

**Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals**

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**Sub-Committee of Experts on the
Transport of Dangerous Goods**

**Sub-Committee of Experts on the Globally Harmonized
System of Classification and Labelling of Chemicals**

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Item 10 (g) of the provisional agenda

Item 2 (d) of the provisional agenda

**Use of the Manual of tests and criteria in the
context of the GHS**

**Use of the Manual of Tests and Criteria in the context
of the GHS**

**Remarks on the use of the Manual of Tests and Criteria in
the context of the GHS**

Transmitted by the expert from the Netherlands

Background

1. The Sub-Committee agreed during its forty-sixth session to review the Manual of Tests and Criteria in the context of GHS in accordance with the mandate described in INF.44 (TDG, 46th session) – INF.19 (GHS, 28th session). Delegations were further invited to submit in writing their comments on the first draft submitted by the secretariat to the forty-fifth session as documents ST/SG/AC.10/C.3/2014/61 – ST/SG/AC.10/C.4/2014/8 and informal document INF.8 (TDG, 45th session) – INF.5 (GHS, 27th session) and Add. 1–5 (Reference ST/SG/AC.10/C.3/90, paragraphs 34 – 37 and ST/SG/AC.10/C.3/92, paragraphs 93-94).

2. The expert from the Netherlands wishes to share the results of a national review of these documents. In particular, we wish to comment on the issues mentioned in paragraph 8 of ST/SG/AC.10/C.3/2014/61–ST/SG/AC.10/C.4/2014/8. Additional remarks and editorial suggestions, in no particular order of importance, are included as well.

Discussion

3. The expert from the Netherlands is in favour of including introductory paragraphs in the Manual explaining the relationship between the Model Regulations and the GHS. Explaining the relationship between GHS and transport classifications, and in particular the proposed Table 1.1, will increase the transparency and user-friendliness of the Manual. For a complete overview, we further suggest the table be revised to also include GHS classifications that are outside the scope of the transport regulations. This could be achieved as shown in the example below (~~deletions are in strike through~~, **additions in bold**):

GHS hazard classes addressed in the Model Regulations	Hazard classes in the Model Regulations
Hazardous to the aquatic environment (Acute 1, Chronic 1 and 2)	Class 9 (environmentally hazardous substances)
Hazardous to the aquatic environment (Acute 2 and 3, Chronic 3 and 4)	Not considered dangerous goods

4. Similarly, the Netherlands supports including references to GHS chapters, paragraphs, hazard classes and categories. Furthermore, the proposed Table 1.1 will show the relationship between the GHS hazard classes and transport classes. Therefore, the Manual can be further simplified by removing the text in parenthesis referring to the transport class. Following this suggestion, the heading of part I of the Manual will for example read (deletions are shown in strikethrough): "Classification procedures, test methods and criteria relating to explosives (~~transport class 1~~)".

5. With regard to terminology, transport frequently uses "substances" to mean both "substances" and "mixtures" whereas GHS clearly differentiates between "substances" and "mixtures". Also, "solutions" and "preparations" are in GHS considered to be "mixtures". Further work may be needed in the future to increase the consistency in terminology use. For the time being, we suggest that for the purpose of the Manual, "substances" will include both "substances" and "mixtures" and where appropriate "formulation" and "solutions" be replaced by "mixtures". A note or an explanatory text in the introduction can be included to clearly explain the meaning of these terms in the context of Part 1, 2 and 3 of the Manual.

6. Regarding the addition of the sectors "storage", "supply" and "use" where the Manual refers to the "transport" sector, a detailed review may be needed to determine when a reference to "transport" is truly transport-specific. We see two possibilities in this situation:

- (a) To include the other sectors in addition to transport, or
- (b) Remove all references to sectors (including transport) and add a note or explanatory text in the introduction stating that the text is relevant to all sectors unless a sector is specifically indicated in a particular paragraph.

The second option may be more simple and readable.

