

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

17 June 2014

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

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Geneva, 23 June – 2 July 2014

Item 11 (g) of the provisional agenda

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

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

Twenty-seventh session

Geneva, 2 – 4 July 2014

Item 3 (c) of the provisional agenda

**Classification criteria and hazard communication:
Work of the TDG-GHS working group on corrosivity
criteria**

**Addendum to the update on the work of the intersessional
joint TDG-GHS working group on corrosivity criteria**

**Transmitted by the expert of the Netherlands on behalf of the working
group**

Introduction

1. The intersessional joint TDG-GHS working group charged with the continuation of work on the development of a proposal on the basis of the outline present in paragraph 8 of INF.27 (GHS, 26th session) held a teleconference on 30 January 2014, on 27 February 2014 and again on 14 May 2014 under the chairmanship of the Netherlands.
2. This addendum contains the minutes of the third teleconference, held on 14 May 2014.

Minutes of the 3rd teleconference on corrosivity, 14 May 2014

Participants:

Marie-Noëlle Blaude, Belgium; Renata Krätke, Germany; Joke Herremans, Netherlands; Sjöfn Gunnarsdóttir, Netherlands; Paul Hurdeman, Netherlands; Maureen Ruskin, USA; Paul Brigandi, USA; Vincent Babich, USA; Arne Bale, UK; Robin Foster, UK; Sabine Böhmert, EC; Eva Kessler, CEFIC; Rene Moonen, CEFIC.

I. Start of the meeting, agreement on the Agenda

1. The agenda was adopted without changes.

II. Adoption of the minutes of the 2st teleconference on 27 February 2014

2. Written remarks on the 2nd teleconference had been received while preparing the INF paper that was submitted in end of March and incorporated into the paper. Sabine Böhmert is mistakenly identified as a participant in the 2nd teleconference.

III. Discussion on advantages and disadvantages of Alternative 1 vs Alternative 2

3. Two alternatives on how to incorporate the criteria into the Model Regulations had been distributed to the participants.
4. The main *advantages* of Alternative 1:
 - (a) Similarity to the current chapter 2.8 in the Model Regulations.
 - (b) The essence of Alternative 1 is the clear separation between classification and assignment of packing group. This separation can facilitate harmonization of hazard classifications between supply and transport, but also accommodates transport specific requirements in the assignment of the packing group.
 - (c) The relationship between hazard classification and assignment of packing group is clearer in Alternative 1 than in Alternative 2.
5. Noting this, it was acknowledged that additional work and text is needed in Alternative 1 to explain that the hazard classification is based on harmonized GHS hazard criteria, and to give guidance for the application of the flow scheme, when 8A is not directly aligned with packing group I.
6. The main *disadvantages* of Alternative 1:
 - (a) It is not appropriate to place the classification criteria in the Manual of Tests and Criteria.
 - (b) The Manual of Tests and Criteria is only available in a few languages. The text will not be included in national/regional legislation, and will not be available in local language.

7. The main *advantages* of Alternative 2:
 - (a) The whole text is in one book, which is very user friendly.
 - (b) The text is translated into the local languages when incorporated into the modes.
8. It was noted that having a long Chapter 2.8 in the Model Regulations would be acceptable in order to have everything in one book, as is now the case for criteria for environmentally hazardous substances in class 9.
9. The main *disadvantages* of Alternative 2:
 - (a) Alternative 2 is confusing. The outcome of the (hazard) classification using Alternative 2 is not clear and the text is a mix-up of classifications and packing group assignments.
 - (b) It does not address the fundamental issues that the group is trying to achieve, namely to resolve inconsistencies in hazard classification between transport and supply.
10. The group exchanged views on the goal of harmonization and the concept of classification. It was noted that in transport, classification and packing group determination are currently done in one step and not two separate steps as is proposed in Alternative 1. Some considered transport to be risk-based and not hazard-based and to determine transport conditions some extra information may be needed. It was pointed out that harmonization can be to harmonize the class-level classification as corrosive to skin, which would then be the same in transport and supply. However, packing groups cannot be harmonized with the subcategories of GHS because the packing group reflects the transport conditions. By harmonizing on class level but disconnecting the subsequent steps would allow the issues to be solved for transport.
11. Others expressed a different understanding. Many within the group believed that the hazard classification should reflect GHS criteria in order to achieve harmonization between transport and supply. The group reconfirmed the conclusion from previous teleconferences that there is often a direct connection between the sub-categories and packing group assignment. In cases where the additivity rules are used to derive the hazard classification, some additional criteria are needed.
12. For substances needing a case-by-case risk-based approach to determine transport conditions the present procedure to create a named entry is available.
13. Robin Foster expressed his view on what the Joint Working Group is trying to achieve. The group was partly charged with solving classification inconsistencies between transport and supply. These inconsistencies can be solved by stating that classification and packing group assignment are not the same thing. In many cases there is one-to-one relationship between classification and packing group assignment but often it is not. If the concept of classification is to be maintained in transport in the same way as in GHS, then classification and packing group assignment need to be two distinct concepts that are separate in the text. However, in order to do that, transport has to be comfortable with having those as two separate concepts and that they don't always align. Careful choice of terminology and consistent use is needed. The group further noted that there is already precedence in the Model Regulations for dissociation of classification and packing group to describe transport conditions, for example in some special provisions.

