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Brussels,

MOVE B4

**Workshop on cross-border testing in the field of**

**Cooperative, Connected and Automated Mobility**

15 May 2018 - 10h00 to 13h00
Rue de la Loi 130, BE-1040 Brussels, Room B

*Draft summary record*

*Chair: Claire Depré, Head of Unit B4 "Sustainable and Intelligent Transport", DG MOVE*

# Introduction

The Chair welcomed the participants and reminded the purpose of the workshop, in the context of the follow-up of the second High Level Member State Dialogue that took place on 14 and 15 September 2017 in Frankfurt (see summary records of the two first workshops held on 16 March and 20 April for further details on the context and outcomes of these workshops).

# Approval of the summary record of the workshop of 20 April 2018

After a quick tour de table, the Chair presented the summary record of the initial workshop of 20 April 2018. An editorial change was proposed by DG CNECT.

With this change, the summary record was approved.

# Presentation of the analysis of received contributions

DG MOVE presented updated results, on the basis of the 8 contributions already received, focusing on must-have elements requiring cooperation at EU level between public and private stakeholders and being feasible at short or medium term.

**On vehicle and infrastructure functionalities**, the 5 most rated functionalities (respecting dynamic traffic rules, passing construction sites, respecting traffic lights, advanced traffic management, incident detection) have all in common to be volatile, dynamic and/or not predictable.

The Chair opened the floor to the participants for questions/comments:

- ETNO underlined the diversity of opinions within a single company, as diverse interpretations are possible, which may lead to unpredictable results. Therefore a short explanation of each line would be useful.

- DG MOVE stressed the need to find a balance between accuracy and manageability of the table.

- IRU highlighted the need to understand how the switch on/off of the automated functions of the vehicle and the related interaction with the driver could take place, especially cross-border.

- DG MOVE emphasised that without the 5 most rated functionalities, the operational design domain of automated vehicles would be very limited, and reminded the importance of driver training, also identified in two contributions.

- The Chair noted the importance of the user perspective as raised by IRU, with the issue of latency time to take over.

- ACEA mentioned the level 3-projects ADAPTIVE and ENSEMBLE, which provided different answers. ACEA noted its convergence with IRU's statement, in particular regarding HMI and the issue of cross-border for taking over.

**On technical enablers**

Short range connectivity (V2V, V2I) and functional safety were the most rated technical enablers. Several enablers were not mentioned, which may not mean that they were not considered important, but that cooperation between public and private sectors were perhaps considered as not needed or not feasible in short time.

The Chair opened the floor to the participants for questions/comments:

- Denmark expressed its surprise regarding the low score of cloud connectivity.

- ACEA mentioned diverging opinions from industry on connectivity, which may indicate that connectivity should be hybrid.

- DG MOVE agreed and noted that the low score of cloud connectivity may indicate that it is perhaps seen as already available. DG MOVE clarified also that that the columns high-medium-low-blank were related to costs assessments.

- Finland was surprised by the absence of HMI, as driver distraction was an important cause of accidents.

- The Chair reminded that this absence did not necessarily mean that HMI was not important, but more that cooperation was felt as not needed by the contributors.

**On non-technical enablers**

Six non-technical enablers (regulations, cyber-security, mixed traffic, standards, privacy, collaboration) were the most rated. Two enablers have been added (mandatory training, centralised traffic management), while two others were not mentioned (methods and business models).

The Chair opened the floor to the participants for questions/comments:

- IRU stressed that economic sustainability should be part of the discussion, especially for users.

- DG MOVE agreed to add it in the overall discussion; however it did not mean that this needed to be solved through public-private cooperation or EU wide alignment.

- IRU added that costs elements and the transition period were important for SMEs.

- Austria stated that more information was needed regarding centralised fleet management: who was the manager, what would be his liability?

- Finland suggested looking at data exchange needs between individual fleet managers and road operators.

- The Chair underlined that affordability for end users was important, for all types of vehicles.

- Nokia confirmed that affordability was an important factor.

- DG MOVE noted that vehicle and infrastructure functionalities and non-technical enablers had been the most mentioned (45 and 40), while the technical enablers were only mentioned 18 times.

- IRU, Tesla and ETNO announced that they would send their contribution as soon as possible.

- DG MOVE concluded the discussion and announced it would complete the current scoping document with preliminary conclusions based on all contributions and on the outcome of discussions of the three workshops, to be further discussed and finalised during next meeting.

# Presentation from ACEA

ACEA presented its preliminary observations on several aspects of cross-border testing (see slides), noting in particular that:

 - Connectivity and automation are different worlds with touch points and added value the one to the other,

- Regarding testing, there was on one hand own projects from vehicle manufacturers and on the other hand collaborative projects in national and EU programs, such as L3 Pilot.

The Chair opened the floor to the participants for questions/comments:

- Austria stressed the issue of physical infrastructure for platooning, with in particular road bridges or tunnels not always adapted to platooning.

- The Netherlands asked ACEA about its views regarding the sharing of cross-border testing data.

- ACEA agreed that for EU funded projects, most data could be shared in aggregated format. However, this may not be possible for sensitive/commercial data.

- The Netherlands asked further if ACEA would see an added value in a sharing platform on testing data, such as in the US.

- ACEA welcomed the question, which needed reflection before giving an answer, and noted the example of cybersecurity data.

