Workshop on Open Data

CEDR – CONFERENCE OF EUROPEAN DIRECTORS OF ROADS
TRA 2018

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AGENDA

1. ACEA
2. CCAM and data
3. Policy dialogue
3. Going forward

Note: the graphs in this presentation are for illustrative purposes only.
1. ACEA: what and who
ACEA COMMERCIAL VEHICLE MEMBERS

DAF

DAIMLER

IVECO

SCANIA

MAN

VOLKSWAGEN

VOLVO
ACEA LCV MEMBERS

DAIMLER

FIAT CHRYSLER AUTOMOBILES

Ford

IVECO

PSA

GROUPE

GROUPE RENAULT

TOYOTA

VOLKSWAGEN
ACEA BUS & COACH MEMBERS

DAIMLER  IVECO

SCANIA  MAN

VOLVO
KEY FIGURES ABOUT THE INDUSTRY

12.6 million Europeans work in the automotive sector

3.3 million jobs in automotive manufacturing

€396 billion in tax revenues (EU15)

€50.1 billion in R&D spending, largest private investor

€90 billion positive net trade contribution
2. CCAM and data
<table>
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<th>Day 1</th>
<th>Day 2</th>
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<th>Day 4</th>
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<td>Awareness Starts</td>
<td>Automation Starts</td>
<td>Cooperation Starts</td>
<td>Future Mobility</td>
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- **“I share where I am and what I hear”**
- **“I share what I see”**
- **“We share our intentions”**
- **“We coordinate all manoeuvres”**

**Hybrid Connectivity**

- **ITS G5+LTE-V**
- **Hybrid + 5G**
- **Hybrid + New technologies**
- **Hybrid + new technologies**

**Advanced Driver Assistance System**

- **2017**
- **2019**
- **2021**
- **2025**

**Some Roads Human Back-up**

- **2021**
- **2025**

**Most Roads No Human Back-up**

- **2030**
- **2035**

**Fully Automated**

- **2040**
- **2045**

Source: EC-DG MOVE
CONNECTIVITY SERVICES
Sense of reality needed -> not all vehicles and infrastructures are connected today

Step by step approach on connectivity and automation

Starting blocks for V2V/V2I/I2V/V2X

Invest once principle. Vehicles are not smartphones! Hard choices to be made: sensors, lidars, camera technology, communications technology, back-end servers
FOUR CATEGORIES OF DATA/USE CASES

1. “Public interest” data -> Reciprocity
   Data relevant to traffic safety
   (e.g. local hazard warning, ITS-related services)

2. Data triggered by the vehicle -> B2B
   Services available across brands: non-differentiating vehicle data
   (e.g. ambient temperature, traffic flows, road sign recognition, street parking)

3. Vehicle specific technical data
   Brand-specific services & component analysis/product improvement: link to suppliers, IP protected
   (e.g. ECU monitoring, chassis sensor data)

4. Data triggered by driver -> GDPR
   Personalised services
   (e.g. vehicle position, speed, insurance, fleet, roadside assistance, diagnostic)
VEHICLES AND INFRASTRUCTURE

❖ Examples of events generated by the vehicle
   • Accident warning
   • Unexpected stationary vehicle
   • Slippery road warning
   • Hard breaking event

❖ Examples of events generated by the traffic infrastructure
   • Fixed infra static data (eg speed limit)
   • Fixed infra dynamic data (dynamic speed limits)
   • Temporary infra static data (road closed, diversion)
   • Temporary infra dynamic data (alert board)
   • Roadworks
Examples of C-ITS use cases

Road safety related:
- Emergency vehicle approaching
- Slow or stationary vehicle(s)
- Traffic jam ahead warning
- Hazardous location notification

Cooperative traffic efficiency:
- Traffic information and smart routing
- Traffic Light Assist
- Green Light Optimal Speed Advisory (GLOSA) / Time To Green (TTG)
- Road works warning
- Weather conditions

Cooperative local services:
- Off street parking information
- Park & Ride information
- Information on AFV fueling & charging stations
- Zone access control for urban areas

ITS G5
(short range 802.11p/W ifi)
or
LTE-V
(PC mode/short range cellular)
or
Mobile network
V2X

Indirect
- V2B – vehicle to backend

Direct
- V2I – vehicle to traffic infrastructure
- V2V – vehicle to vehicle
- V2P – vehicle to pedestrian

Backend Servers

Depending on factors such as criticality/safety/latency

B2I – backend to traffic infrastructure
B2V – backend to vehicle
ACEA POSITION ON ACCESS TO DATA

• OEMs prepared to make data available, when the following principles are respected:
  o Safety, security, vehicle integrity and liability
  o Customer choice (repair and maintenance, as well as mobility services)
  o Fair competition
  o Privacy and data protection
  o Interoperability (standardised approach, cfr ISO)
  o Return on investment

• Direct access to data inside the vehicle poses a threat to: safety, security and integrity of the vehicle

• Dongles connected to an OBD interface pose a risk to the vehicle

• Focus on providing off-board access to data through Extended Vehicle model
2. POLICY DIALOGUE
CONNECTED DATA POLICIES

- ITS directive 2010/40
- DR 886/2013 (Priority Action c)
- DR on C-ITS specs (Priority Area IV)
- "Data economy"
- Data protection/privacy

- Priority action c + Priority Area IV
- SRTI
- Linking vehicle with the transport infrastructure
- PSI directive B2B, G2B, B2G Access, use, re-use
- GDPR ePrivacy EECC NIS

- Specifications Procedures Standardisation
- Public/private service providers road authorities
- Interoperability Technology “GPDR” (Cyber) security
- Private interest/public interest balance
- Personal data non-personal data raw data
NO ONE SIZE FITS ALL

Types of data

❖ Machine generated data, raw data
❖ Interpreted data
❖ Anonymised data
❖ Personal data
❖ Meta data
❖ [...]

Who generates the data?
Who processes and interpretes the data?
Who uses the data?

Balance the interests

❖ Quality monitoring
❖ Intellectual property rights
❖ Trade secrets
❖ Privacy
❖ Private interest
❖ Public interest
❖ Competitiveness of the industry
3. GOING FORWARD
KEEP IN MIND

1. Not all is connected today. Step by step approach

2. Invest once principle: first time right, safety, security and sustainability at stake

3. Competitive landscape among vehicle manufacturers

4. Policies should facilitate, not hamper innovation

5. And... let’s continue to talk to each other!
GOING FORWARD

- Dialogue with CEDR CAD group
  - Understand each other’s ecosystem
  - Demystify connectivity, automation, data
  - Exchange on ongoing projects
  - Identify barriers and opportunities, solutions
  - First intro meeting held with CAD group on 8 March 2018, Birmingham

- Identify which sources, use cases and data: vehicle originated, road centres originated, other third parties devices and services

- No duplication of dialogue for a : sync with the Data Task Force member states/industry
ACEA POSITION PAPERS
On Smart Mobility and Cybersecurity

Principles of Automotive Cybersecurity
https://goo.gl/L7SdRX

Access to Vehicle Data for Third-party Services
https://goo.gl/Lf8vAB

Principles of Data Protection in relation to CAD
https://goo.gl/37iCHV
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THANK YOU FOR YOUR ATTENTION

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