Economic Commission for Europe
Inland Transport Committee
Working Party on the Transport of Dangerous Goods

104th session
Geneva, 15–17 May 2018
Item 5 (b) of the provisional agenda
Proposals for amendments to annexes A and B of ADR:
miscellaneous proposals

9.7.4 Earthing of FL vehicles and 9.8.3 Earthing of MEMUs

Transmitted by the Government of Sweden∗

Summary

Executive summary: Sub-sections 9.7.4 and 9.8.3 contain provisions about electrical connections between the chassis and the tank, battery element, bulk containers or special compartments for packages. This connection refers to bonding, rather than earthing which is stated in the heading.

Action to be taken: Amend the headings in subsections 9.7.4 and 9.8.3.

Background documents: Informal document INF.4 of 103rd session of the Working Party ECE/TRANS/WP.15/239 paras. 59, 60

Introduction

1. At the 103rd session of the Working Party in November 2017, Sweden raised a question (see informal document INF.4 from the 103rd session) concerning different terms used in ADR for describing electrical connections in requirements concerning precautions

∗ In accordance with the draft programme of work of the Inland Transport Committee for 2018-2019, (ECE/TRANS/WP.15/237, annex V, (9.1)).
against electrostatic charges. The aim with that document was to have a clarification on what is actually meant in the different sub-sections.

2. The outcome from the meeting was the following (extract from the report):

“59. Concerning the first case presented in informal document INF.4, the Working Party confirmed the interpretation of Sweden, according to which, in order to meet the requirements of section 7.5.10, an earthing connection must be established with the vehicle chassis prior to the filling or emptying of tanks, either by means of a direct connection of the vehicle or tank to the earth or by connecting the vehicle or the tank to an earthed storage tank.

60. Concerning the second case, the Working Party confirmed that the provisions in 9.7.4 and 9.8.3 required bonding, while the titles of the sections referred to earthing. In order to clarify the text, the representative of Sweden could propose that the terms should be changed at the next session.”

3. Sections 9.7.4 and 9.8.3 require that a good electrical connection shall be established by a link from the tanks, containers and compartments to the chassis. According to our understanding, this is usually referred to as “bonding”, while the word “earthing” is used in ADR.

4. As stated in the report from the 103rd session (see above), the meeting confirmed that the intention with the provisions in 9.7.4 and 9.8.3 is to require “bonding”, even though both sections refer to “earthing”. At the last session it was argued that the term “bonding” is used in other parts of ADR, and therefore might be inappropriate to use in part 9.

5. As far as we can see, the word only appears in two places in ADR: sub-section 6.1.4.18.1 concerning paper bags and sub-section 6.9.2.2.3 concerning fibre-reinforced plastic tanks. In summary, both sub-sections describes a manufacturing process and the bonding of different materials to other layers in the same product.

6. Sweden cannot see that using the same word, but with a different meaning, in part 9 would cause any confusion. Amending the headings would better reflect the requirements contained in sections 9.7.4 and 9.8.3.

Proposals

7. Amend the heading in section 9.7.4 as follows (changes stricken through or underlined):

“9.7.4 Earthing Bonding of FL vehicles”

8. Amend the heading in section 9.8.3 as follows (changes stricken through or underlined):

“9.8.3 Earthing Bonding of MEMUs”

Alternative proposals:

9. Amend the heading in section 9.7.4 as follows (changes stricken through or underlined):

“9.7.4 Earthing Electrical bonding of FL vehicles”

10. Amend the heading in section 9.8.3 as follows (changes stricken through or underlined):

“9.8.3 Earthing Electrical bonding of MEMUs”
Feasibility

No problems are foreseen.