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(Leader of the Task Force on UN-R 46)
on behalf of the Task Force on UN-R 46

Informal document GRSG-127-04-Rev.2
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Agenda item 4 (a))

# Proposal for a Supplement 1 to the 06 series of amendments to UN Regulation No. 46 (Devices for indirect vision)

The Working Party on the Transport of Dangerous Goods (WP.15) during its 114th session noted, on the basis of INF.18 from Germany, that problems could arise during the approval of vehicles intended for the carriage of explosive substances and articles (Class 1) for vehicles intended for the carriage of liquids having a flash-point of not more than 60°C. (EX/III and FL vehicles) fitted with a camera monitoring system which complied with the requirements of UN Regulation No. 46.

Paragraph 9.2.2.8.3. of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) stipulates that the electrical circuits must be broken within 10 seconds after operation of the**feature to enable the de-energization of the electric circuits**. This might conflict with paragraph 16.1.1. of UN Regulation No. 46 which requires that, after each engine switch-off (intended use), the camera-monitor system remains operational for a period of at least 120 seconds.

WP.15 invited Germany to draw the attention of the World Forum for Harmonization of Vehicle Regulations (WP.29) to that point and invited delegations to inform their counterparts in charge of vehicle construction provisions of those problems, on the basis of the information provided in informal document INF.18.

Subsequently, Germany asked GRSG to start a discussion on this issue. As Germany is leader of the GRSG task force UN-R 46, currently working on amendments to UN Regulation No. 46, Germany has already forwarded this request to the Task Force, to speed up the process.

Consequently, the text below was produced by the Taskforce on UN-R46 together with some experts on ADR vehicles from WP.15

Modifications to the current text of UN Regulation No. 46 are marked in bold for new and strikethrough for deleted characters. Modifications to the text of the original proposal GRSG-127-04 are marked in green, underlined new and green and strikethrough for deleted characters. These modifications were added to the original proposal by the Leader of the Task Force on UN-R46 from Germany to facilitate a discussion on different wordings suggested by the experts on WP.15 after its last session end of March 2024.

## I. Proposal

*Paragraph 16.1.1., amend to read:*

"16.1.1. Intended use, activation and deactivation.

The intended use shall be mentioned within the operator's manual. ~~The procedure for activation and deactivation of the CMS of Classes II and III shall allow a safe use of the vehicle.~~

~~The CMS shall be activated when the vehicle is opened (e.g. unlocking of the doors, opening of a front door or any other means by the choice of the manufacturer).~~

~~In addition to the requirements mentioned in paragraph 15.2.1.1.2., after each engine switch-off the system shall remain operational for a period of at least T1 = 120 s. After T1 period and for a period of at least T2 = (420-T1) seconds the system shall be able to be reactivated such that the required field of vision is made available within 1 second by manoeuvring any front door opening automatically and, if available, manually by the driver. After T2 period the~~

~~system shall be able to be reactivated within 7 seconds (e.g. by initiating any front door opening process).~~

~~Notwithstanding the provisions above, any other concept providing at least the same level of safety shall be demonstrated to the Technical Service and to the Approval Authority within the safety concept that is provided according to the provisions in Annex 12, paragraph 2.~~"

*Insert new Paragraphs 16.1.1.4. to 16.1.1.4.1., to read:*

**"16.1.1.4. The procedure for activation and deactivation of the CMS of Classes II and III shall allow a safe use of the vehicle.**

**The CMS shall be activated when the vehicle is opened (e.g. unlocking of the doors, opening of a front door or any other means by the choice of the manufacturer).**

**In addition to the requirements mentioned in paragraph 15.2.1.1.2., after each engine switch-off the system shall remain operational for a period of at least T1 = 120 s. After T1 period and for a period of at least T2 = (420-T1) seconds the system shall be able to be reactivated such that the required field of vision is made available within 1 second by manoeuvring any front door opening automatically and, if available, manually by the driver. After T2 period the system shall be able to be reactivated within 7 seconds (e.g. by initiating any front door opening process).**

**Notwithstanding the provisions above, any other concept providing at least the same level of safety shall be demonstrated to the Technical Service and to the Approval Authority within the safety concept that is provided according to the provisions in Annex 12, paragraph 2."**

**"16.1.1.4.1. The provisions of paragraph 16.1.1.4. do not apply to vehicles, if:**

**- they are equipped with a feature specifically to enable the de-energization of the electrical circuits according to the "Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)";**

**- they have a control device for the feature to enable the de-energization of the electrical circuits, installed outside of the cabin; and**

**- the feature to enable the de-energization of the electrical circuits is activated via the control device outside of the cabin."**

# II. Justification

According to the TF's outcome this document deals with the following topics:

1. Clarify for which classes of CMS the requirements under paragraph 16.1.1.4. and 16.1.1.4.1. shall apply.

**2.** Solve the issue with ADR-vehicles **eqipped with a feature to enable the de-energization of the electrical circuits** and a CMS, in **the feature to enable the de-energization of the electrical circuits is activated via a control device outside of the cabin.**