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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 Globally Harmonized  
System of Classification and Labelling of Chemicals****Thirty-fourth session**

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Item 4 (a) of the provisional agenda

**Implementation of the GHS:****development of a list of chemicals****classified in accordance with the GHS****Assessing the potential development of a global list of  
chemicals classified in accordance with the Globally  
Harmonized System of Classification and Labelling of  
Chemicals****Transmitted by the expert from the United States on behalf of the  
informal correspondence group on the global list\*****Introduction**

1. The Sub-Committee has been studying the possibility of developing a global list of chemicals classified in accordance with the GHS since 2008. It has done considerable work in this regard, including a survey of international classification lists, developing a set of guiding principles, a pilot classification project, and a list comparison exercise.
2. In a wide-ranging discussion at the last meeting of the informal correspondence group in July 2017, many experts expressed a strong sentiment that the time had come for the Sub-Committee to begin work on developing a classification list. Others, however, expressed caution. As a way forward, it was agreed that the correspondence group develop a working paper for the next session summarizing the discussion for further consideration at the thirty-fourth session (see ST/SG/AC.10/C.4/66, para. 35).

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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. After an overview of the Sub-Committee's work on the global list, this paper summarizes those discussions.

## Background

4. The GHS was developed to provide harmonized hazard classification criteria and hazard communication elements so that "consistent and appropriate information" on the hazards of chemicals could be developed "to control chemical exposures and protect people and the environment" (see para. 1.1.1.3 of the GHS). This would, among other things, "facilitate international trade in chemicals whose hazards have been properly assessed and identified on an international basis" (see para. 1.1.1.4 (d) of the GHS).

5. UNITAR submitted a paper to the fifteenth session of the Sub-Committee noting the fact that "some competent authorities have chosen to develop lists of classifications" for common substances in order to help companies comply with technical classification requirements and "to ensure a consistent approach" (see informal document INF. 32, fifteenth session). However, the document noted that the development of multiple lists was creating disharmony and increased complexity in classification for internationally distributed chemicals. This issue was included in the scope of work for the informal correspondence group on implementation issues (ST/SG/AC.10/C.4/32 para. 72 and ST/SG/AC.10/C.4/2008/22 para. 4.4 (g)).

6. Two studies subsequently presented to the Sub-Committee showed discrepancies between existing lists:

- (a) The first (informal document INF.6, nineteenth session), prepared by OECD, studied the classifications assigned by the European Union, Japan, and New Zealand to the chemicals listed in Annex III of the Rotterdam Convention. Of those chemicals, only one, asbestos, was classified identically in each system. The OECD studied the classifications of five chemicals in depth, and found that the use of differing data sets was the most important reason for the discrepancies, followed by differences in interpretation of the data and application of the classification criteria;
- (b) The second (informal document INF.7, nineteenth session), prepared by the Secretariat, showed a number of discrepancies between the transport classifications in the "Recommendations on the Transport of Dangerous Goods, Model Regulations" (Rev. 16) and the classifications in Annex VI of Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (CLP Regulation). The secretariat updated this comparison for Rev. 17 of the Model Regulations (see informal document INF.10, twenty-fifth session).

7. A survey conducted within the Sub-Committee showed that GHS classification lists had been adopted by at least five individual countries and the European Union. In addition, classification lists were maintained by IMO (Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP)), the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) and WHO (pesticides and International Chemical Safety Cards) (see informal documents INF. 4 and INF. 5, twentieth session). For these lists, some classifications were derived from application of the GHS criteria, while others were translated from earlier systems. The data supporting some classifications were available, for others they were not. There was general support by survey respondents for a global non-binding list of GHS chemical classifications (ST/SG/AC.10/C.4/2010/20, para. 4).

8. It was also noted that the OECD's eChemPortal contained information on several existing GHS classification lists, and that links for additional lists were planned (see ST/SG/AC.10/C.4/46 para. 43 and ST/SG/AC.10/C.4/38 para. 48).

9. The Sub-Committee next developed a set of guiding principles that should govern the development of global non-binding list by the Sub-Committee (see ST/SG/AC.10/C.4/48, Annex III). The goal of the guiding principles is to ensure that classifications be developed transparently, with stakeholder input, from publicly available and electronically accessible data, and be non-binding. These principles are reproduced in Annex I.

10. After extended debate about next steps, the Sub-Committee conducted a pilot classification project in conjunction with the OECD to explore the process that might be used and the resources that might be required to prepare a global classification list. Under the pilot program, draft classification reports prepared by sponsors for three chemicals were posted on a website hosted by the OECD, and all interested parties were allowed access to the website and invited to provide comments. Sponsors revised their documents based on the comments and provided responses to the comments. Outstanding comments were resolved by way of teleconference (see ST/SG/AC.10/C.4/2017/1; ST/SG/AC.10/C.4/2016/18 and informal document INF. 4, thirty-second session).

11. The pilot project was successful in that non-binding consensus classifications were reached for each of the three chemicals. It also showed that significant resources and a sustained commitment would be necessary if the Sub-Committee were to develop a global classification list in this way.

