

---

## Annex III

### Terms of Reference of the informal working group on ITS/Automated Driving (IWG on ITS/AD)

#### I. Introduction

1. Automated driving technology for road vehicles is increasingly featured in vehicle manufacturers technology plans and thus creating a higher level of media and public interest in many markets across the world. Inevitably this type of technology due to the potential scale of impact on drivers, road users and the wider society creates many uncertainties but also offers huge potential benefits for a safer and more efficient road transport network. Capturing these benefits while enhancing the promotion of technology in the international market is a key objective for the international regulatory community – tackling both the vehicle regulations as well as taking into account the responsibilities for drivers.

2. The work of the WP.29 ITS Informal Working Group (IWG) has thus far developed our understanding of topics relating to automated driving such as the definitions of automated driving technology, guidelines on establishing requirements for high-priority warning signals, and design principles for control systems of Advanced Driver Assistance System (ADAS), etc.

3. In response to the growing interest and application of these technologies, as well as recognizing the recent amendment of the 1968 Vienna Convention, it is proposed that the IWG on ITS should refocus its discussion on automated driving technology and, as a result, change its name accordingly to "Informal Group on ITS/Automated Driving (IWG on ITS/AD)", and that IWG on ITS/AD, while keeping in mind establishment of internationally harmonized technical regulations in the future, discuss relevant issues for the practical application of this technology and, where appropriate, to consider administrative legal and social aspects.

#### II. Working items to be covered (details see Annex 1)

4. Prepare a proposal with harmonized definition of Automated Driving Technologies (ADT)

5. Identify the main horizontal issues and legal obstacles to automated driving technologies and, where possible and appropriate, those not within the remit of WP.29.

6. Determine discussion items for establishment of internationally harmonized regulations on ADT enabling drivers to benefit from a higher degree of automation of the driving task (ADT – term still to be defined, para. 5. above).

7. Prepare a proposal on harmonized general guidelines for eSecurity and eSafety in motor vehicles.

(eSecurity is the protection against unauthorized access from outside; eSafety is the protection against failures (e.g. system failures, redundancy in the system, event data recorders for failure tracking in case of an accident). Both, eSecurity and eSafety are important for electronic systems especially for systems with autonomous functionality).

## 8. Others

- (a) Consideration of guidance regarding ADT when requested to WP.29 by GRs.
- (b) Exchange of views and information from each Contracting Party about the most advanced technology including full autonomous driving technology (driverless vehicles), such as research results including field tests, information on the national legal system and measures, events, conventions, etc.
- (c) Exchange of views and information on fully autonomous driving technologies (driverless vehicles) will also be taken forward. This latter activity might be concurrent with above discussion on ADT.
- (d) Necessary discussion will be made at appropriate times.

**III. Timeline****(a) Approval process**

- November 2014 Submission of draft ToR of the Group to WP.29 for consideration
- March 2015 Formal approval of ToR

**(b) Definition of Automated Driving Technology**

- June 2015 Submission of outline
- November 2015 Submission of preliminary draft
- March 2016 Submission of draft definition and recommendation

**(c) Identify the main horizontal issues and legal obstacles to wider uptake/implementation of ADT**

- June 2015 Submission of outline
- March 2016 Submission of preliminary draft
- November 2016 Submission of conclusions

**(d) Recommendation ADT regulations with recommendation for GRs**

- June 2015 Submission of outline
- November 2015 Submission of preliminary draft
- March 2016 Submission of draft document

**(e) Development of security guidelines**

- November 2015 Submission of outline
- June 2016 Submission of preliminary draft
- March 2017 Submission of draft document

**(f) Other**

- Necessary discussion will be made at appropriate times.

## IV. Rules of procedure

The following rules of procedure describe the functioning principles of the informal working group.

- (a) Following the Rules of Procedure of WP.29. Chapter 1, Rule 1, the IWG is open to all experts from any country or organization of WP.29 and its subsidiary bodies.
- (b) Two Co-Chairs (Japan and United Kingdom) and a Secretary (National Traffic Safety and Environment Laboratory (NTSEL)) will manage the IWG.
- (c) The working language of the IWG will be English.
- (d) All documents and/or proposals shall be submitted to the Secretary of the Group in a suitable electronic format, preferably in line with the UNECE guidelines, in advance of the meetings. The Group may refuse to discuss any item or proposal which has not been circulated five working days in advance of the scheduled meetings.
- (e) The IWG shall meet regularly in conjunction with the WP.29 sessions, presuming the availability of meeting rooms. Additional meetings will be organized on demand.
- (f) An agenda and related documents will be circulated to all members of the informal working group in advance of all scheduled meetings.
- (g) The work process will be developed by consensus. When consensus cannot be reached, the Co-Chairs of the informal group shall present the different points of view to WP.29. The Co-Chairs may seek guidance from WP.29 as appropriate.
- (h) The progress of the informal group will be routinely reported to WP.29 orally or with an informal document by the Co-Chairs or the Secretary.
- (i) All documents shall be distributed in digital format. The specific ITS/AD section on the UNECE website shall be used for this purpose.

## V. Annex

This annex gives a detailed overview for the discussion and tasks related to the working items of section II.

### **Working item 4. Definition Automated Driving Technologies**

- (a) Compare existing definitions for the levels of automated driving;
- (b) Determine the differences between ADT and fully automated driving. Clarification of terms of "Driver in the loop" / "Driver out of the loop (driver less OK)";
- (c) Identify typical systems / (use case scenario) that would be assumed as ADT;
- (d) Relationship of ADT and those technologies subject to the Vienna Convention and possible advantages of categorizing ADT in groups from a legal perspective;
- (e) Develop a globally harmonized proposal for WP.29 on definitions for the different levels of autonomous driving.

### **Working item 5. Main horizontal issues**

- (a) Identify the main horizontal issues (e.g. liability) and legal obstacles (e.g. traffic rules) to automated driving technologies including, where possible, those not within the remit of WP.29;

- 
- (b) Clarify the tasks to be completed within WP.29 and, where appropriate, those to be addressed in other fora and legal/instruments.

**Working item 6. ADT Regulations**

The relevant issues for the practical application of ADT will be identified and the Group will scrutinise the current regulatory measures and identify and propose areas for consideration by WP.29.

WP.29 may then propose that the appropriate GR consider developing an internationally harmonized regulation for that ADT technology in parallel with IWG on ITS/AD.

- (a) Agree on the principle of how to make regulations for individual systems and clarification of the area to be covered by WP.29;
- (b) Give recommendation to WP.29 regarding mandate of each GR based on the above consideration;
- (c) Consider recommendations to other entities for topics beyond the remit/scope of WP.29;
- (d) Discuss new measures to ensure that ADT systems retain their integrity and operation in-use (such as OBD).

**Working item 7. Security Guidelines**

- (a) Consider and recommend ideas to ensure adequate security (prevention of hacking, tampering) and malfunction for vehicle systems;
- (b) Develop harmonized security guidelines for the protection of vehicles and vehicle systems against unauthorized access through connectivity technologies;
- (c) Submit a full set of harmonized guidelines to WP.29 for consideration.

**Working item 8. Other**

Necessary discussion will be made at appropriate times.

---