7. The Netherlands further wishes to share our initial thoughts on the location of flow-schemes that are used for classification of some physical hazards. These flow-schemes are included both in the Manual and the GHS. This is undesirable since two versions need to be diligently updated and maintained to prevent discrepancies between the two. Our preference would be to have the flow-schemes in only document.

8. Other remarks on content or editorial matters that the Netherlands has identified so far are included below for further consideration. In some instances, the remarks relate to existing text of the Manual.

- Section 1.2.3.3, table 1.1: Should classification of aerosols in GHS category 3 be included in the table?
- Section 1.2.3.3, table 1.1: Is it necessary to point out where the criteria between the GHS and the TDG differ, for example for acute inhalation toxicity of vapours?
- Section 10.2.1: We agree to change "risk" to "hazard".
- Section 20.4.2 and 20.4.3: Should the heading also include references to GHS classification for self-reactive substances (GHS chapter 2.8) and organic peroxides (GHS chapter 2.15)?
- Section 20.4.2 and 20.4.3 (a), (b), (c), (d), (e) and (f): The text needs a careful editorial check to ensure that the changes have not changed the criteria.
- Section 20.4.2 (b): We believe that text on labelling requirements is better suited for the Model Regulations and that it is unnecessary to include this text in the Manual.

- Part III, Table of content: Chapter 32, flammable solids and solid desensitized explosives are not part of transport class 3 and Chapter 33, oxidizing liquids and solids are not a part of transport Class 4.
 - Section 31.3.1: The text is rather confusing as it suggests that aerosols can only be classified as extremely flammable or flammable although in (b) the option of non-flammable is also given. An editorial revision would be beneficial.
 - Section 32.3.1.1: There are differences between the criteria/text in the GHS and the Manual with regard to use of flash point for PGI and the use of boiling point for GHS category 3. It is preferable to have the two texts consistent.
 - Section 32.3.1.3: We agree with consistent use of “hazard” in this context instead of “risk”. As an additional remark on existing text, this section is not unique for this hazard but applicable in general. Considerations may be given to moving this text and other instances when the precedence of hazard is discussed to a more general part of the Manual or remove it altogether from the Manual since the precedence of hazard is discussed in the Model Regulations.
 - Section 32.5.1.4: A reference to GHS category 3 is not appropriate here. Note 3 in section 2.6.2 of the GHS says that viscous liquids may be regarded as a special group for some authorities (e.g. transport). However, GHS itself makes no distinction between flammable liquids and viscous flammable liquids.
 - Sections 33.3.1.3.3.4, 33.3.1.6.4.2 and 33.3.1.6.4.4: “Whether GHS Category 2 (packing group III) is assigned or the substance or mixture is not classified as a self-heating substance or mixture (transport Division 4.2), in the packaging to be used, is decided on the basis of the test results”. How do sectors other than transport make a judgement whether a substance/mixture is GHS Cat.2 or not classified when not packaged but in storage silos? Is editorial revision of the text sufficient (e.g. replacement of “packaging” with “packaging or storage container”) or is a more fundamental review needed?
 - Section 37.1.3: We prefer to not include this section in the Manual as skin corrosion is not a hazard included in the Manual and this text is better suited for the Model Regulations.
 - Section 37.4.1.1: We agree with remark RC35, i.e. generalizing the text/test to be applicable to all sectors.
 - Appendix 3.3 (d): Packing group I, II and III are referred to as high, medium and low hazard whereas in other parts of the Manual and in the Guiding Principles, the word “danger” is used. We suggest the “hazard” be replaced with “danger” for consistent terminology use in the Manual.
9. In order for this editorial work to result in a Manual that is useful for all sectors, it is important that both subcommittees contribute to the work. Since it is anticipated that a large part of the Manual will be reviewed in the Working Group on Explosives, experts usually attending the GHS Sub-Committee are encouraged to participate in the working group to ensure that the needs of sectors other than transport are properly addressed as well.
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