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

REPORT OF THE SUB-COMMITTEE OF EXPERTS
ON ITS FIFTEENTH SESSION
(Geneva, 9 (p.m) -11 July 2008)

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I. ATTENDANCE

1. The Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals held its fifteenth session from 9 to 11 July 2008, with Ms. Kim Headrick (Canada) as Chairperson and Mr. Roque Puiatti (Brazil) as Vice-Chairperson.

2. Experts from the following countries took part in the session: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Qatar, South Africa, Spain, Sweden, United Kingdom of Great Britain and Northern Ireland and United States of America.

3. Under rule 72 of the rules of procedure of the Economic and Social Council, observers from the following countries also took part: Jamaica, Kenya, Lao People’s Democratic Republic, Republic of Korea, Slovenia, Switzerland, Thailand, and Viet Nam.

4. Representatives of the United Nations Institute for Training and Research (UNITAR) and of the following specialized agencies were present: International Labour Organization (ILO), International Maritime Organization (IMO) and World Health Organization (WHO).

5. The following intergovernmental organizations were also represented: European Commission and Organisation for Economic Co-operation and Development (OECD).

6. Representatives of the following non-governmental organizations took part in the discussion of items of concern to their organizations: Association of European Adhesive and Sealant Manufacturers (FEICA); Compressed Gas Association (CGA); Croplife International, Dangerous Goods Advisory Council (DGAC), European Chemical Industry Council (CEFIC), European Council of Paint, Printing Ink and Artists Colours Industry (CEPE), European Industrial Gases Association (EIGA), Industrial Federation of Paints and Coats of Mercosul (IFPCM), European Council of Chemical Associations (ICCA), International Association of the Soap, Detergent and Maintenance Products Industry (AISE), Industrial Confederation of Plastics Packaging Manufacturers (ICPP), International Council of Chemical Associations (ICCA), International Fireworks Association (IFA), International Organization for Standardization (ISO), International Paint and Printing Ink Council (IPPIC), International Petroleum Industry Environmental Conservation Association (IPIECA), Institute of Makers of Explosives (IME), Responsible Container Management Association of Southern Africa (RCMASA), Soap and Detergent Association (SDA) and US Fuel Cell Council (USFCC).

II. ADOPTION OF THE AGENDA (Agenda item 1)

Documents: ST/SG/AC.10/C.4/29 (Provisional agenda)
ST/SG/AC.10/C.4/29/Add.1 (List of documents and annotations)

Informal documents: UN/SCEGHS/15/INF.1 (List of documents)
UN/SCEGHS/15/INF.2 (List of documents under each agenda item)

7. The Sub-Committee adopted the provisional agenda prepared by the secretariat after amending it to take account of informal documents INF.1 to INF.44.
III. UPDATING OF THE SECOND REVISED EDITION OF THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) (Agenda item 2)

A. Physical hazards

1. Flammable liquids

Document: ST/SG/AC.10/C.4/2008/5 (Germany)
Informal document: UN/SCEGHS/15/INF.40 (Secretariat) (item 2.1 (e))

8. The Sub-Committee endorsed the proposal made by the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) for the insertion of “and not more than 60 °C” in the first sentence of Note 2 under table 2.6.1 in Chapter 2.6 of the GHS (see annex 1). The proposal was intended to make it clear that test L.2 (Part 3, section 32 of the Manual of Tests and Criteria) is only suitable for evaluating the sustained combustion of Category 3 flammable liquids and cannot be applied to Category 4 flammable liquids. It was noted that the problem appeared to be the lack of appropriate tests for Category 4 flammable liquids and experts interested in the issue were invited to submit proposals in this regard.

9. The representative of CEFIC raised some concerns about the implications that the amendment agreed by the Sub-Committee might have on the classification of Category 3 and 4 flammable liquids and said that he would submit a proposal for the next session.

2. Substances having explosive properties

Document: ST/SG/AC.10/C.4/2008/6 (Germany)
Informal documents: UN/SCEGHS/15/INF.20 (Germany)
UN/SCEGHS/15/INF.40 (Secretariat) (item 2.1 (a))

10. Noting that the proposals intended to modify the sequence of the test series for the assessment of explosive properties had not received any support from the TDG Sub-Committee, the expert from Germany decided to withdraw them.

