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## Economic Commission for Europe

### Inland Transport Committee

### Working Party on the Transport of Dangerous Goods

#### Ninety-fifth session

Geneva, 4-8 November 2013

Item 6(a) of the provisional agenda

#### **Proposals for amendments to Annexes A and B of ADR: construction and approval of vehicles**

### **Electrical equipment on trailers**

#### **Transmitted by the Government of Sweden<sup>1</sup>**

#### *Summary*

<b>Executive summary:</b>	Questions to fulfill the provisions in 9.2.2.3.2 for the control device for the battery master switch for trailers.
<b>Action to be taken:</b>	Interpretation of 9.2.2.5.1, 9.3.7.3 and 9.7.8.1 are needed as well a consideration of amending 9.3.7.3 or 9.7.8.1.
<b>Related documents:</b>	Informal document INF.5 presented at the eighty-third session (Sweden) Informal document INF.17 presented at the ninety-fourth session (Sweden) ECE/TRANS/WP.15/219 para 17

### **Introduction**

1. The Working Party preferred at its last session to postpone the discussion on the electrical equipment on trailers and later discuss it on the basis of an official document.

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<sup>1</sup> The present document is submitted in accordance with paragraph 1(c) of the terms of reference of the Working Party, as contained in document ECE/TRANS/WP.15/190/Add.1, which provides a mandate to “develop and update the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)”.

2. The provisions on transport security in section 1.10 of ADR have led to the development of specific actions to prevent theft or misuse of dangerous goods. Devices and equipment are being installed on vehicles and in load compartments. However, there are requirements on the construction of vehicles in part 9 of ADR that still must be applied.

### **Example 1**

3. A 24 V battery is installed on an EX/III trailer to serve protective devices (GPS, anti-theft devices etc.) with additional power in case the trailer is separated from the motor vehicle e.g. during an intermodal transport. This battery is charged when the trailer is connected to the towing vehicle.

4. In 9.3.7 the additional requirements concerning the electrical installation is specified for EX/II and EX/III vehicles. Sub-section 9.2.2.3, referred to in 9.3.7.3, only seems to deal with batteries mounted on a motor vehicle. However, in this case the battery is mounted on a trailer which is only connected to a motor vehicle during the movement. Therefore, 9.2.2.3.2 is not possible to fulfil for the switch on the trailer but perhaps not “relevant” according to 9.3.7.3 but 9.2.2.2, 9.2.2.3.1, 9.2.2.3.3, 9.2.2.3.4, 9.2.2.4, 9.2.2.5.2 and 9.2.2.6 can be fulfilled.

5. Sweden is interested to know if such devices may be installed on an EX/III-trailer if the conditions in 9.3.7 are fulfilled. (See also statement below from the report of the Working Party, ECE/TRANS/WP.15/210, para. 20)

### **Example 2**

6. The same condition as in example 1 but now the trailer is an FL-vehicle. However, in 9.7.8.1 (additional requirements concerning electrical equipment) the word “relevant” is not included in the text. This means that all provisions in 9.2.2.2, 9.2.2.3, 9.2.2.4, 9.2.2.5.1 and 9.2.2.6 have to be fulfilled, i.e. also 9.2.2.3.2.

7. The text in 9.3.7.3 and 9.7.8.1 differs in such a way that “for which an approval according to 9.1.2 is required” is added in 9.7.8.1 compared to 9.3.7.3. The word “relevant” was introduced in 9.3.7.3 in ADR 2009 after discussion of the Swedish informal document INF.5 presented at the eighty-third session (November 2007). INF 5 pointed at a contradiction between 9.2.1 and 9.3.7.3.

8. Sweden would like to hear the views on the need to fulfil 9.2.2.3.2 for control devices to the battery master switch mounted on an FL-trailer.

9. In the report of the Working Party, ECE/TRANS/WP.15/210, para. 20, the following is stated: «The Working Party confirmed that devices in vehicle cabs containing batteries permitting data or parameter storage when not permanently energized (radios, personal navigation assistants, etc.) did not need to meet the general requirements of standard IEC 60079, parts 0 and 14, or the additional requirements applicable under standard IEC 60079, parts 1, 2, 5, 6, 7, 11, 15 or 18.».

10. Sweden is also interested to know if the same interpretation can be applied for apparatus such as GPS, burglar alarms with internal batteries etc. installed outside the drivers cab on an FL-trailer.

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## Proposals

11. Amend sub-section 9.7.8.1, first sentence, to read as follows (changes underlined or stricken out) in order to harmonize with sub-section 9.3.7.3:

Option 1: «The electrical installation on FL vehicles for which an approval according to 9.1.2 is required shall meet the relevant requirements of 9.2.2.2, 9.2.2.3, 9.2.2.4, 9.2.2.5.1 and 9.2.2.6.».

Option 2: «The electrical installation on FL vehicles ~~for which an approval according to 9.1.2 is required~~ shall meet the relevant requirements of 9.2.2.2, 9.2.2.3, 9.2.2.4, 9.2.2.5.1 and 9.2.2.6.».

12. Amend sub-section 9.3.7.3, first sentence, to read as follows (changes underlined or stricken out) in order to harmonize with sub-section 9.7.8.1:

“The electrical installation on EX/III vehicles for which an approval according to 9.1.2 is required shall meet the relevant requirements of 9.2.2.2, 9.2.2.3, 9.2.2.4, 9.2.2.5.2 and 9.2.2.6.”.

## Justification

Safety: No problems are foreseen.

Feasibility: No problems are foreseen.

Enforceability: No problems are foreseen.

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