

## 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

Thirteenth session  
Geneva, 9-11 July 2007  
Item 2(d) of the provisional agenda

### UPDATING OF THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

#### Revision of Annexes 1, 2 and 3 of the GHS

Transmitted by the expert from the United Kingdom on behalf of  
the correspondence group

#### **Introduction**

1. At its twelfth session, the Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling acknowledged the work done by the correspondence group on the revision of annexes 1, 2 and 3 of the GHS and decided that the work should continue during the next biennium.
2. The remit of the correspondence group (taken from draft programme of work for 2007/2008) is:  
  
*‘Pursue work to further improve Annexes 1, 2 and 3 of the GHS, including consideration of the development of combined hazard statements and combined precautionary statements, and proposals to eliminate current redundancies in some precautionary statements’.*
3. However, noting the comments contained in document ST/SG/AC.10/C.4/2006/20, the Sub-Committee considered that, before starting the revision of the annexes, the correspondence group should agree on their scope and contents and should clearly identify the target audiences to whom the Annexes would be addressed. The correspondence group should report to the Sub-Committee on the agreement reached on those issues before continuing the work.
4. The United Kingdom produced a questionnaire for the correspondence group (see Annex 1) in order to identify the target audiences and the use and purpose of Annexes 1, 2 and 3 of the GHS.
5. This INF paper, therefore, has two aims:
  - (a) Report the outcomes of discussion of the correspondence group on the scope and audience of Annexes 1 to 3 of the GHS; and
  - (b) Provide detail of the possible future work of the correspondence group, for discussion and agreement at the July meeting of the UNSCEGHS

### **Discussion of the correspondence group**

6. Responses to the questionnaire were received from (in order of date received): European Commission, CEFIC, Canada, AISE, IPPIC, Sweden, and WHO. All the responses are reproduced in Annex 2 to this document.
7. Although the majority of the group indicated that they believed in the future (in particular post 2009) the intended purpose of Annexes 1 to 3 of the GHS will be to assist providers of classification and labelling information, the use of these Annexes as a training tool for regulators was also considered important.
8. The views of the correspondence group reflect the main issue – on the one hand members do not wish to lose the value of the present Annexes 1 to 3 of the GHS as a training tool, but on the other hand members feel that the existing Annexes do not meet the needs of practitioners and contain much duplication.

### **Conclusions of the correspondence group**

9. It is therefore the view of the correspondence group that the target audiences for Annexes 1 to 3 are all of the following:
  - (a) Regulators;
  - (b) Providers of classification and labelling information (including manufacturers, importers, consultants, trade associations, etc.); and
  - (c) Users of classification and labelling information (including emergency responders and downstream users).
10. The correspondence group also consider that the use and purpose of Annexes 1 to 3 are all of the following:
  - (a) A training tool for Regulators;
  - (b) To assist providers of classification and labelling information to carry out duties; and
  - (c) To assist users of classification and labelling information to understand hazard warning information.

### **Possible future work of correspondence group (for discussion and agreement at July meeting of the UNSCEGHS)**

11. Following the identification of the target audience and scope, there appear to be two possible workstreams for the correspondence group. The UNSCEGHS is invited to consider whether the first should be given priority, or whether, subject to availability of resources, both should proceed in parallel.

#### ***Workstream 1: Hazard and precautionary statements***

12. Work to develop as appropriate combined hazard statements and combined precautionary statements, and to eliminate current redundancies in some precautionary statements.

#### ***Workstream 2: General improvement of Annexes 1 to 3 of the GHS***

13. Work to improve the presentation of Annexes 1 to 3 of the GHS, taking into account the intended audiences, uses and purposes as in paragraphs 9 and 10 above.
14. One example of a possible approach to improving the presentation of the guidance in Annexes 1 to 3 of

the GHS is outlined in paragraphs 15 to 17 below. The Sub-Committee is invited to give a view on whether this idea is worth developing.

15. The idea is prompted by noting that it might assist all the target audiences if:
  - (a) Annexes 1, 2 and 3 of the GHS followed the approach adopted throughout the main body of the “purple book” of considering first classification and then hazard communication; and
  - (b) All the label information (pictograms, signal words, hazard statements, precautionary statements) for each hazard class and category were in one place. (Although all three Annexes present label information, none provide all the label elements.)
  
16. This would point to two new annexes:
  - (a) Classification Summary Annex (new Annex 1)  
The classification criteria for each hazard class and category.
  
  - (b) Labelling Summary Annex (new Annex 2)  
The labelling elements (GHS and transport pictograms, signal words, hazard statements, precautionary statements) for each hazard class and category.
  
