
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 battery master switch. 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.

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. In case of an activated battery master switch, the provisions of paragraph 16.1.1.4. do not apply to vehicles of category FL, EXIII and MEMU according to the “Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)” having an actuating device for the battery master switch 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 of category FL, EXIII, MEMU and CMS, in case of an activated battery master switch.
