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Economic Commission for Europe

Inland Transport Committee

Working Party on Road Transport

**Group of Experts on European Agreement Concerning Work of
Crews of Vehicles Engaged in International Road Transport (AETR)**

Seventeenth session

Geneva, 19 February 2018

Item 2 (b) of the provisional agenda

Programme of Work:

Appendix 1C

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Submitted by Turkey

This document, submitted by the Government of Turkey, proposes to include V2X technologies for remote communication function of smart tachographs.

Approach:

Inclusion of V2X (Vehicle-to-everything) to the choice of technologies for Remote Communication Function of Smart Tachograph.

Facts:

CEN 5.8 GHz DSRC (Dedicated Short Range Communication) is chosen for remote communication function of the Smart Tachograph in the Appendix 1C (DSC_1, DSC_20). This requires installment of Road Side Units (RSU) on the road infrastructure by the road operators. On the other hand, for the Vehicle to Infrastructure (V2I) communication in the scope of Cooperative Intelligent Transport Systems (C-ITS), which foresees the interaction of vehicles directly with each other (V2V) and with the road infrastructure (V2I) as stated in the European strategy on Cooperative Intelligent Transport Systems ¹, it is expected that Road Side Units operating at 5.9 GHz using the below listed two different technologies will be necessary to be installed on the road infrastructure by the road operators.

- a. ITS-G5 (IEEE 802.11p)
- b. 3GPP LTE-V2X: Today's realisation of Cellular V2X (C-V2X), and this will evolve towards 5G Technologies to become 5G-V2X.

Justification and Suggestion:

This means duplicate investment of separate RSUs for V2I communication and Smart Tachograph. It is recommended to extend the choice of technology in Appendix 1C for Smart Tachograph's remote communication function to include also the above mentioned V2X technologies which are foreseen by the C-ITS Platform of the European Commission².

¹ COM(2016) 766, "A European strategy on Cooperative Intelligent Transport Systems, a milestone towards cooperative, connected and automated mobility"

² C-ITS Platform, Final Report Phase II, September 2017