11. However, she insisted on the fact that the order in which the test series are currently performed had been established for classification according to transport regulations and therefore was suitable for packaged substances and articles, while for the purposes of supply and use classification, it would be appropriate to introduce a simplified procedure using only the test series applicable to unpackaged substances (Test series 1 to 3). She explained that the classification procedure would then consist of two separate sets of tests: one for unpackaged substances (for supply and use) and another one for packaged substances (for transport), which would remain unchanged (see figure 2.1.3 in Chapter 2.1). Furthermore, she pointed out that it would be appropriate to start the sequence with test series 3 since this test series required small sample sizes and could be used as a preliminary test for potentially explosive substances.

12. She informed the Sub-Committee that she would submit a new proposal in the future to address this issue.
3. Desensitized explosives

Informal document: UN/SCEGHS/15/INF.40 (Secretariat) (item 2.1 (b))

13. The Sub-Committee took note of the report of the informal working group on desensitized explosives and was informed that the group intended to meet in parallel to the thirty-fourth session of the TDG Sub-Committee.

14. The Sub-Committee agreed that the informal working group should continue to provide progress reports on the on-going work until a formal proposal is ready to be submitted for consideration by both sub-committees.

4. Additional tests for the classification of 1.4S explosives, review of UN Test Series 7 and improvement of the screening test for substances which may have explosive properties

Informal document: UN/SCEGHS/15/INF.40 (Secretariat) (items 2.1 (d) and (f))

15. The Vice-Chairman of the TDG Sub-Committee informed the Sub-Committee that a number of amendments to some of the tests contained in the Manual of Tests and Criteria had been adopted. He added that although these amendments did not imply any consequential amendment to the text of the GHS itself, they did have an indirect impact on the GHS classification criteria since the tests prescribed by the Manual were those to be used for the classification of physical hazards according to the GHS. He therefore invited the Sub-Committee experts to keep abreast of any amendments to the Manual of Tests and Criteria adopted by the TDG Sub-Committee.

16. The Sub-Committee took note of the progress of the work of the informal working group on Test Series 7 and of the work concerning the screening test for substances which may have explosive properties.

5. Classification of ammonium nitrate emulsions

Informal documents: UN/SCEGHS/15/INF.12 (United Kingdom)
UN/SCEGHS/15/INF.40 (Secretariat) (item 2.1 (c))

17. The Sub-Committee agreed in principle to the amendments to figure 2.1.4 in Chapter 2.1 of the GHS proposed by the TDG Sub-Committee in INF.40 and asked the secretariat to submit an official document for the next session.

6. Chemically unstable gases

Informal document: UN/SCEGHS/15/INF.41 (Germany)

18. The expert from Germany provided a progress report on the work of the informal group on classification of chemically unstable gases and said that a fourth meeting of the group might be convened, if deemed necessary, in parallel with the thirty-fourth session of the TDG Sub-Committee.
B. Health hazards

1. Amendments to Category 3 specific target organ toxicants (single exposure)

Document: ST/SG/AC.10/C.4/2008/3 (Germany)
Informal documents: UN/SCEGHS/15/INF.19 (Australia)
UN/SCEGHS/15/INF.43 (Australia, Germany, United States of America)

19. There was general support for the proposal to amend decision logics 3.8.1 and 3.8.2. However, it was felt that the proposed text could be further improved to take into account that more severe respiratory effects and effects on the central nervous system that are not transient should result in classification as Category 1 or 2 for these effects.

20. Regarding the proposed amendments to the hazard statement, the representative of the European Commission said that it might not be appropriate to amend the current text since from a legal point of view “or” meant “and/or” and that if this was going to be specified for this hazard category, the whole text of the GHS would have to be revised accordingly to avoid any misinterpretation.

21. The Sub-Committee finally adopted the amendments to decision logics 3.8.1 and 3.8.2 as proposed in document ST/SG/AC.10/C.4/2008/3, with some additional modifications (see annex 1). The proposal to amend the current hazard statement for Category 3 was not adopted.

