A regulatory framework for connected and automated driving Towards a strengthened cooperation

3rd SIP-adus WS
TOKYO, JAPAN

Friedemann Bruehl

JAIA, on behalf of ACEA

ACEA MEMBERS

AGENDA

1. Context

2. Developing a supportive policy and regulatory framework

3. The European policy and regulatory framework

4. Towards a global policy and regulatory framework

5. Japan-EU cooperation

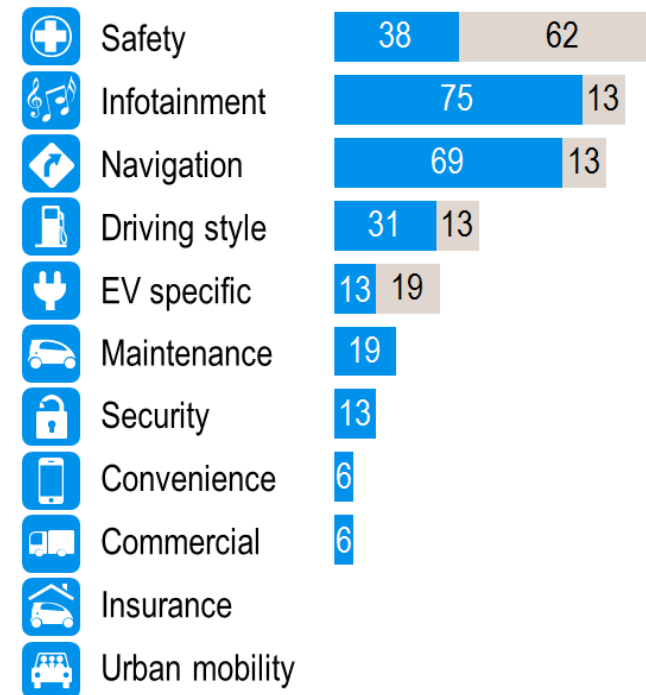# 1. Context

CONNECTIVITY POTENTIAL

A vehicle with access to mobile network…

… exchanging 2-ways data with its environment…

P **Road infrastructure**
(Traffic lights, parking, tolls…)

🏃 Humans
(Drivers, pedestrians…)

📱 Mobile devices
(Mobile, tablet, smartwatch…)

@ Service providers
(Leaser, insurance, hotel…)

🚗 Other vehicles

… and allowing a wide range of Mobility services

Service	% offering	% planning
Safety	38	62
Infotainment	75	13
Navigation	69	13
Driving style	31	13
EV specific	13	19
Maintenance	19	
Security	13	
Convenience	6	
Commercial	6	
Insurance		
Urban mobility		

■ % of OEM offering the service (Europe)[1]

■ % of OEM planning to offer the service (Europe)[1]

Source: Roland Berger analysis, study results 2014

NEW ALLIANCES/CO-OPETITION

Traditional automotive business models will change

- – Manufacturers are evolving from being 'just' producers of vehicles to providers of integrated mobility solutions
- – That's why our industry has to establish new alliances with non-automotive partners in the telecom and IT sectors …
- – … and develop innovative mobility solutions around new technologies together with other players

At the same time, these disruptive developments will bring great change to our industry

- – Not only competition from other world economies, but also non-traditional players (large IT companies)

Tech players

Mobility and logistics players

Infra players

REALITY CHECK

Managing expectations

- Correct expectations on big data and access to all data ?
- Automotive industry meets new industries such as IT/telecoms with sometimes different agendas and expectations
- Anti-trust law prevents intense collaboration models
- Harmonization, coordination on standards, safety etc. takes time

Future proof concept

- Technology progresses at speed of light. Choosing one or another technology may hinder flexibility for automotive business
- Connectivity makes us more dependent and vulnerable (e.g. cyber attacks)
- Society may not be able to absorb the tech (r) evolutions. Aging society, digital divide, shortage of digital skills

2. Developing a supportive policy and regulatory framework

REGULATORY CHALLENGES

Approval and Regulation

- Tests on public roads (codes of practice, exemptions)
- Update '58 Agreement for automated driving
- Vienna Convention

Data

- Access to data: what data and how to access
- Protection of personal data/privacy
- OEMs' intellectual property rights versus "free flow" of data

Security and Standards

- Secured access to data by third parties
- Cyber Security
- C-ITS standards, ISO framework
- Global V2X standards

Liability

- Connectivity means strict service level agreements with telco providers
- Automation: role of OEM, data recording, new legal framework needed ?

