



**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****Fiftieth session**

Geneva, 28 November–6 December 2016

Item 2 (b) of the provisional agenda

**Recommendations made by the Sub-Committee on its
forty-seventh, forty-eighth and forty-ninth sessions
and pending issues: explosives and related matters****Sub-Committee of Experts on the Globally Harmonized
System of Classification and Labelling of Chemicals****Thirty-second session**

Geneva, 7–9 December 2016

Item 2 (a) of the provisional agenda

**Classification criteria and related hazard communication:
recommendations made by the Sub-Committee on its
twenty-ninth, thirtieth and thirty-first sessions****Chapter 2.1 of the Model Regulations – Class 1 definition
Chapter 2.1 of the GHS – Class of explosives****Transmitted by the Australian Explosives Industry Safety Group
(AEISG)¹****Introduction**

1. In Chapter 2.1 of the United Nations Recommendations on the Transport of Dangerous Goods, Model Regulations, 2.1.1.1 currently reads:

“2.1.1.1 Class 1 comprises:

- (a) Explosive substances (a substance which is not itself an explosive but which can form an explosive atmosphere of gas, vapor or dust is not included in Class 1), except those that are too dangerous to transport or those where the predominant hazard is appropriate to another class;
- (b) Explosive articles, except devices containing explosive substances in such quantity or of such a character that their inadvertent or accidental ignition or initiation during transport shall not cause any effect external to the device either by projection, fire, smoke, heat or loud noise (see 2.1.3.6); and

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).

- (c) Substances and articles not mentioned under (a) and (b) which are manufactured with a view to producing a practical, explosive or pyrotechnic effect.”
2. Similarly, in Chapter 2.1 of the GHS, 2.1.1.2 currently reads:
“2.1.1.2 The class of explosives comprises:
- (a) Explosive substances and mixtures;
- (b) Explosive articles, except devices containing explosive substances or mixtures in such quantity or of such a character that their inadvertent or accidental ignition or initiation shall not cause any effect external to the device either by projection, fire, smoke, heat or loud noise; and
- (c) Substances, mixtures and articles not mentioned under (a) and (b) above which are manufactured with the view to producing a practical, explosive or pyrotechnic effect.”
3. The comma after the word ‘practical’ in 2.1.1.1(c) of the Model Regulations and 2.1.1.2 (c) of the GHS is unnecessary and incorrectly extends Class 1 of the Model Regulations/the class of explosives of the GHS to include any substance, mixture or article which is manufactured with a view to producing a practical effect even if non-explosive in nature.

Discussion

4. AEISG believes the added comma represents an error which has been carried on from previous editions of the Model Regulations.
5. The phrase “a practical explosive or pyrotechnic effect”, EXCLUDING THE COMMA, is used in other parts of the existing Model Regulations (nineteenth revised edition), the Manual of Tests and Criteria (sixth revised edition) and the GHS (sixth revised edition) including:
- 2.1.3.3.1 of the Model Regulations;
 - Figure 10.2 (Box 2), Figure 10.6 (3. Box 2), Figure 10.7 (Box 2), Figure 10.8 (8. Box 35), 16.6.1.4.7(a), 16.6.1.4.7(b) and Appendix 6 (3.1) of the Manual of Tests and Criteria;
 - Figures 2.1.2 and 2.1.3 of the GHS.
6. While the phrase “a practical, explosive or pyrotechnic effect”, WITH COMMA, appears in 51.2.2 (a) of the current version of the Manual of Tests and Criteria (sixth revised edition) and 2.17.2.1 (a) of the GHS, this was amended at the forty-ninth session of the TDG Sub-Committee and at the thirty-first session of the GHS Sub-Committee to exclude the comma amongst other things (ST/SG/AC.10/C.3/98, paragraph 138 and ST/SG/AC.10/C.4/62, paragraph 23).
7. The phrase “a practical, explosive or pyrotechnic effect”, with the comma after the word “practical”, is also used in the Note “b” to Table 2.1.1.

Proposals

8. It is proposed to remove the comma after the word “practical” in 2.1.1.1(c) of the Model Regulations and to clarify intent and to achieve consistency with all other references throughout the Model Regulations and the Manual of Tests and Criteria, such that 2.1.1.1 would read:

“2.1.1.1 Class 1 comprises:

- (a) Explosive substances (a substance which is not itself an explosive but which can form an explosive atmosphere of gas, vapour or dust is not included in Class 1), except those that are too dangerous to transport or those where the predominant hazard is appropriate to another class;
- (b) Explosive articles, except devices containing explosive substances in such quantity or of such a character that their inadvertent or accidental ignition or initiation during transport shall not cause any effect external to the device either by projection, fire, smoke, heat or loud noise (see 2.1.3.6); and
- (c) Substances and articles not mentioned under (a) and (b) which are manufactured with a view to producing a practical explosive or pyrotechnic effect.”

9. It is proposed to remove the comma after the word “practical” in 2.1.1.2 (c) and Note b to Table 2.1.1 of the GHS to clarify intent and to achieve consistency with all other references throughout the GHS, the Model Regulations and the Manual of Tests and Criteria, such that

2.1.1.2 would read:

“2.1.1.2 The class of explosives comprises:

- (a) Explosive substances and mixtures;
- (b) Explosive articles, except devices containing explosive substances or mixtures in such quantity or of such a character that their inadvertent or accidental ignition or initiation shall not cause any effect external to the device either by projection, fire, smoke, heat or loud noise; and
- (c) Substances, mixtures and articles not mentioned under (a) and (b) above which are manufactured with the view to producing a practical explosive or pyrotechnic effect.’

Note b to Table 2.1.1 would read:

“b This comprises substances, mixtures and articles which are manufactured with a view to producing a practical explosive or pyrotechnic effect.’
