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Brussels,

MOVE B4

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

**Cooperative, Connected and Automated Mobility**

20 April 2018 - 10h00 to 13h00
European Committee of the Regions, Room JDE 70

*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 record of the first workshop held on 16 March for further details on the context).

# Approval of the summary record of the workshop of 16 March 2018

After a quick tour de table, the Chair presented the summary record of the initial workshop of 16 March 2018.

The summary record was approved without changes.

# Presentation of the analysis of received contributions

The Chair reminded that the first workshop allowed initial discussions, understandably not very structured. At the end of the workshop, participants were invited to contribute by filling in an Excel table which was sent to the participants on 29 March.

The few contributions received (only five to date) were analysed by DG MOVE, with the (very preliminary) results as follows:

* Only 5 contributions received from external stakeholders so far; Not enough data at this stage → very preliminary analysis
* (Understandably) not all contributions cover all aspects (i.e. functionalities and all enablers)
* Focus should be on data which is evaluated as relevant for this exercise, meaning requiring cross-border cooperation and public intervention, being a must-have, urgent and feasible in the short term.
* On use cases:
	+ Only “interaction with other modes” missing
	+ Cost data more scattered than other categories
	+ No definitive conclusion possible yet based on limited data (max 3 answers/use case)
* Technical enablers: a limited number of enablers evaluated positively on all criteria.
* Non-technical enablers: only slightly higher number of enablers evaluated positively on all criteria.

These first results must be taken with caution, as not sufficient data is available at this stage yet. Considerably less positives could mean some kind of prioritisation is possible.

DG MOVE concluded the presentation in stressing that more data was needed, and possibly the questionnaire could be improved if deemed necessary by the participants.

# Outcomes of discussions

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

* ACEA noted that according to first input from OEMs, the scope of the exercise should be cross-pilot site interoperability instead of physical cross-border.
* DG MOVE replied that the focus was indeed on cross-border and cross-industry cooperation (beyond pure geographical border crossing), with interoperability being an important aspect, with the objective to identify elements on which stakeholders should work together, in the perspective of the definition of a common roadmap.
* POLIS underlined that safety was paramount and that minimum safety regulations were needed.
* ACEA highlighted the need for a governance at EU level to allow learning from on-going projects (such as ADAPTIVE, ENSEMBLE).
* Volvo Group noted that all the mentioned enablers were also important for non-automated driving.
* ECTA mentioned that a Mobile virtual network operator (MVNO) had recently signed an agreement with a big OEM, and that such MVNOs had sometimes difficulties to access some countries, which could be seen as an obstacle for deployment of services. ECTA mentioned also the EU Telecom rules as not looking enough at services. Following a request for details from DG CNECT, ECTA indicated that it would consult with its members and come back with more information.
* Finland mentioned the example of the maritime sector, which does not yet have automated vessels but is putting in place the eco-system with e.g. data clouds, in a learning-by-doing iterative process.

Following this first (and rather limited) round of reactions, the Chair suggested collecting the reactions from stakeholders on the preliminary conclusions stemming from the discussions between Member States.

Main outcomes of the discussions as follows, on specific topics in the beginning followed by a general discussion:

**On road safety:**

* POLIS presented its expectation that automated vehicles would respect all rules, including speed limits.
* Volvo Group reminded that there were different types of automation, e.g. for platooning the first benefit would not be safety (but platoons would follow the rules).

**Other top benefits:**

* ACEA underlined the expected better throughput of vehicles and the optimal use of infrastructure, but highlighted as well the challenge of the cohabitation with non-automated vehicles.
* Following a mention to ports areas (ports of the future), DG MOVE reminded that private roads had been taken into account in the analysis, and that most of the conclusions were valid for freight as well, with also the aspect of integration of automated vehicles with other modes.
* Nokia noted that the list of use cases made sense.
* ACEA noted that sustainability aspects were a bit missing.
* DG MOVE replied that "less emissions" was identified in the conclusions as part of high value benefits, as well as public health.

