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**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****Fifty-fourth session**

Geneva, 26 November–4 December 2018

Item 2 (b) of the provisional agenda

**Recommendations made by the Sub-Committee on  
its fifty-first, fifty-second and fifty-third sessions  
and pending issues: explosives and related matters****Sub-Committee of Experts on the Globally Harmonized  
System of Classification and Labelling of Chemicals****Thirty-sixth session**

Geneva, 5–7 December 2018

Item 3 (b) of the provisional agenda

**Classification criteria and related hazard communication:  
review of Chapter 2.1****Inconsequent use of the expression “manufactured with a  
view to producing a practical explosive or pyrotechnic effect”****Transmitted by the expert from Sweden\*****Background**

1. A product is a candidate for Class 1 if it falls into one of the definitions of Class 1 in 2.1.1.1 (a), (b) or (c) of the Model Regulations. A product that has been provisionally accepted into Class 1 may be excluded from Class 1 by virtue of test results.
2. The expression “manufactured with a view to producing a practical explosive or pyrotechnic effect” is introduced into the Model Regulations as a part of the definition for Class 1 in 2.1.1.1 (c). This expression is also used elsewhere in the Model Regulations and in the Manual of Tests and Criteria (MTC), namely in 2.1.3.3.1 of the Model Regulations and in box 2 in Figure 10.2, box 35 in Figure 10.3, 16.6.1.4.7 (a), 16.6.1.4.7 (b) and 3.1 in Appendix 6 of the MTC.

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\* In accordance with the programme of work of the Sub-Committee for 2017–2018 approved by the Committee at its eighth session (see ST/SG/AC.10/C.3/100, paragraph 98 and ST/SG/AC.10/44, paragraph 14).

3. As the majority of text in the Model Regulations concerning Class 1 has been more or less copied into Chapter 2.1 of the GHS, the corresponding use of the expression is found therein. Specifically the expression is used in 2.1.1.2 (c) and in the two boxes of the flow chart in Figures 2.1.2 and 2.1.3 corresponding to box 2 and box 35 of Figures 10.2 and 10.3 in the MTC.

## Problem

4. As described in informal document INF.39 from the fifty-third session of the Subcommittee of Experts on the Transport of Dangerous Goods (SCETDG), the problem is that the above expression has been used with different meanings. In 2.1.3.3.1 of the Model Regulations, the second sentence reads “If the substance is manufactured with a view to producing a practical explosive or pyrotechnic effect (2.1.1.1 (c)), it is unnecessary to conduct Test Series 1 and 2”. Thus, in this text, the expression is strictly correlated to the definition of Class 1 in 2.1.1.1 (c).

5. However, when used in the MTC, the expression has no correlation to the definition of Class 1 in 2.1.1.1 (c) of the Model Regulations. In the context of MTC, the expression has a broader meaning, namely, “manufactured with a view to producing a practical explosive or pyrotechnic effect, no matter whether the effect is produced by a Class 1 product within definition 2.1.1.1 (a), 2.1.1.1 (b) or 2.1.1.1 (c).”

6. After reviewing the use of this expression in both Model Regulations and MTC, it can be deduced that the reference to 2.1.1.1 (c) in 2.1.3.3.1 of the Model Regulation is incorrect and should be deleted, as proposed by the expert from Sweden in informal document INF.39. During the fifty-third session of the Working Group on Explosives (EWG) discussed this matter and many experts supported this proposal.

7. Another issue that was brought up in the informal document INF.39 is the necessity of the word “practical” in the phrase “a practical explosive or pyrotechnic effect”. The expert from Sweden is of the opinion that in the context of the Model Regulations and the MTC, this word “practical” has no meaning whatsoever. This issue was also discussed by the EWG, and no expert could provide a rational reason why this word appears at all and many experts consequently supported a deletion of this word.

## Proposals

8. Therefore, the expert from Sweden proposes to delete the word “practical” in the phrase “a practical explosive or pyrotechnic effect” wherever it appears in the Model Regulations and MTC, except in the definition in 2.1.1.1(c) of the Model Regulations. The wording in 2.1.1.1 (c) thus remains to be “manufactured with a view to producing a practical explosive or pyrotechnic effect”, while everywhere else the wording would be “manufactured with a view to producing an explosive or pyrotechnic effect”. As the result, it becomes clearer that the new expression “manufactured with a view to producing an explosive or pyrotechnic effect” has no correlation to 2.1.1.1 (c) of the Model Regulations.

9. The following is a summary of the proposals. All the proposed amendments are indicated: inserted text is shown as underlined (inserted) and deleted text is shown as strikethrough (~~deleted~~).

10. Amend the second sentence in 2.1.3.3.1 of the Model Regulations to read as follows:  
“If the substance is manufactured with a view to producing ~~a practical an~~ an explosive or pyrotechnic effect (~~2.1.1.1 (c)~~), it is unnecessary to conduct Test Series 1 and 2”.

11. In the following places in the MTC, amend the respective sentence to read “~~a practical~~ an explosive or pyrotechnic effect”:

- Box 2 in Figure 10.2, Section 10
- Box 35 in Figure 10.3, Section 10
- Section 16.6.1.4.7 (a),
- Section 16.6.1.4.7 (b), and
- Point 3.1 in APPENDIX 6.

## **Consequential amendments to the GHS**

12. Make the corresponding changes to the affected boxes of Figures 2.1.2 and 2.1.3 in Chapter 2.1 of the GHS (these boxes corresponding to box 2 and box 35 of Figures 10.2 and 10.3 in the MTC).

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