



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

Geneva, 11-13 December 2019

Item 2 (b) of the provisional agenda

**Classification criteria and related hazard communication:
review of Chapter 2.1****Review of GHS Chapter 2.1 GHS (explosives) – status report
on the development of an extended classification system****Transmitted by the expert from Sweden*****Background**

1. The work on revising Chapter 2.1 for Explosives in the GHS has been going on since the twenty-ninth session of the Sub-Committee of Experts on the Globally Harmonized System (SCEGHS). It is discussed within an Informal Correspondence Group (ICG) led by the expert from Sweden, and the progress of the work has been reported in status reports since the thirtieth session of the SCEGHS.¹ The work has resulted in a possible extended classification system for the GHS, with developed criteria and with associated hazard communication elements under development. This new GHS classification system was outlined in Annex 1 to document ST/SG/AC.10/C.4/2019/5 (GHS thirty-seventh session).

2. The new classification system's main feature is that it overcomes the current dependence of the GHS hazard communication on a particular configuration, normally that for transport. It remains largely based on the divisions currently used in both the GHS and the UN Model Regulations, but evaluates the explosive behaviour down to the level of the primary packaging (normally the innermost container) and validates whether or not the explosive effect as reflected by the division is also accurate at that level. This removes the possible mitigating effect that the (transport) configuration may have, which can be

* In accordance with the programme of work of the Sub-Committee for 2019-2020 approved by the Committee at its ninth session (see ST/SG/AC.10/C.3/108, paragraph 141 and ST/SG/AC.10/46, paragraph 14).

¹ These status reports have also been submitted to the Sub-Committee of Experts on the Transport of Dangerous Goods (SCETDG), in their capacity as focal point for the physical hazards of the GHS.

substantial, and thereby allows for appropriate GHS hazard communication for the primary packaging.

3. Another feature of the new system is to provide a means to classify explosives not assigned to a division for reasons other than being too sensitive (i.e. for other than “unstable explosives”), which the current system does not. For example, in explosives manufacturing and processing there is no (transport) configuration that can be subjected to the appropriate tests for assigning a division, and hence no GHS classification can currently be assigned (unless they are “unstable explosives”). The new system is able to classify explosives also in this situation and assign GHS hazard communication elements to them.

Status report

4. At the thirty-sixth session of the SCEGHS, new terms of reference and a programme of work were adopted as reflected in informal document INF.43/Rev.1 (GHS, thirty-sixth session). The programme of work sets out to complete the task of reviewing Chapter 2.1 within the 2019-2020 biennium and describes the route to this goal in terms of four work items. These items were addressed in document ST/SG/AC.10/C.4/2019/5 to the thirty-seventh session of the SCEGHS. During that session and in the meeting of the Working Group on Explosives (EWG) in parallel to the fifty-fifth session of the Sub-Committee of Experts on the Transport of Dangerous Goods (SCETDG), there was substantial further progress. A status report in terms of the items of the programme of work is given below.

Item 1 – Finalise the criteria for the new system

5. The criteria for the various classifications within the new GHS system were essentially finalized in the combined meeting of the ICG and the EWG held in parallel to the fifty-fifth session of the SCETDG. These criteria are reflected in the report of the EWG¹, reproduced as informal document INF.24, and in informal document INF.21² (GHS thirty-seventh session). They were subsequently shown, explained and illustrated at the meeting of the ICG that took place during the thirty-seventh session of SCEGHS.

6. While the criteria were essentially finalized, the issue of whether an exclusion should be made for substances and mixtures in the research and development phase, and if so under what conditions, was not fully resolved. Also regarding the exclusion of certain substances, mixtures and articles that have been excluded from Class 1 of the UN Model Regulations via specific UN numbers in the Dangerous Goods List, the matter was not completely settled. Furthermore, there is still some work needed in order to word the criteria clearly and present them in a logical way.

7. Discussions are on-going within the ICG to address the above issues and to develop appropriate guidance to aid in the practical application of the criteria. As the EWG does not convene again until the fifty-seventh session of the SCETDG in the summer of 2020, the expert from Sweden hopes that at least the majority of the remaining work can be done via correspondence and telephone conferences before that meeting takes place.

¹ INF.55 to the SCETDG, fifty-fifth session.

² INF.56 to the SCETDG, fifty-fifth session.

Item 2 – Assign appropriate hazard communication elements and precautionary statements

8. At the meeting of the ICG during the thirty-seventh session of the SCEGHS, the main item for discussion was the hazard communication elements for the various classifications of the new classification system. The outcome of these discussions is presented in informal document INF.26 (GHS, thirty-seventh session). Many of the hazard communication elements could be tentatively agreed, but for some there is additional work needed.

9. In particular, the occurrence of a symbol or not for sub-category 2C, the additional hazard communication for “sensitive” explosives in Category 1, and the way to state the division on the label for at least sub-category 2A are items that need further deliberations. The hazard communication elements are under discussion within the ICG and can be expected to be further debated at the thirty-eight session of the SCEGHS.

Item 3 – Draft a new GHS Chapter 2.1 and review the Manual of Tests and Criteria for associated amendments needed

10. A draft new Chapter 2.1 based on the criteria and hazard communication elements as reported in the aforementioned documents was put together by the expert from Sweden and sent out to the ICG in the beginning of July 2019, for commenting. As July and August are summer vacation months for most members of the ICG, few comments have been received at the time of writing and further input is expected after the submission of this document.

11. The expert from Sweden has also circulated a list of precautionary statements currently applied to explosives, and asked members of the ICG to indicate how they think these should be applied to the new classifications. Also, regarding this, answers are expected to come after the submission of this document. At the point of writing, no analysis has yet been made regarding any consequential amendments needed to the Manual of Tests and Criteria.

12. Discussions are assumed to follow within the ICG during the autumn of 2019, based on the comments received, with the aim of producing an advanced draft new Chapter 2.1 for presentation to the SCEGHS at its thirty-eight session. An informal document containing that draft chapter can be expected to appear in early November 2019, to supplement this working document.

Item 4 – Propose a new Chapter 2.1 for inclusion in the ninth revised edition of the GHS, and the associated changes to the Manual of Tests and Criteria

13. As indicated at the meeting of the ICG during the thirty-seventh session of the SCEGHS, an attempt will be made to present a firm proposal for a new GHS Chapter 2.1 to the thirty-ninth session of the SCEGHS. This will be based on the comments received to the draft chapter as presented in the forthcoming informal paper mentioned above, and members of the SCEGHS who have views are encouraged to bring them forward.

Upcoming discussions

14. It can be expected that a meeting of the ICG on the review of GHS Chapter 2.1 will be held during, or in the margins of, the thirty-eight session of the SCEGHS. The expert from Sweden looks forward to these discussions and thanks the ICG members that have worked hard thus far towards finalisation of this item before the biennium is over.