**Focus on automation level 4:**

* POLIS noted that level 4 influenced the use cases.
* DG MOVE underlined that level 4 implied sufficient road allowing automated vehicles, to bring users close enough.
* The impact on public transport and on users was highlighted by several participants, with the issue of general interest vs personal interests.
* Luxembourg stressed that a possible transfer from public transport to private transport was difficult to support, and that there was a lack of interest from industry and service providers on transport policy and strategy. It is still not clear if solutions such as MaaS, transport on demand will compete with or complement public transport.
* Nokia informed about its involvement in projects for automated subways, which led to increased frequencies and increased usage of public transport.
* Tesla subscribed to Luxembourg's rationale and noted that use domains (e.g. highways) may have different use cases. Tesla expressed perplexity about the large list of use cases, noting that it was hard to predict, based on customers feedback, how connectivity and shared solutions may influence mobility, and highlighted the need for a transport vision.
* UITP agreed that level 4 or 5 were needed to see real impact. But in the absence of a sufficiently effective artificial intelligence, vehicles should start learning on specific lanes/trajectories, with infrastructure/algorithms adapted to the needs. Enlargement of the geographical scope would then happen in a second stage.
* Denmark suggested keeping the discussion to the level of what needs to be tested, not to political choices.
* Austria highlighted the need of automation to better integrate all modes, all kind of vehicles (tramways, buses, cars, tractors in rural areas).

**General discussion on use cases and enablers:**

* ETNO informed about its taskforce in charge of analysing use cases. DG MOVE welcomed any feedback regarding use cases.
* Ertico underlined that in many projects, use cases were discussed again and again. A very abstract definition of use cases would be useful.
* POLIS noted that national frameworks for testing were missing in many Member States; knowledge exchange about these frameworks would be useful.
* ACEA supported POLIS and expressed the need for an analysis of enablers and lessons learnt from all projects.
* Luxembourg noted that some type of vehicles, such as shuttles, have no tangible regulations, no type-approval, even the category of these vehicles was not clear, therefore the framework was not always obvious. An analysis of commonalities and differences in national frameworks has been conducted between Luxembourg, Germany and France.
* Germany, Austria and Denmark informed about existing national frameworks for testing.
* The Chair reminded that a first mapping had been done within GEAR 2030, things have evolved since then. Better "real-time" mapping of the instruments is needed. We should also look at the level of readiness of use cases for pre-deployment, to be more effective in the allocation of EU funds.
* Tesla reiterated the need for harmonisation of testing frameworks and traffic rules in the EU.
* Belgium informed about a new national legislation published on 19 April allowing driverless testing, including with remote operators. Differences in traffic rules should stay for a long time, so it may be more useful that testing takes already into account these differences (e.g. speed limit for platooning: 90 km/h for BE, 80 km/h for NL).
* CER stressed the need for an information framework: how to reach awareness about progress achieved, between Member States and transport modes. Many innovations could be transposed between modes and cooperation could take place on common use cases.
* ACEA reminded the CAD conference in 2017, and the related website listing activities, European projects and European field trials in the domain of Automated Road Transport: <https://connectedautomateddriving.eu/>
* The Chair reminded that DG MOVE was trying to foster cooperation between modes, e.g. regarding commonalities between C-ITS and drones, and informed that next CAD conference would take place in April 2019.
* Ertico/TISA reminded the importance of standards for interoperability.
* CER informed about a similar exercise done in the railway sector on use cases and enablers, with as a result similar enablers. Functionalities were looked at, if they were covered or not by EU or industry research streams.
* Volvo noted that on some use cases, cooperation was needed.
* ACEA considered the list of enablers as (almost) exhaustive, and suggested adding social acceptance and driver education. DG MOVE agreed, driver education being already mentioned in the five contributions received to date. The Chair underlined the need to understand the real impact on society.
* CER highlighted the impact on traffic management, how it will need to evolve with evolving vehicles.
* Tesla identified regulatory needs and type-approval as main barriers.
* POLIS replied that more information about the vehicles was needed, and considered that automated vehicles were not a "happy story" until now.
* Tesla supported the EuroNCAP framework, and underlined the need to bring vehicles on the roads and the issue with type-approval, which is still not possible for L4.
* POLIS noted that apparently a lot was requested from infrastructure, and stated that if cities had to do something, automated vehicles had also to answer to cities' needs.
* Luxembourg supported POLIS and suggested addressing very concrete needs, such as mapping needs.
* Austria added that two years ago, the position from OEMs was that nothing was needed, but apparently that position has evolved.
* ACEA agreed, and expressed needs for a public-private partnership and for a dedicated forum to address common issues, including societal aspects.
* ECTA stressed the national emission rules, which were hampering deployment of telecom networks; 5G deployment would imply many more antennas, and cities can play a role to facilitate this deployment.
* Tesla mentioned cross-border connectivity without interruption as bringing important benefits.
* The Netherlands underlined the importance of having at some point an EU platform for sharing information on testing.

