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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**

18 June 2018

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

**Fifty-third session**

Geneva, 25 June-4 July 2018

Item 10 (e) of the provisional agenda

**Issues relating to the Globally Harmonized System  
of Classification and Labelling of Chemicals:**

**Joint work with the GHS Sub-Committee**

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

**Thirty-fifth session**

Geneva, 4-6 July 2018

Item 3 (b) of the provisional agenda

**Review of Chapter 2.1**

**Status report on the work of the informal correspondence  
group on the revision of GHS Chapter 2.1 (Explosives)**

**Transmitted by the expert from Sweden**

**Background**

1. The Informal Correspondence Group (ICG) that works on the revision of Chapter 2.1 under the leadership of the expert from Sweden has discussed the item since the autumn of 2015. The ICG currently consists of almost 50 experts, whereof slightly more than half are also experts of the Working Group on Explosives (EWG) under the SCETDG. As described in ST/SG/AC.10/C.4/2018/7 to the 35:th session of the SCEGHS<sup>1</sup>, that also references all previous status reports on the work, the group has lately focused on an amended classification system that adds another layer of classification onto the existing Division-based system that originates from the transport sector.

2. The new layer of classification would potentially consist of two categories, where Category 2 would be identical in scope to Class 1 of transport and Category 1 would contain explosive substances, mixtures and articles (Explosives) that have not been assigned a (transport) Division. Category 2 would be divided into three Sub-categories 2A, 2B and 2C depending on the degree of hazardous behaviour of the Explosive regardless of any particular (transport) packaging or configuration.

3. By adding this layer of classification, the two major problems of current Chapter 2.1 would be overcome, as further described in ST/SG/AC.10/C.4/2018/7-ST/SG/AC.10/C.3/2018/33.

(a) Explosives that cannot be assigned a Division because they are not packaged/configured (for transport) could be classified according to GHS.

(b) The GHS hazard communication of Explosives could be made independent of the (transport) packaging/configuration, which avoids potential mislabeling where the classification at the Division level is dependent on a particular (transport) packaging/configuration.

4. The details of this amended GHS classification system were discussed at two ICG-meetings in December 2017, and the outcome subsequently presented to the SCEGHS at its 34:th session. While discussions mainly revolved around the criteria for the various

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<sup>1</sup> ST/SG/AC.10/C.4/2018/7- ST/SG/AC.10/C.3/2018/33

categories and the hazard communication elements, they also touched upon more fundamental questions such as the scope of the GHS. The discussions resulted in tentatively agreed criteria <sup>2</sup> which are displayed in the annex to ST/SG/AC.10/C.4/2018/7-ST/SG/AC.10/C.3/2018/33.

## Developments since the December 2017 meetings

5. After the UN-meetings in December 2017, the expert from Sweden sent out three separate requests for input to the ICG-Members:

- (a) A request for input to the criteria for Category 1;
- (b) A request for input to the criteria for Sub-categories 2B and 2C;
- (c) A request for input to the hazard communication elements for all (sub-) categories.

6. Only one group of ICG-members responded to all these requests as instructed, although a few other experts did provide various types of feedback as well, some of it not relating to the above requests. The overall input was, however, modest which makes it somewhat difficult to draw well-founded conclusions and build further on these.

7. From the responses received, the expert from Sweden can only conclude that the development of the criteria within the ICG has not significantly progressed lately. The criteria for Category 1 are, in his view, more or less a matter of getting it right with regards to the scope of the chapter, i.e. to comprise all Explosives that are currently within the scope. The criteria for Sub-categories 2B and 2C, however, need further in-depth discussion as there are differing opinions in particular on which Sub-category should be assigned to various Compatibility groups within Division 1.4 and on the hierarchy between Divisions, Categories and Sub-categories within the amended system. Furthermore, there are some that feel that it should be made clear that the Divisions relate to transport packagings/configurations only, while others think that Divisions could in principle be assigned to Explosives also in other types of packagings.