14. Discussion on the introduction of the subclasses 8A, 8B and 8C in the Model Regulations showed that some considered the new terminology unnecessary and confusing for the user. Others believed that it would be useful for showing the relationship between the (GHS) sub-categories and the packing groups. In many cases, no extra information is needed when going from the sub-categories to the packing group, in those cases there would be a one-to-one relationship between the two. Where the hazard classification 8A is based on additivity, the relationship will not be one-to-one and additional information or tools are needed.

15. The group noted that the two Alternatives might be combined into one. In any case, two blocks of text are needed, one on hazard classification and one on assignment of packing group. The most appropriate location for this block of text describing the classification can be discussed at a later point. The content will be the same whether it is one (Model Regulation) or two (Model Regulation and Manual of test and criteria) books.

IV. Discussion on the flow scheme

16. Two schemes have been proposed to assign packing group to substances classified as 8A using the additivity rules. Scheme 1 was proposed by CEFIC and Scheme 2 by the NL. Some considered Scheme 1 more in line with how additivity for skin and eye corrosivity is currently handled in GHS whereas others considered Scheme 2 more accurate and easier to use. Ultimately, it is up to the TDG to decide. It was pointed out that it was unlikely that both schemes lead to the same conclusion.

17. More explanations are required for Scheme 2:

- (a) The packing group and the concentration of each individual ingredient of the mixture is needed. The packing group used for the calculation can be either for a named entry or an NOS entry.
- (b) The concentration limits in Scheme 2 are taken from the Model Regulations.

18. The group discussed whether the scheme should be used only when a mixture is classified as 8A based on additivity or in all cases where additivity is used to classify a mixture, irrespective whether the outcome is 8A, 8B or 8C. Some wanted to use the schemes in all cases where a mixture is classified using the additivity rules for consistency and clarity. Also, the logic of the flow scheme could theoretically lead to a mixture classified as 8A being assigned to PG III while a mixture classified as 8B would be assigned to PGII which would make little sense. On the other hand, the original concern had been the over-assignment of mixtures into packing group I but not PG II or PG III. This meant limiting the use of the scheme to mixtures classified as 8A. Using it for mixtures classified as 8B and 8C based on additivity would mean extending the scope of the work that the intersessional group was charged with. The group felt that this issue needed a closer look, in particular whether the packing group assignment of mixtures would change if the scheme was used in all cases when the additivity was used. The intention of the work was to not change PG II and PG III assignment. CEFIC said they would look whether the packing group assignment for mixtures classified as 8B and 8C using additivity would change when the flow scheme is used. As a step forward, the group agreed that in the INF paper to be submitted, the scheme would be put forward only for mixtures classified as 8A using the additivity while acknowledging that more considerations are needed before a final decision is made by the TDG.

