



**Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals****Sub-Committee of Experts on the Transport
of Dangerous Goods****Forty-eighth session**

Geneva, 30 November – 9 December 2015

Item 7 of the provisional agenda

**Global harmonization of transport of dangerous goods
regulations with the Model Regulations****Proposal to insert the definition “Mild steel” in section 1.2.1
of the Model Regulations****Transmitted by the observer from Romania¹****Introduction**

1. The observer from Romania attending the forty-seventh session of the Sub-Committee of Experts on the Transport of Dangerous Goods of June 2015, proposed in informal document INF. 30 to delete the definition “*Reference steel*” in 6.7.2.1, 6.7.3.1 and 6.7.4.1 and all references be made to 1.2.1. This is proposed again in document ST/SG/AC.10/C.3/2015/44 submitted for the current session.
2. In the logic of the text, also the definition of the mild steel must be treated in the same way, as confirmed by the experts attending the forty-seventh session.
3. The definitions of “*Mild steel*” in 6.7.2.1 and 6.7.3.1 could be deleted from these paragraphs and the text could be inserted in section 1.2.1 “Definitions”, thus becoming applicable for the whole text of the Regulations.

¹ In accordance with the programme of work of the Sub-Committee for 2015–2016 approved by the Committee at its seventh session (see ST/SG/AC.10/C.3/92, paragraph 95 and ST/SG/AC.10/42, para. 15).

4. From the point of view of text construction, the proposed solution covers all the aspects because the term “*Mild steel*” is used several times in paragraphs 2.7.2.3.3.5, 6.4.17.2, 6.4.20.2, 6.7.2.4.7, 6.7.2.4.9 and 6.7.3.4.6.

5. The proposal is consistent with the Guiding Principles for Chapter 1.2 – definitions and units of measurements which stipulate: “*Definitions and units of measurements of general applicability used throughout the Model Regulations are listed here. However, some additional definitions that are specific to relevant Chapters of the Model Regulations are found at the beginning of those Chapters (such as the definition of ‘security’ found in Note 2 to Chapter 1.4.).*”.

6. The current sub-sections 6.7.2.1 and 6.7.3.1 include definitions of “Mild steel”, as follows:

Mild steel means a steel with a guaranteed minimum tensile strength of 360 N/mm² to 440 N/mm² and a guaranteed minimum elongation at fracture conforming to 6.7.2.3.3.3;

Mild steel means a steel with a guaranteed minimum tensile strength of 360 N/mm² to 440 N/mm² and a guaranteed minimum elongation at fracture conforming to 6.7.3.3.3.3;

7. The elongation at fracture represents an important characteristic of steel. This characteristic is defined in 6.7.2.3.3.3 and 6.7.3.3.3.3 in the same manner, but only for portable tanks not also for the tests established in chapters 2.7 and 6.4. In these conditions the definition proposed for section 1.2.1 will not cover this characteristic. We sustained the principle of the formula prescribed in paragraphs 6.7.2.3.3.3 and 6.7.3.3.3.3 to remains valid for portable tanks as it is and where it is. More than this, the formula for the determination of the elongation at fracture is valid for all steels used, not only for mild steels:

“Steels used in the construction of shells shall have an elongation at fracture, in %, of not less than 10 000/Rm with an absolute minimum of 16% for fine grain steels and 20% for other steels.”.

8. For example: the current text of RID/ADR includes since the 2001 edition a definition of “Mild steel” and a related note in section 1.2.1, as follows:

“Mild steel” means a steel having a minimum tensile strength between 360 N/mm² and 440 N/mm²;

NOTE: For portable tanks, see Chapter 6.7.

9. Our proposal for the definition of mild steel consists in a hybrid solution between the current definitions presented below in order to solve the two differences:

- The definition of 6.7 uses the specific term for metal IBCs and portable tanks: *guaranteed minimum tensile strength*;
- The definition of RID/ADR/ADN represents a flexible solution valid also for chapters of the Regulations other than 6.5 and 6.7 but is not including the interval end of the tensile strength of 360 N/mm² as the other does.

Proposal

10. Insert the definition “*Mild steel*” in section 1.2.1 Definitions, as follows:

“Mild steel means a steel having a minimum tensile strength of 360 N/mm² to 440 N/mm²”;

11. Delete the definitions of “*Mild steel*” from 6.7.2.1 and 6.7.3.1.

Consequential amendments

12. Delete de following parenthesis from the paragraphs:
- (a) 6.7.2.4.7 and 6.7.2.4.9: (see 6.7.2.1), and
 - (b) 6.7.3.4.6: (see 6.7.3.1).
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