POLICY AND DECISION-MAKING LEVELS

- **Global framework**
  - UN (Vienna Convention, UNECE)
  - ITU (radio spectrum)
  - ISO and SAE (standardisation)
  - G7
- **European Union framework**
- **Japan–EU cooperation**
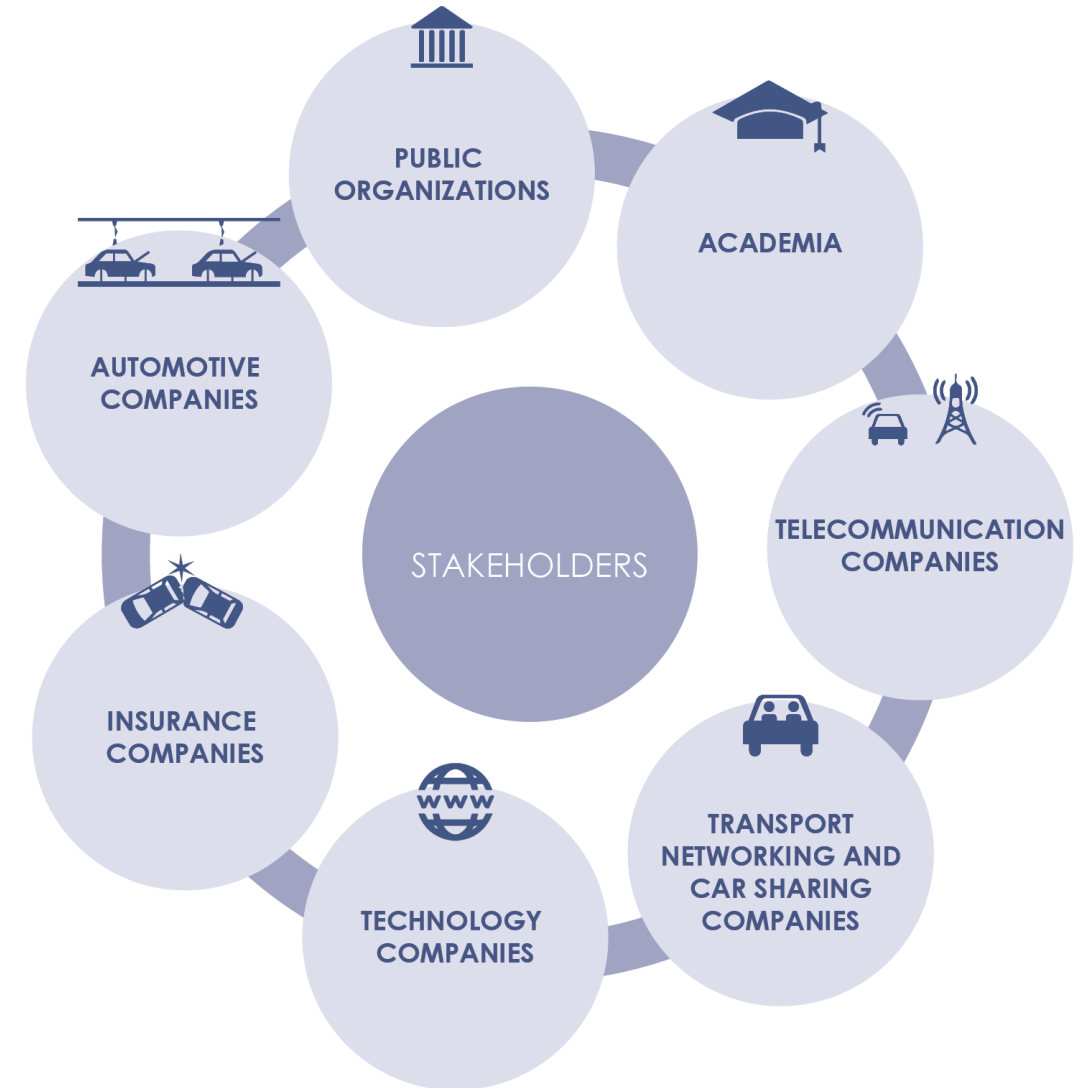
3. The European policy and regulatory framework

