Automation-Ready Authorities - How to prepare? -

Wolfgang Backhaus - Rupprecht Consult

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SIS10 - Possible actions for Public Authorities and Cities to facilitate Automated Driving

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How to plan with uncertainties?

SUMP Principles

- Assure quality
- Plan for sustainable mobility in the ‘functional city’
- Arrange for monitoring and evaluation
- Develop a long-term vision and a clear implementation plan
- Involve citizens and relevant stakeholders
- Assess current and future performance
- Cooperate across institutional boundaries
- Develop all transport modes in an integrated manner

*Sustainable Urban Mobility Planning for Road Vehicle Automation* practitioners briefing
Change, change, change ...

Phase 1 of SUMP cycle: Preparation and analysis

Increase **Dynaxibility** to
- to find the right balance between regulation and new ideas to foster innovation
- to establish sustainable mobility in zone 3!
Learn your lessons...
How to get from zone 4 to 3?

CrowdSpark/AAP: seen on http://theconversation.com
Assess future performance...  
... liveability with `orderly chaos`?
Start early with involvement and participation ... 
... and not only for the selection of options!

Aachen Future Lab:
Do we want autonomous driving?
As part of the International Citizens’ Debate: Tomorrow, our lives with driverless mobility!

100 citizens of City of Aachen got together and exchanged views on the subject of autonomous mobility.
www.futurelab-aachen.de/en
It’s about impact, impact, impact ... Analyse problems and opportunities!

- Space required to transport 60 people
  - Car
  - Uber
  - Autonomous car
Don't believe the hype ... Identify KPIs for all mobility objectives!

KPIs for liveability in SUMPs:
- Social compatibility (equally accessible for all, economic)
- Space efficiency
- Resiliency
- Safety
- Environmental sustainability (reduction of noise, CO2, pollutants)
Develop scenarios ... to enable informed decision making!

Legend:
- Microscopic
- Macroscopic

Gothenburg (VTI)

Helmond (TASS)

Accessibility during long-term construction works

Shared Space

Transition from interurban highway to arterial

Signalised intersection including pedestrians and cyclists

CoEXist
# Just do it!
Agile values & regulatory principles to tackle change!

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<th>Agile Manifesto Values</th>
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<td>Individual and Interactions</td>
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<td>Working Products</td>
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<td>Customer Collaboration</td>
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<td>Responding to Change</td>
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<td>Comprehensive Documentation</td>
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<td>Contract Negotiations</td>
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<td>Following a Plan</td>
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1. **Adaptive regulation**  
Shift from "regulate and forget" to a responsive, iterative approach

2. **Regulatory sandboxes**  
Prototype and test new approaches by creating sandboxes and accelerators

3. **Outcome-based regulation**  
Focus on results and performance rather than form

4. **Risk-weighted regulation**  
Shift from one-size-fits-all regulation to a data-driven, segmented approach

5. **Collaborative regulation**  
Align regulation nationally and internationally by engaging a broader set of players across the ecosystem

Start to prepare proactively ...
CoEXist automation-ready framework

<table>
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<tr>
<th>Mobility Aspect</th>
<th>Automation Awareness</th>
<th>Planning for Automation Readiness</th>
<th>Implementation of Automation Ready Measures</th>
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<tr>
<td>Policy</td>
<td>Policy screening: Liveability as top priority - how can CAVs contribute to it?</td>
<td>Reassessment of strategic mobility plans; incorporating new mobility forms</td>
<td>Mobility pricing for &quot;SPAM&quot; roaming cars</td>
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<tr>
<td>Infrastructure</td>
<td>Is there a conflict between people friendly vs. automation friendly?</td>
<td>Preparation of physical and digital infrastructure</td>
<td>Modifications to infrastructure and accompanying traffic code</td>
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<tr>
<td>Planning</td>
<td>Engagement with citizens &amp; support testing activities and research</td>
<td>Update travel demand models and evaluate road capacity needs</td>
<td>Assessment of required land use changes based on integrated land use and transport modelling tools</td>
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<td>Capacity Building</td>
<td>Try out level 1 &amp; 2 functionalities</td>
<td>Identify new skill requirements - 'less concrete more bytes'</td>
<td>Organisational restructuring for traffic management and public transport operations</td>
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<tr>
<td>Traffic Management</td>
<td>Road authorities need to engage with OEMs</td>
<td>Back office for data exchange in traffic management</td>
<td>Defining data management responsibility with new management schemes</td>
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</table>

Reduce uncertainties through:
- Guidance on technology, analysis methods, impacts and measures
- Clear-headed and informed decisions about automation
- Automation FAQ for cities
Conclusions

• Authorities should look at automation as an element of a more **fundamental change process**

• Policy development for automation should be **based on analyses** and supported by all **stakeholders** (and not on an SAE perspective).

• In addition to (old) risks, **new opportunities** for sustainable urban development arise.

• Local actors should **actively** use these opportunities and become "automation-ready".
Thank you for listening!

Wolfgang Backhaus
w.backhaus@rupprecht-consult.eu

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