8. As regards the hazard communication there appears to be consensus on the elements as reflected in paragraph 10 of ST/SG/AC.10/C.4/2018/7-ST/SG/AC.10/C.3/2018/33, apart from the hazard statement for Category 1. For this hazard statements, two groups of experts have expressed that they prefer a stronger hazard statement than “Explosive”, e.g. “Sensitive explosive” or “Extremely explosive”, because the category also comprises explosives not allowed for transport due to being too mechanically sensitive or thermally unstable. Furthermore, one of these groups has stated that a common hazard statement for all Explosives in Category 2A can only be accepted by them if the Division is communicated on the GHS-label in some way (preferably the Division should also be communicated on the GHS-label for Sub-categories 2B and 2C, according to this group).

9. In order to assist the discussions around the principles of an amended classification system for Explosives as outlined in ST/SG/AC.10/C.4/2018/7-ST/SG/AC.10/C.3/2018/33, the expert from Sweden submitted INF.10 to the 35:th session of the SCEGHS<sup>3</sup> showing what a new Chapter 2.1 of the GHS could look like. That paper also contains an amended Classification and Labelling Summary Table as well as the GHS labels resulting from the changes, in order to further illustrate the consequences of the potential amendments to Chapter 2.1.

10. In mid-April 2018, the working group on explosives, pyrotechnics and propellants under IGUS<sup>4</sup> (IGUS-EPP) and the Chief Inspectors of Explosives (CIE) held their annual

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<sup>2</sup> See UN/SCEGHS/34/INF.20 - UN/SCETDG/52/INF.57

<sup>3</sup> INF. 9 to the 53:rd session of the SCETDG, UN/SCEGHS/35/INF.10 - UN/SCETDG/53/INF.9

<sup>4</sup> IGUS is the International Group of experts on the explosion risks of Unstable Substances, [www.igus-experts.org](http://www.igus-experts.org)

meetings in Ottawa, Canada, where many of the ICG-members that are also experts of the EWG participated. At this conference, the review of GHS Chapter 2.1 was presented and discussed amongst the attendees. As the expert from Sweden was not present at this conference he refrains from attempting to summarise these discussions. However, informal paper INF.15 to the SCEGHS<sup>5</sup> from the United States of America, IME and SAAMI refers to this conference.

## Upcoming discussions and future outlook

11. The review of Chapter 2.1 of the GHS has been scheduled for discussion at the joint session of the SCEGHS and SCETDG in the afternoon of Tuesday the 3:rd of July.<sup>6</sup> The ICG within which the work is done can be expected to meet when the formal part of the meeting of the EWG has been finalised, probably starting on Thursday the 29:th of June and pending decision by the SCETDG.<sup>7</sup> Another meeting of the ICG is scheduled to be held in the margins of the session of the SCEGHS in the evening of Tuesday the 3:rd of July.<sup>8</sup>

12. The expert from Sweden anticipates vivid discussions on the item in all these meetings and reminds that the Programme of Work for the ICG sets out to complete the work within the current biennium.<sup>9</sup> Unless this time line can be met, the work will either have to be carried over into the next biennium or put to a halt, and the experts of the SCEGHS should be prepared to take a stand on the preferred way forward before the December 2018 session.

## Acknowledgements

13. Finally, the expert from Sweden wishes to thank the ICG-members for their persistent work thus far. In his view, the almost 50-50 mixture of experts from the EWG and from the SCEGHS in the ICG is a good way to work on the review of Chapter 2.1, taking into account everything from detailed technical aspects of explosives and their transportation to more general GHS-related aspects such as GHS hazard communication and the practical functionality of the GHS in various sectors.

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<sup>5</sup> INF.33 to the SCETDG, UN/SCEGHS/35/INF.15 - UN/SCETDG/53/INF.33

<sup>6</sup> See UN/SCEGHS/35/INF.11 and UN/SCETDG/53/INF.12 from the Secretariat

<sup>7</sup> See UN/SCETDG/53/INF.12 from the Secretariat, footnote \*\*

<sup>8</sup> See UN/SCEGHS/35/INF.11 from the Secretariat

<sup>9</sup> See UN/SCEGHS/33/INF.13 - UN/SCETDG/51/INF.44