- Switzerland informed that the authorisation to test automated vehicles in Switzerland was conditioned to the sharing of test data. Public authorities needed further knowledge, in particular regarding the level of cyber-security of the vehicle. Switzerland considered that the current level of cyber-security of most vehicles was not sufficient for L3 to L5 automation levels.

- ACEA replied that it was too early for any mandate on cyber-security.

- Switzerland reminded the experience of aviation, where cyber-security could be increased, and noted that schemes on how to identify and solve security issues should be common to all actors, to ensure safe operation on public roads.

- The Chair emphasised that more and more Member States were looking at the access to tests data. More knowledge was needed, in a win-win approach. The Chair reminded also that the idea of sharing R&D data was present in the proposal to revise the PSI Directive adopted in April 2018.

- Luxembourg noted many requirements regarding the physical infrastructure, and noted that digital knowledge of the physical infrastructure was also required.

- ACEA reminded that the timeframe for its roadmap was 2030, and the need to plan actions together with public authorities.

- The Chair reminded the need to agree on priorities, supported by Member States, in view of the Goeteborg High Level Dialogue on Cooperative, Connected and Automated Mobility. However, actions defined in the 3rd Mobility Package and/or funded through the new CEF call, including creation of data, would start soon and needed to be coordinated.

- Switzerland noted that both sensors in the car and physical infrastructure were not perfect, and that L3 vehicles had more accidents than "normal" vehicles, thus the priority should be on level 4. Switzerland insisted also on the need for connectivity, which could not be separated from automation. Connectivity was also needed for enforcement, public authorities needed to intervene in certain situations.

- ACEA reminded also the needed knowledge of the digital representation of works, which should be available through the national access points of the ITS Directive.

- Finland underlined the need to get the cities involved in the picture.

- Luxembourg stressed the need for feedback from the vehicle sensors on the quality of the infrastructure (e.g. for traffic signs).

- ACEA underlined the diversity of the sources of information on infrastructure (service providers, vehicle sensors etc).

- Spain wondered if investment on physical infrastructure would not be higher for automated vehicles than for human drivers and asked about OEMs needs.

- DG MOVE reminded that the WG of physical and digital infrastructure of the C-ITS platform phase II concluded that while there was a clear need, to support automated driving, to invest on digital representation of the physical infrastructure, it was less clear for physical infrastructure itself.

- Switzerland stressed the need for bi-directional data exchange.

- Denmark gave the example of misplaced traffic signs, which could be detected by vehicle sensors and for which feedback to road operators would be welcome.

- Tesla highlighted that one of the biggest challenge was the consistency between the digital information and the physical infrastructure.

- DG MOVE reminded the current initiative TN-ITS to provide digital map providers with updates on traffic regulations, speed limits etc. This may be extended to specific needs of automated driving if need be.

- ACEA welcomed discussion on cooperation on information exchange and asked in which forum this discussion could take place in the future.

- The Chair replied that indeed the work would not be finished with this series of workshops, orientations were needed but concrete work should follow as well.

# Next steps

The Chair asked remaining contributions to be sent as soon as possible. An updated scoping document reflecting the results of the analysis of the contributions and the outcomes of the workshops will be distributed, to be finalised during next meeting.

The Chair thanked the participants and closed the meeting.

Next meeting: 4 June 2018 from 10:00 to 13:00 in Brussels.

| **Workshop on cross-border testing in the field of** **Cooperative, Connected and Automated Mobility****15 May 2018**10:00 – 13:00 |
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| **ATTENDANCE LIST** |
| **Last name** | **First name** | **Organisation** |
| BARRADAS | Pedro | European Commission/DG MOVE/B4 |
| BAUMANN | Leo | Nokia |
| BUSSIÈRE | Sara | Orange |
| CARABIN | Gilles | European Commission/DG MOVE/B4 |
| DEPRE | Claire | European Commission/DG MOVE/B4 |
| DIBLIK | Lukas | Czech Republic |
| FISCHER | Edwin Thomas | ETNO / Deutsche Telekom AG |
| GARCIA DE SANDOVAL | Aurora | Spain |
| GELAU | Christhard | Germany |
| GIANNINI | Monica | International Road Transport Union |
| HAZENBERG | Johan Bernard | GSMA |
| KECHAGIA TSIAKIRI | Maria | European Commission/DG MOVE/B4 |
| KOTILAINEN | Ilkka | Finland |
| LEWANDOWSKI | Sławomir | Poland |
| MALONE | Margaret | Ireland |
| MARTON | Maria | Sweden |
| MOLIN | Helge | Austria |
| RAUTAVIRTA | Maria | Finland |
| RIEDERER | Markus | Switzerland |
| ROBERG | Clas | Sweden |
| SCHILTZ | Jean | Luxembourg |
| SØRENSEN | Anders Bak | Denmark |
| TIAGO | Ricardo | Portugal |
| TIEROLF | Jan Willem | Netherlands |
| VAN DE SCHOUW | Guus | European Commission/DG MOVE/B4 |
| VAN DER LINDEN | Geert | European Commission/DG MOVE/B4 |
| VAN IMPE | Marc | Tesla |
| VANTOMME | Joost | ACEA |
| WOOD | Paivi | European Commission/DG MOVE/B4 |
| ZAMBARA | Nino | European Commission/DG CNECT/H2 |