12. The Global List informal correspondence group has also begun work on a comparison of the classifications in CLP Annex VI derived from opinions from the European Chemicals Agency Committee for Risk Assessment (ECHA RAC) and the Japanese classification list. Of the 89 chemicals in common to the two lists, none had identical classifications. The correspondence group has held preliminary discussions about additional work that might be done to identify the causes of the disagreements between the two lists (see informal document INF. 14, thirty-third session) such as comparing the data sets used for classification.

## **Discussions on the future of the global list initiative**

13. During the current biennium, the Sub-Committee has directed the Global List informal correspondence group to "consider whether there is sufficient interest to warrant additional work at this time on the Global List project," and "if the work moves ahead, consider the proper role of the GHS Sub-Committee in that effort" (see ST/SG/AC.10/C.4/64 para. 53 and informal document INF. 40, thirty-second session, paras. 6 (c) and (d)). The informal correspondence group discussed the future of the project at its meeting on 11 July 2017.

14. There was a strong sentiment among many experts that the Sub-Committee should begin work on a global list of classifications in accordance with the guiding principles. Arguments in favour of this view included:

- (a) The Sub-Committee has identified a process for reaching agreed classifications that works. While substantial effort was required to develop classifications in the pilot project, efficiencies will be found with more experience. WHO reported that it develops classifications for 100 International Chemical Safety Cards each year. The representative of

WHO was invited to share the procedures for classification with the Sub-Committee;

- (b) A list of internationally agreed classifications furthers the goals of the GHS, which is to ensure that users of chemicals have “consistent and appropriate information” worldwide (see para. 1.1.1.3 of the GHS);
- (c) A global list will especially aid small and medium sized chemical manufacturers and suppliers who do not have the resources to develop separate labels and safety data sheets for jurisdictions with varying classifications. It will also aid countries which do not have the resources to develop classifications on their own to achieve consistency in chemical hazard communication (see paras. 1.1.1.1 to 1.1.1.3 of the GHS);
- (d) Developing a list might lead to potential economies of scale where competent authorities who have adopted mandatory or recommended lists would be able to adopt more classifications by pooling their resources on an international level than by doing so on their own;
- (e) Finally, in response to concerns about possible conflicts between national, or regional, legally binding lists and an international non-binding list, experts in favour of a global list argued that an additional review of classifications at the global review should only improve their accuracy.

15. At the same time several experts expressed concerns about going forward with a global list for the following reasons:

- (a) The pilot project has shown that developing a list of harmonised classified substances would require substantial resources;
- (b) Work on the international level might unnecessarily lead to duplication of work already done at the competent authority level;
- (c) Differing results in a global list might undermine the credibility of a competent authority’s binding list, and might create potential legal issues in the enforcement of the competent authority’s classifications.

## **Discussion on the way forward**

16. After nine years of study, it seems this project is at a crossroads, and the time has come for the Sub-Committee to make the fundamental decision about whether to move forward with the development of a global list.

17. If it decides to do so, additional decisions of principle and process will need to be made. Points of principle could include how substances are prioritised for review and inclusion of classifications on the list, and whether substances can be listed as a group. Issues of process include the arrangements for submission and consideration of proposals, and for the Sub-Committee to take note/agree/approve/endorse proposed classifications and for updating existing classifications based upon new or updated data, together with how these activities will be resourced and managed.

18. Alternatively, the Sub-Committee may wish to investigate other options to improve harmonisation of the classification of substances that do not have the disadvantages mentioned in paragraph 15.

19. The Sub-Committee is invited to consider these questions.

## Annex I

### **Guiding principles for the development of a global list of chemicals classified in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals**

- (a) The process for developing and maintaining a global list must be clear, transparent and follow the principles of the GHS. Opportunities should be provided for stakeholders to provide input as well as mechanisms for expert review, conflict resolution and updating the list when new significant data or information become available;<sup>1</sup>
- (b) All GHS hazard categories and classes must be included in the global list of classified chemicals;<sup>2</sup>
- (c) Only substances, as defined by the GHS, will be included in the global list of classified chemicals;
- (d) All substances must be accurately identifiable and described for each entry (e.g. including *Chemical Abstracts Service Registry Numbers* (CAS numbers), the UN numbers assigned under transport of dangerous goods regulations where assigned/applicable, and relevant impurities);
- (e) The data sets forming the basis for the chemical classification must be referenced with the classification. The source of the information must also be electronically available, and publicly accessible. The data should be derived using test methods that are scientifically sound and validated according to international procedures;
- (f) The global list of chemical classifications will be non-binding. As with the GHS itself, countries will have the option to make the list binding if they adopt it through their legislative and/or regulatory process. Furthermore, the development of a global list is compatible with the GHS principle of self-classification.

*(Guiding principles as adopted by the Sub-Committee Report of the Sub-Committee on its twenty-fourth session, see ST/SG/AC.10/C.4/48, Annex III)*

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<sup>1</sup> Given the vast amount of substances on the global market, the global list will initially cover only a subset of prioritised substances.

<sup>2</sup> Development of the global list needs to involve priority setting and proceeding in a stepwise fashion. While the ultimate goal is to include all GHS classes/categories, an interim step may include a phased in approach. The pilot program being proposed for the next biennium will not require that substances be selected in order to have all hazard classes/categories covered.