



iMobility Forum WG Automation in Road Transport

WP3.2 Sub-WG Legal Issues D3.2.1 regulatory needs

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WP3.2: Deliverable D3.2.1 (DRAFT 1)

- D3.2.1 “Regulatory needs and solutions for deployment of Vehicle and Road Automation (Draft1)”
- Period 1: mostly investigatory with an attempt to identify the relevant persons in Europe and beyond for the regulatory topic

SEVENTH FRAMEWORK PROGRAMME
EUROPEAN COMMISSION
DG Communications Networks, Content & Technology

SEVENTH FRAMEWORK PROGRAMME
INFORMATION AND COMMUNICATION TECHNOLOGIES
Coordination and Support Action
Grant Agreement Nr 610737

VRA NETWORKING
IN AUTOMATION
Support action for Vehicle and Road Automation network

**Regulatory needs and solutions for deployment of
Vehicle and Road Automation (Draft1)**

Deliverable no.	D3.2.1
Dissemination level	PU
Work Package no.	WP3
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Version Nr (F: final, D: draft)	V1.1
File Name	VRA_20140930_WP3_D3.2.1 Regulatory needs (Draft 1) v10.docx
Project Start Date and Duration	01 July 2013, 42 months

WP3.2: First period (July 2013 – Sept 2014):

- Identify the active contact points
- Clarify current initiatives of EU Members States
- Identify the inputs from EU and national -funded projects
- Network internationally especially with US and Japan to identify their regulatory initiatives
- Provide first recommendations for EU level coordination

D3.2.1. Different regulatory frameworks

- Fully “Automated (Road) Transport Systems”
- “Vehicle automation”: evolution of ADAS
- “Freight automation”: evolution answering fleet specific logistic and business needs.
- “Infrastructure evolution” with resilient intelligence for traffic management and control.

WP3.2 Mapping of current activities (EC)

- Study SMART2010/0064 Definition of necessary vehicle and infrastructure systems for automated driving
- DG MOVE study on action 5.2 Liability aspects related to ITS applications
- iMobility forum Automation WG: Sub-WG on regulatory needs
- European Commission “Platform for the deployment of C-ITS in the EU”

WP3.2 Mapping of current activities (EU MS)

- European MS
 - Germany, The Netherlands, United Kingdom, France, Sweden, Finland, Greece, Other EU member states
- Other parts of the world
 - United States, Japan, Singapore
- International activities
 - UNECE, Standardisation (ISO, SAE)
- European and national projects
 - HavelT, InteractIVe, SARTRE, COMPANION, Citymobil2 WP26, AdaptIVe Response4
 - DRIVE Me (SE), HF Auto (NL), NL DAVI, FR ABV

Vienna convention

- European or world level rules and standards are needed. Many are still calling for a change of the Vienna convention but they should know that:
- **A recent amendment has been made this year by the U.N. Working Party on Road Traffic Safety which would allow a vehicle to indeed drive itself, as long as the system "can be overridden or switched off by the driver".**

Liability

- It is still not clear whom to blame when an accident will occur depending on the scenario and the level of automation involved but the target of the OEM is to provide a roadworthy vehicle with highest functional safety
- Some solutions have been mentioned
 - A framework for type approval of automated vehicles based on series of tests in virtual environment, on test tracks and finally on real roads
 - Use of Data recorders (black boxes) capable to reconstruct the incident receivable in court
 - Use of the concept of “Vehicles as personhood” similar to the treatment of liabilities related to “animals” or “kids”
 - Use an “insurance fund” for introduction of automation (FR)

Netherlands

- NL wants to be at the frontline of the deployment of automated transport solutions
- DAVI demo: A specific case (an exception to the rule) with automated vehicles admitted to drive on the road in the Netherlands was performed through RDW based on the European Directive (2007/46/EC) and national laws
- Insurance companies have started thinking positively towards automation



SWEDEN

- Prepare for testing of partially or fully automated driving on the road in 2016-17
 - Current Swedish regulations give space for testing of real vehicles with a high degree of automation
 - Traffic legislation does not prohibit
 - If the vehicle does not meet requirements - possible dispensation from Transport Agency
- DRIVE ME:
 - The Highly Automated Driving will be allowed on specific roads that have been “certified” for this kind of operation i.e. Ring highway of Gothenburg, in addition some secondary roads and some car parks.

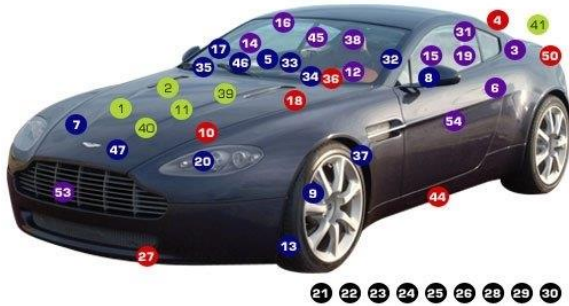
FINLAND

- The Finnish Ministry of Transport wants to be in the front line and transform the transport policy codes for automation.
- Finland is working with law and policy makers to allow tests on roads (like in the Netherlands).
- They believe that they will be ready by this year and testing will be allowed in specific areas for specific scenarios

“We want to deploy fully automated transport in Urban areas with vehicles operating at max 40 km/h”

Regulatory issues, M. Flament

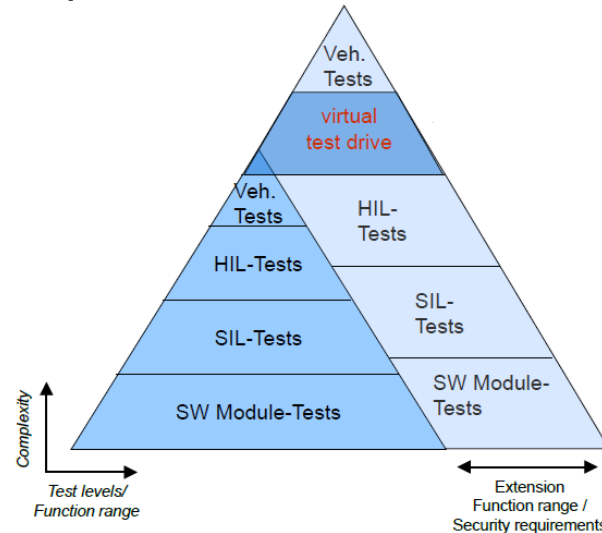
Testing and Validation



Source: RDW



“Testing of Highly Automated Vehicle will never be exhaustive and able to cover all possible scenarios: Too many variables are present between Vehicles, infrastructure and the transport cloud so this will become a liability headache”



Dr. Anne Bartels – Volkswagen
 * Prof. Winner et al., Damstädter Kompendium
 “Mensch un Fahrzeug” 2011

iMF Automation Recommendations

- Regulatory framework to allow of highly automated driving vehicles testing at European Scale within a very near time horizon
- Regulatory framework to allow the commercialisation of highly automated driving vehicles at European scale in a longer term
- Clarify the roles and responsibilities of all relevant parties including road operators, and infrastructure providers

WP3.2 Next steps

- Initiate concrete interaction with identified contact points
- Request feedback on first draft report and extend its scope
- List current regulatory concerns and which actions are needed
- Organise at least one workshop on regulatory issues in collaboration with the legal issues WG of the iMobility Forum
- Update report with status of initiatives and project results, add any new ones
- Publish findings in second draft report

WP3.2 Listing regulatory concerns (for Phase 2)

- Roles and responsibilities
- Testing of automated vehicles
- Liability framework
- Insurance funds
- Infrastructure Data
- Vehicle data

Thank you for your attention...

Any questions?

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