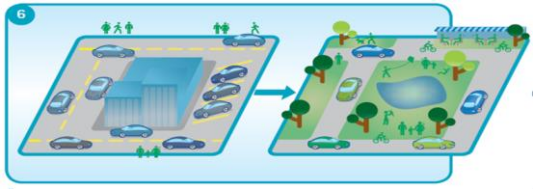


Let‘s get ready for procurement

› **Development of guidelines** for „**innovative public procurement“** of automated mobility services

Different Use Cases of automated mobility services → *Definition of organizational, financial and legal possibilities* → *Concept of modules & system-elements*





› Establish “**Role model function**” of the public sector
  › national and regional added value
› Include procurement early **– let’s get real**
  › New instruments & collaboration mechanisms needed

Procurement options – System Elements

L-4 Services
Building Blocks

- **(A) Planning Tools (Planning Dept.)**
- **(B) Physical & Digital Infrastructure Elemen t (IOOs)**
- **(C) Fleet-MM. / Operations-Centers (PT/Service Op)**
- **(D) Vehicles & Components**

What we need to define

Elaboration of (functional) (minimum) requirements for the procurement process in a selected scenario

Procurement Instruments & Processes
(Innovation-Partnerships, Buyers Groups)

Pre-Commercial Commercial	References (SPICE, SAAM, LIMA, FABULOS…)

Technical Aspects & Specifications
(Standards → ToR;

Infrastructure (C-ITS/C-Roads; Curb & Hub elements; Mobile-NW)	Vehicles (ADAS; special purpose vehicles, Vehicle types)

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ありがとう - Arigatō, Thank You

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