2. Amendments to table 3.1.2 and note 2

Document: ST/SG/AC.10/C.4/2008/4 (Germany)
Informal document: UN/SCEGHS/15/INF.42 (United States of America)

22. Some experts shared the view of the expert from Germany that the use of the current converted acute toxicity point estimate (cATpe) values to calculate the acute toxicity of some mixtures resulted in an over-classification of the whole mixture (e.g.: a mixture made of Category 2 ingredients only would be classified into Category 1).

23. Others were of the opinion that those values were adequate for most mixtures and noted that they had been chosen following a very conservative approach for the most toxic categories to avoid underestimating toxicity.

24. It was recognized, however, that the problem of over-classification raised by the expert from Germany needed to be addressed and to this end, the Sub-Committee agreed on an explanatory text to be added as sub-paragraph 3.1.3.3 (c) (see annex 1).

3. Classification criteria for substances and mixtures, which in contact with water, release toxic gases

Document: ST/SG/AC.10/C.4/2008/10 (France)

25. After some exchange of views, the Sub-Committee agreed that the work on the development of classification criteria should first concentrate on the improvement of test N.5
(see Part 3, sub-section 33.4.1.4 of the Manual of Tests and Criteria), which uses the gas evolution rate as one of the parameters to evaluate toxicity. The Sub-Committee agreed to defer this task to the TDG Sub-Committee.

26. Furthermore, the Sub-Committee concluded that only when the work on test N.5 is finalized, would it reconsider any issues related to the classification of these substances and mixtures.

4. Amendments to Chapter 3.10


27. The Sub-Committee adopted the proposed text with some additional amendments (see annex 1) which were intended to make it clear that substances in powder form may still be classified on the basis of available human evidence.

5. Corrections to tables 3.8.1, 3.9.1 and 3.9.2 of the GHS

Documents: ST/SG/AC.10/C.4/2008/12 (Secretariat)
ST/SG/AC.10/C.4/2008/13 (Germany)
Informal document: UN/SCEGHS/15/INF.4 (Germany)

28. The Sub-Committee adopted the corrections proposed by the secretariat (without modifications) and by the expert from Germany (with one additional modification) (see annex 2). The corrections are to be included in a corrigendum to the second revised edition of the GHS.

6. Issues related to chapter 3.2 (Skin corrosion/irritation) and chapter 3.3 (serious eye damage/eye irritation)

Informal document: UN/SCEGHS/15/INF.5 (Germany, European Commission)

29. There was general support for an editorial review of chapters 3.2 and 3.3 since most experts felt that the user-friendliness of the text could be improved. It was made clear that the editorial review would not entail changes to the classification criteria.

30. Since some of the issues raised in the document fell within the scope of the work of the informal working group on implementation, the Sub-Committee agreed to entrust their consideration to that group on the understanding that the prioritization of the work would be discussed and agreed upon at the next session of the Sub-Committee.

7. Strong versus weak sensitizers

Informal documents: UN/SCEGHS/15/INF.13 (OECD)
UN/SCEGHS/15/INF.14 (OECD)

31. The Sub-Committee adopted in principle the proposal intended to revise the classification criteria in chapter 3.4 to allow the sub-categorization of skin and respiratory sensitizers where data are sufficient and where required by a competent authority.
32. One expert noted that some editorial corrections were needed in paragraphs 3.4.2.2.1.4 and 3.4.2.2.1.5. The Sub-Committee agreed on the proposed corrections to those paragraphs.

33. The secretariat was invited to issue the OECD proposal (including the agreed corrections) as an official document to be considered for final adoption at the next session of the Sub-Committee.

C. Environmental hazards

1. Classification and labelling of ozone depleting chemicals

Informal document: UN/SCEGHS/15/INF.33 (OECD)

34. The Sub-Committee adopted the classification and labelling criteria for ozone depleting chemicals (see annex 1).

35. The proposed related precautionary statements, codes and other consequential amendments to the GHS contained in INF.33 were adopted in principle. The secretariat was invited to issue the OECD proposal as an official document to be considered for final adoption at the next session of the Sub-Committee.

2. Transformation/Dissolution of metals and metal compounds in aqueous media (Transformation/Dissolution Protocol)

Informal documents: UN/SCEGHS/15/INF.3 (OECD)
UN/SCEGHS/15/INF.21 (OECD)
UN/SCEGHS/15/INF.22 (OECD)

36. The Sub-Committee took note of the report of the ring test and statistical analysis of the guidance on the Transformation/Dissolution Protocol (TD/P), the considerations regarding the applicability of the guidance and the further statistical analysis contained in annex 2 to INF.21.

