Proposal for amendments to the Consolidated Resolution R.E.3

I. Introduction

- 1. During its June 2017 session, WP.29 thought about the need to define a new vehicle category related to vehicle automation (see <u>ECE/TRANS/WP.29/1131</u>, para. 28). The GRRF Secretary presented a preparatory note for AC.2 which was then distributed to the IWG on ITS/AD as <u>Document No. ITS/AD-12-10</u>. The representative of the United Kingdom, Co-Chair of the IWG on ITS/AD presented the presentation with the symbol <u>Document No. ITS/AD-12-12</u>. Both documents provided justifications for developing a new category of vehicles for regulatory purposes.
- 2. This document was reviewed by AC.2 at its 127th session. It is following-up on the brainstorming, building on the outcome of the discussion. Its aim is to provide a document to WP.29 to initiate a follow up discussion on a new vehicle category related to vehicle automation.

II. Proposal for amendments to R.E.3.

Note: Similar provisions could be developed for the Special Resolution No.1 if the Contracting Parties to the 1998 Agreement express this wish.

Insert a new paragraph 2.10. (and its subparagraphs 2.10.1 to 2.10.3.), to read:

"2.10. Category C - Automated vehicles

2.10.1. Definition

An automated vehicle is a vehicle equipped with a system that is designed to continuously perform, under certain circumstances, a driving task.

The performance of this driving task may be under the supervision of the driver or it may be performed without supervision, depending on the automation category.

A vehicle equipped with an ACSF function is an automated vehicle.

A vehicle equipped with active safety systems (e.g. an Electronic Stability Control or an Advanced Emergency Braking System) is not an automated vehicle as the function is not designed to perform a driving task on a continuous basis.

2.10.2. Classification

Some considerations on classification of automated vehicle technologies are provided in the reference document with definitions of Automated Driving under WP.29 and the General Principles for developing a UN Regulation on automated vehicles (ECE/TRANS/WP.29/1140).

2.10.3. Combined designation

Symbols M, N, L, O, T, R and S may be combined with symbol C. For example, a vehicle of category N_1 which is an automated vehicle may be designated as N_1C ."

IV. Justification

3. The above proposal is defining an *automated vehicle* category on the model of the Category G (Off-road vehicle)- see para. 2.10.3. If the automated vehicle category was a fully new independent vehicle category, it would mean that none of the existing regulations (e.g. passive safety,

active safety, emissions related ones) would include these vehicles in their scope. A manufacturer could not get an approval according to a steering or braking regulation, nor a seat belt regulation or a crash test regulation. Therefore, it was found that the Category G model can be replicated in this case and that it provides the necessary flexibility for regulatory activities while limiting the potential draw backs due to the creation of a new independent category.

4. By reproducing the model of the Category G, the Category C is part of the other Categories M, N, L, O, T, R and S. With para. 2.10.3. (drafted on the model of the existing para. 2.8.4.), for example, a vehicle of Category M_1C is also a vehicle of Category M_1 . It also means that a vehicle of Category C is also a vehicle of Category M, N, L, O, T, R or S. It provides the possibility to identify automated vehicles as a subgroup of a vehicle Category and to define specific provisions for this specific subgroup. It provides the possibility to define provisions for the whole Category C.

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