17. The new Annex 1 could be prepared very simply by pulling together the existing decision logic diagrams, which are also guidance. The new Annex 2 could, for example, be developed either from the current Annex 3 (taken from the 2nd revised edition of the GHS), or from the presentation used by CEFIC in document ST/SG/AC.10/C.4/2006/20/Add.1 (Annex 3, pages 93 to 121).

#### **Next steps**

18. Subject to the view of UNSCEGHS as requested in paragraphs 11 and 14, the correspondence group will provide a further update at the December meeting.

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## Annex 1

### QUESTIONNAIRE SENT TO THE CORRESPONDENCE GROUP

#### UNSCEGHS – Correspondence Group to review of Annexes 1-3

#### Correspondence Group

Brenda Everson - **Health Canada**  
Lennart Dock - **Sweden**  
Jonas Falck - **Sweden**  
Gilmar Trivelato - **Brazil**  
Paul Keymolen – **IPPIC**  
Uta Jensen-Korte – **EC**  
Wendy Cameron – **AISE**  
Lesley Onyon – **WHO**  
Rich Sedlak - **Soap and Detergent Association**  
Rosa Garcia Couto – **Secretary UNSCEGHS**  
Johan Breukelaar – **CEFIC** –

#### Aim:

*‘Pursue work to further improve Annexes 1, 2 and 3 of the GHS, including consideration of the development of combined hazard statements and combined precautionary statements, and proposals to eliminate current redundancies in some precautionary statements’.*

(Taken from draft programme of work for 2007-2008)

#### Issue:

At the last meeting of the UNSCEGHS in December, it was decided that, before starting the revision of the annexes, the correspondence group should agree on scope, contents and clearly identify the target audiences to whom the Annexes would be addressed.

The correspondence group is to report to the Sub-Committee on the agreement reached on these issues before continuing the work.

#### Objectives

- To identify the target audiences for Annexes 1, 2 and 3 of the GHS document
- To identify the use and purpose of Annexes 1, 2 and 3 of the GHS document

And then

- To define the content of Annexes 1, 2 and 3 of the GHS document
- To define the layout of Annexes 1, 2 and 3 of the GHS document

## **Background**

- The WSSD target date for countries to implement the GHS is 2008.
- From the implementation reports at the UN SCE GHS and UNITAR, probably at least 100 countries, possibly 150, are working towards implementing the GHS by the end of 2008.
- The earliest that the work of the Correspondence Group could be incorporated into the GHS is 2009.

## **Questions**

In answering the two questions below you may wish to consider:

- (i) the background information in the Annex below on the approximate numbers of potential direct users of the UN GHS; and
- (ii) the probable situation in 2009 in terms of implementation and adoption of the UN GHS worldwide

### **1 Who are the intended audiences of GHS Annexes 1, 2 and 3?**

- (a) Regulators only
- (b) Providers of classification and labelling information (including manufacturers, importers, consultants, trade associations, etc.)
- (c) Users of classification and labelling information (including emergency responders and downstream users)
- (d) All of the above
- (e) Others (please specify)

### **2 What is the intended purpose of GHS Annexes 1, 2 and 3?**

- (a) As a training tool
- (b) To assist providers of classification and labelling information to carry out duties
- (c) To assist users of classification and labelling information to understand hazard warning information
- (d) Other (please specify)

- Which purpose do you consider will be the most important in 2009?

### **3 Are there any other points you would wish to make at this stage?**

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**Appendix 1 to Annex 1****Potential users of the GHS document**

This Appendix aims to estimate the number of regulatory staff and chemical industry users of the UN GHS worldwide. The estimates have been kindly provided by CEFIC.

(1) *Regulators*

Assuming that 150 countries implement the GHS and an average of 40 personnel per country need to be conversant with the GHS, this gives a total of 6000

**NOTE:** In developed countries the figure will be higher than 40, in countries with developing economies, it will be less than 40.

(2) *Industry – providers of information on classification and labelling*

In order to estimate the size of the global chemical industry, we started with the information on the EU Chemical industry in 2004.