EU POLICY FRAMEWORK

- **Competences fragmented between EU and 28 member states**

- **Umbrella strategy: the Digital Single Market**
  - Single market – remove obstacles to digital economy
  - Trust in digital data/security environment
  - Competitiveness of the industry

- **Three Commissioners in charge**
  - Elżbieta Bieńkowska - Industry
  - Günther Oettinger - Digital economy and society
  - Violeta Bulc - Transport

EU POLICY FRAMEWORK

Gear 2030
- Industry value chain
- Focus on automation
- Legal, technical aspects
- Links with UN-ECE

Digital
- 5G action plan
- Gigabit society
- Net neutrality
- EU Industry Dialogue

C-ITS
- Focus on connectivity
- Phase 1 report: Jan 2016
- Phase 2 focus on connectivity in infrastructure
- Short range standard G5

Parallel topics
- Safety
- Standardization
- Funding: CEF, H2020
- Free flow of data
- Access to digital skills

EU INDUSTRY DIALOGUE
between EU automotive and telecom industries

- **Initiated in September 2015 by Commissioner Oettinger**

- **Sectors identified three key areas for pro-active cooperation**
  - Connectivity: improving broadband roll-out, network coverage and reliability
  - Standardisation: promoting take-up through interoperability
  - Security: ensuring that all data transmission to and from vehicles, as well as all data processing that is required, occurs in a secure manner

- **Triggered the creation of the European Automotive-Telecom Alliance**
  - Objective is to accelerate the deployment of connected and automated vehicles alongside digital highways across Europe
  - Through a mega European pre-deployment project starting in 2017

4. Towards a global policy and regulatory framework

GLOBAL POLICY FRAMEWORK

- **Global harmonisation is crucial for a timely and cost efficient market development of connected and automated vehicles**

- **Agenda for concrete action**
  - Changes to Vienna Convention to allow for higher degrees of automation
  - Update of UNECE Regulation 79 on type approval of steering equipment
    - ⇨ ACEA greatly appreciates support from Japan to allow for the introduction of automated steering above 10 km/h
  - Japan and the EU need to establish a common vocabulary on the various levels of automation in a way that other nations can join easily

5. Japan-EU cooperation

JAPAN-EU COOPERATION

1. **On the 2017/2018 (field) operational tests in Japan, ACEA would be pleased to receive more details on the following:**

   - Approach

   - Conditions

   - Expected outcome

   - Rights & obligations

2. **With regard to the legal framework for fully automated driving systems, important for Japan to harmonise its requirements, as far as possible, with those in the EU and the US**

   - We have to prevent that regulations for automated driving systems inadvertently act as a barrier to trade

   - For example, regulations on radio frequencies for V2X communication in Japan should be harmonised with the 5.9 GHz standard in the EU and US

JAPAN-EU COOPERATION

3. Follow-up on the G7 Transport Minister's meeting in Karuizawa

- European Commissioner Violeta Bulc pleaded for intense G7 cooperation on driverless cars
- Opportunity for JAIA and ACEA to work together

4. Cyber Security

- Absence of uniform approach and standards
- Exchange of expertise needed
- Works ongoing at UN level in order to foster a global automotive cybersecurity security approach -> opportunity to foster a common global platform

THANK YOU FOR YOUR ATTENTION

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