# Next steps

The input to be provided for next meeting was discussed.

The aim is the cooperation between public and private; what is the private sector needing from public sector to develop business cases. Input from stakeholders could be in the form of a wish list, distinguishing between "must haves" and "nice to haves" (e.g. digital speed limits could be prerequisite). The wish list discussed in GEAR 2030 could be reviewed as a starting point.

The Chair concluded the discussions by inviting stakeholders to provide as much input as possible, possibly in the form of the provided Excel file and/or in the form of comments in track changes on the preliminary conclusions (scoping document).

The Chair thanked the participants and closed the meeting.

Next meeting: 15 May 2018 from 10:00 to 13:00 in Brussels.

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| **ATTENDANCE LIST** |
| **Last name** | **First name** | **Organisation** |
| BAUMANN | Leo | Nokia |
| CARABIN | Gilles | European Commission//DG MOVE/B4 |
| CATANA | Eusebiu | ERTICO-ITS Europe |
| CHAUFTON | Stéphanie | TISA |
| CHIRCA | Mihai | UITP - International Association for Public Transport  |
| COUPE | Charlotte | France |
| DEPRE | Claire | European Commission//DG MOVE/B4 |
| DIBLIK | Lukas | Czech Republic |
| DIMARIDIS | Achillefs | Greece |
| FISCHER | Edwin Thomas | Deutsche Telekom AG on behalf of ETNO |
| GARCIA DE SANDOVAL | Aurora  | Spain |
| GELAU | Christhard | Germany |
| GERAETS | Maurice | NXP Semiconductors |
| HINDRYCKX | Luc | ECTA |
| HOADLEY | Suzanne | Polis |
| JOHANSSON | Mikael | Volvo Group |
| LEWANDOWSKI | Sławomir | Poland |
| MOLIN | Helge | Austria |
| MUETZE | Frank | European Transport Safety Council |
| NILSSON | Niclas | Sweden |
| PERKOVIĆ | Ivana | Croatia |
| PICHL | Martin | Czech Republic |
| PIRKELBAUER | Sigrid | Switzerland |
| RAUTAVIRTA | Maria | Finland |
| ROCCO | Luca | Italy |
| ROONEY | Shane | GSMA |
| RUIZ | Daniel | on behalf of Eric Sampson |
| SCHEIDT | Alexander | IBM Deutschland GmbH |
| SCHILTZ | Jean | Luxembourg |
| SCHOENMAEKERS | David | Belgium |
| SIMONNET | Jean Baptiste | CER |
| SØRENSEN | Anders Bak | Denmark |
| TIEROLF | Jan Willem | Netherlands |
| VAN DER LINDEN | Geert | European Commission//DG MOVE/B4 |
| VAN IMPE | Marc | Tesla |
| VANTOMME | Joost | ACEA |
| VASSILEVA | Veneta | ACEM |
| WILLOUGHBY | Neil | Logos Public Affairs on behalf of FIM |