**EU chemical industry structure 2004**

Enterprise Size		Companies		Employees	
Type	Number of employees	Number of companies	% of Total	Number of employees	% of Total
Large	≥ 250	1039	3.8	864,400	63.0
Medium	50 - 249	2844	10.4	312,900	22.8
Small	10 – 49	6316	23.1	143,300	10.4
Micro	1 - 9	17088	62.6	52,100	3.8

**NOTE 1:** *The above figures exclude pharmaceuticals*

**NOTE 2:** *Only 6317 SMEs (24%) produce substances  
96% of enterprises are SMEs  
> 75% of SMEs are formulators only*

**NOTE 3:** *Globally the proportion of SMEs are likely to be higher than in the EU, USA or Japan, and in many countries with economies in transition, the manufacture of substances will be minimal.*

If we extrapolate the above figures for the personnel who need to be conversant with the GHS on the following basis:

Large Enterprises	10 per Enterprise
Medium Enterprises	5 per Enterprise
Small Enterprises	1 per Enterprise
Micro Enterprises	1 per Enterprise

This gives European figures as follows:

Large Enterprises	10390 personnel
Medium Enterprises	14220 personnel

Small Enterprises	6316 personnel
Micro Enterprises	17088 personnel

A total of 48014 personnel

***NOTE:** for Medium and larger enterprises this figure is likely to be understated, but will be offset by small and micro enterprises using consultants or IT solutions.*

If these figures are scaled up to a global level, this gives a figure of potential direct users (who provide information) of the GHS as follows;

Regulators	6000
Enterprises, Large	34600
Enterprises, Medium	47400
Enterprises, Small	21050
Enterprises, Micro	56950

A total of 160,000 personnel

These figures will not include indirect users (who use information) such as emergency responders, medical personnel and other downstream users.

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## Annex 2

### Responses to the questionnaire

#### 1. CONTRIBUTION FROM THE EUROPEAN COMMISSION

Thank you for having prepared the questionnaire with the informative Annexes.

With regard to the questionnaire our view is as follows:

**Question 1:** "Who are the intended audiences of the GHS Annex 1, 2 and 3?",

**Answer d)** "all of the above"

**Question 2:** "What is the intended purpose of GHS Annexes 1, 2 and 3?",

**Answer b)** "To assist providers of C&L information to carry out duties"

**Question 3:** "Are there any other points you would wish to make at this stage?",

**Answer:** we support the aim as outlined in the draft programme of work for 2007-2008. However we believe that combination of precautionary statements cannot be addressed until work on the rationalisation of PS has been finalised and that might take some time, therefore it could be useful to have a table of precedence covering some of the similar statements under the prevention and storage categories. It might additionally be useful to identify PS that are solely for workplace and it could thought about, if they need to appear on the label or only on the SDS.

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#### 2. CONTRIBUTION FROM CEFIC

Thank you very much for the initiative of that questionnaire. Please find below CEFIC's answers.

**Question 1:** Who are the intended audiences of GHS Annexes 1, 2 and 3?

**CEFIC:** Our choice would be option d.

**Question 2:** What is the intended purpose of GHS Annexes 1, 2 and 3?

**CEFIC:** Our choice would be option b.

**Question 3:** Are there any other points you would wish to make at this stage?

**CEFIC:** Concerning question 1, we would like to suggest that the primary focus should be on SMEs.

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### 3. CONTRIBUTION FROM CANADA

Thank you for the questionnaire.  
Please find below the comments from Canada.

#### Objectives

- To identify the target audiences for **current** Annexes 1, 2 and 3 of the GHS document
- To identify the use and purpose of **current** Annexes 1, 2 and 3 of the GHS document

And then

- To define the content of **future** Annexes 1, 2 and 3 of the GHS document
- To define the layout of **future** Annexes 1, 2 and 3 of the GHS document

#### Questions

**Question 1 & 2 are the same (intended user vs. intended purpose, speculation)**

**Better question is *Who uses it now?* (this is a information based on fact)**

#### **1 Who are the intended audiences of current (rev 2) GHS Annexes 1, 2 and 3?**

- (a) Regulators only
- (b) Providers of classification and labelling information (including manufacturers, importers, consultants, trade associations, etc.)
- (c) Users of classification and labelling information (including emergency responders and downstream users)
- (d) All of the above
- (e) Others (please specify)

#### **Who uses it now?**

All of the above

-those who are involved in the regulatory process lifecycle (including policy makers)

-trainers

#### **2 What is the intended purpose of GHS Annexes 1, 2 and 3?**

- (a) As a training tool **yes**
- (b) To assist providers of classification and labelling information to carry out duties **yes (to a point)**
- (c) To assist users of classification and labelling information to understand hazard warning information **yes (to a point)**

(d) Other (please specify)

- Record of decision for UNSEGHS
- Supplements info from main text and acts as guidance, through compiled /summarized information and pictorial display
- To assist providers of classification and labelling information to understand hazard warning information

- Which purpose do you consider will be the most important in 2009?