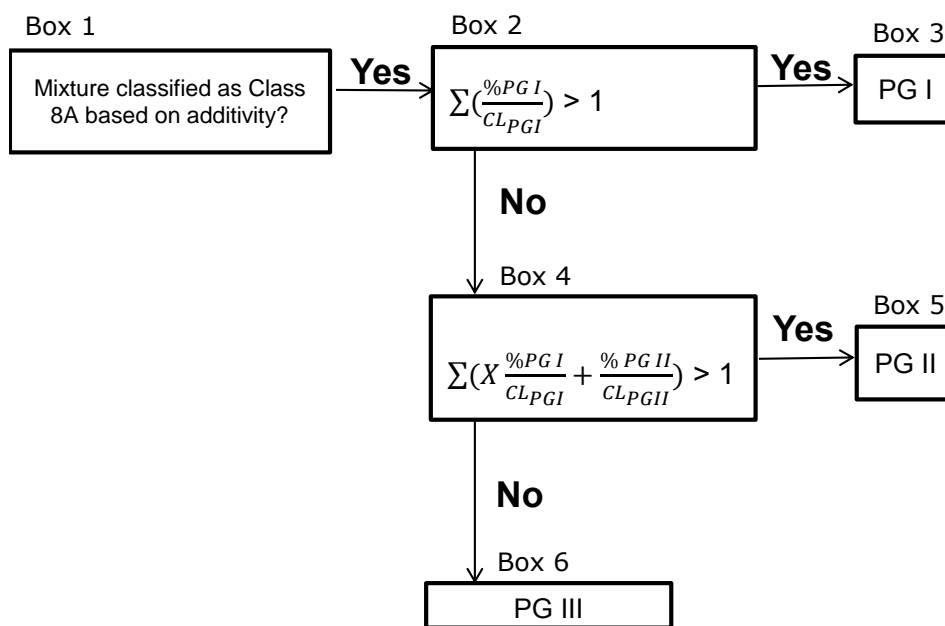
19. The group discussed whether the scheme was applicable for assigning packing group to mixtures where sub-classification is not possible, such as when non-additivity or pH are used to classify. Some considered the scheme a tool that could be used in other situations

than only for additivity. However, in order to use the scheme, the concentration, packing group and concentration thresholds of all ingredients must be known. Therefore, the scheme is not applicable for assignment of a packing group to mixtures for which no or limited information on the ingredients is available. If the only information available for the mixture is the pH, then a 'default' classification must be used. Whether this default classification is PG I or PG II is still to be decided by the TDG. In such cases, it is prudent to look for further information on the ingredients. In the case of classification of a mixture using non-additivity, information on the ingredients is often available. The group noted that the discussion had increased the understanding of when the schemes are not applicable.

20. Another issue is the assignment of concentration limits. Concentration limits are needed for PGI, PGII and PGIII. It is yet to be decided whether these concentration limits will be the same for all three packing groups or different.

21. A number of remarks had been received on the lay-out of the schemes. The group agreed that the layout could be simplified and made more accurate and logical by deleting a couple of boxes and changing the question in the first box. In addition, the group noted that it is impossible to not assign a packing group to a mixture originally classified as 8A; therefore having PG III as a dead-end is appropriate.

22. The group agreed that the new layout would be applicable to scheme 2 but some wanted to check whether it was also applicable to scheme 1. The new scheme layout and explanations are shown below.



23. Explanations to flow scheme:

- % PG I is the concentration of ingredient assigned to packing group I
- % PG II is the concentration of ingredient assigned to packing group II
- CL_{PG I} is the concentration limit on Dangerous Goods List for ingredient with packing group I. This concentration limit can be either a specific concentration limit or generic concentration limit

- CL_{PG II} is the concentration limit on Dangerous Goods List for ingredient with packing group II. This concentration limit can be either a specific concentration limit or generic concentration limit.
- X is a generic value that adds weight to the packing group I ingredients in the decision between PGII and PGIII

VI. Further work on draft INF paper

24. The aim of the intersessional working group is to submit an INF paper with a further worked-out version of chapter 2.8 taking into account the outcome of this teleconference.

25. It was noted that when referring to the OECD guidelines, the Model Regulations traditionally includes the dates of the OECD guidelines, as newer standards may need to be evaluated for applicability for inclusion into the Model Regulations. By not listing the publication date, the user is not alerted of updates. The question is whether results according to a newer version are acceptable for use since they are not specifically listed in the book. This issue should be highlighted and discussed in TDG particularly if the OECD guideline is being used to determine the sub-category 8A, 8B, 8C. For example, there are now 2013 versions of both OECD Guidelines 430 and 431 available.

VII. Conclusion and next steps

26. Circulate to intersessional working group by end of May (NL):

- (a) minutes of this teleconference
- (b) revised draft INF paper with Alternatives 1 and 2

27. Remarks on draft minutes and draft INF paper by 10th June (all participants of the teleconference).

28. Submission of two INF papers (minutes of 3rd teleconference and proposal for revision of chapter 2.8 of the Model Regulations) in June, no 2nd round of remarks (NL).

29. The document with the proposal for revision of Chapter 2.8 will be submitted on behalf of the intersessional working group but with a disclaimer that the views presented may not represent the views of all of the members of the group.

30. NL will contact Jeff, Robin and Maureen for deliberations on how this work will be discussed and when during the TDG and GHS meetings.

VII. Closure of the meeting

The participants were thanked for their constructive contributions to the work.