a) Training tool

**3 Are there any other points you would wish to make at this stage?**

- the Purple Book (and its Appendices) is not the legal document
- Regulators and regulates must refer to their own legislation/regulations re: implementation and compliance and enforcement
- therefore it is guidance material only

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#### **4. CONTRIBUTION FROM AISE**

##### **Questions**

**1 Who are the intended audiences of GHS Annexes 1, 2 and 3? D**

- (a) Regulators only
- (b) Providers of classification and labelling information (including manufacturers, importers, consultants, trade associations, etc.)
- (c) Users of classification and labelling information (including emergency responders and downstream users)
- (d) All of the above**
- (e) Others (please specify)

**2 What is the intended purpose of GHS Annexes 1, 2 and 3? B**

- (a) As a training tool
- (b) To assist providers of classification and labelling information to carry out duties**
- (c) To assist users of classification and labelling information to understand hazard warning information
- (d) Other (please specify)

- Which purpose do you consider will be the most important in 2009?

**3 Are there any other points you would wish to make at this stage? No**

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## 5. CONTRIBUTION FROM IPPIC

### 1 Who are the intended audiences of GHS Annexes 1, 2 and 3?

- (a) Regulators only
- (b) Providers of classification and labelling information (including manufacturers, importers, consultants, trade associations, etc.)
- (c) Users of classification and labelling information (including emergency responders and downstream users)
- (d) All of the above
- (e) Others (please specify)

**IPPIC reply:** all the audiences mentioned above (option d) should be considered as being those to which the revised annexes 1, 2 and 3 should be of interest, especially the SMEs.

### 2 What is the intended purpose of GHS Annexes 1, 2 and 3?

- (a) As a training tool
- (b) To assist providers of classification and labelling information to carry out duties
- (c) To assist users of classification and labelling information to understand hazard warning information
- (d) Other (please specify)

**IPPIC reply:** basically it could serve the purpose of (a), (b) and (c)

- Which purpose do you consider will be the most important in 2009?

**IPPIC reply:** option (b), including IT companies providing systems for issuing labels and SDS should also be interested for a uniform system.

### 3 Are there any other points you would wish to make at this stage?

**IPPIC reply:** work should be made step by step:

1. rationalisation of Precautionary Statements distinguishing the different categories (general, prevention, response, storage and disposal Precautionary Statements)
2. linking them to the Hazard Statements;
3. identifying those that are solely for the workplace and decide if they need to appear on the label or only on the SDS to avoid too large labels
4. then rationalisation by developing combined Hazard and Precautionary Statements

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## 6. CONTRIBUTION FROM SWEDEN

Our view is very much reflected in the response submitted by Canada.

- 1) The target audience includes regulators as well as providers and users of classification and labelling information (**d**)
- 2) The purpose of the Annexes, as we see it, is primarily to assist the providers of classification and labelling information (**b**)

It should be pointed out that the GHS is only a recommendation and that national legal acts based on the GHS may not necessarily contain Annexes identical to the Annexes in the Purple Book. In that sense, they could be seen as a guidance and training tool.

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## 6. CONTRIBUTION FROM WHO

We agree that the Annexes as currently presented are duplicative and this in itself can be confusing even if all of them are in-tune. Is there a need for separate Annexes, I don't think I have ever heard one, but if there is one it would be good to clarify.

All the audiences of the three current Annexes are the same 1d)

We see that the future of a rationalised Annex(es) should be as a training tool, but not simply it should be a reference tool providing a quick look-up of the essentials - with the detailed classification guidance in the body of the main book. This might also lend itself to a more interesting electronic presentation

On simple perusal, Annex 1 differs only from Annex 2 only in that it has pictograms, Annex 2 differs from Annex 1 in that it contains the main aspects of the classification criteria. Annex 3 includes precautionary statements, the same content as Annex 1 but no criteria.

Annex 3 is something we refer to most for quick look-ups, together Annex 2 for the criteria. What is the experience of others - maybe this could a simple conglomeration and rationalisation could be achieved by 2009 with any obvious discrepancies addressed.

In terms of training we find the flow-charts or decision-trees very useful - but seeing how these could be included in the revised Annex is difficult.

We think the proposed priority for 2009 should have a rationalised set of Annexes that would assist training and use.

In terms of rationalising hazard and precautionary advice we believe this needs to be based on precedent **experience** and would be happy to consider using the embodied experience gained from creating and updating 1700 International Chemical Safety Cards ICSC to provide any analytical background to such an exercise. We would not want to make changes to the system at this stage unless they were will justified and based on experience not just hear-say.

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