37. The Sub-Committee adopted in principle the proposed amendments to paragraph 4.1.2.11.2 (see INF.22) and to Annex 10 of the GHS (see INF.21, annex 1).

38. The secretariat was invited to issue the proposed amendments to the GHS text as an official document to be considered for final adoption at the next session of the Sub-Committee.

3. Biodegradability criteria for multi-constituent substances

Informal document: UN/SCEGHS/15/INF.35 (CEFIC and AISE)

39. There was no support for the proposal intended to exclude, under certain conditions, all multi-constituent substances from fulfilling the specific levels of biodegradation specified in 4.1.2.10.3 within 10 days of the start of the biodegradation, by analogy with the testing criteria used for surfactants composed of mixtures of closely related homologues and isomers showing a similar biodegradability profile.
40. Some experts considered that it was not necessary to introduce additional exemptions to the general rule since 4.1.2.10.3 (c) already contained the criteria under which such exemptions could be accepted.

41. Others pointed out that the application of the testing criteria for the evaluation of the biodegradability of surfactants to other multi-constituent substances was not justified from a scientific point of view. It was also noted that the evaluation of the suitability of the test for multi-constituent substances should be undertaken only on a case-by-case basis, as indicated in the excerpt from the OECD Guideline reproduced in footnote 6 in INF.35.

42. Finally, noting that most experts had not been able to conduct the necessary consultations at national level due to the late submission of the proposal, the Sub-Committee invited the representatives of CEFIC and AISE to consider the need to submit a new proposal for the next session, taking account of the comments received.

4. Terrestrial environmental hazards

Informal documents: UN/SCEGHS/15/INF.28 (OECD) UN/SCEGHS/15/INF.29 (OECD) UN/SCEGHS/15/INF.37 (ICMM) UN/SCEGHS/15/INF.38 (Crop Life International) UN/SCEGHS/15/INF.39 (Australia, Austria, Slovenia, Spain)

43. The Sub-Committee took note of the progress report on the work on terrestrial environmental hazards and noted that the OECD had fulfilled the mandate given by the Sub-Committee.

44. Some experts considered that the value of further work on the development of a harmonized system of classification and labelling for substances and mixtures hazardous to the terrestrial environment was an open issue and should not be undertaken before a cost-benefit analysis had been carried out. Others on the contrary, were of the opinion that a more accurate evaluation of the costs and benefits would be realized if consideration was given to classification and labelling criteria.

45. The absence of data or available tests for the evaluation of the effects of a substance or mixture in the terrestrial environment was also mentioned as a consideration for the development of criteria. However, some experts said that this gap should not prevent the work on the development of criteria for the terrestrial environment. They considered that this would avoid the current situation where data available for aquatic toxicity are being used to evaluate the toxicity of substances and mixtures to the terrestrial environment, even though experience had shown that some substances (such as biocides) presenting low levels of toxicity for the aquatic environment, could be highly toxic for the terrestrial environment. Regarding the availability of tests, several experts mentioned that there are suitable OECD test guidelines available.

46. Other experts considered that, not developing adequate classification criteria for terrestrial hazards would mean accepting a system with incomplete classification criteria for environmental hazards.
47. In consideration of the different views on this matter, all experts interested in continuing the work on this issue were invited to submit a detailed programme of proposed activities for consideration by the Sub-Committee at its next session.

D. Annexes

1. Revision of annexes 1, 2 and 3

Informal documents: UN/SCEGHS/15/INF.26 (United Kingdom)
UN/SCEGHS/15/INF.9 (CEFIC)

48. The expert from the United Kingdom provided an update on the status of work for the revision of annexes 1, 2, 3 and the harmonization of hazard and precautionary statements and invited experts to provide specific comments on the possible approaches proposed.

49. Some experts detected some inconsistencies in the text of the hazard statements for physical hazards and suggested that they should be thoroughly checked.

50. The representative of the World Health Organization raised concerns about some of the draft proposals for the simplification of precautionary statements, since she felt that the omission or amendment of some parts of the information initially given in the statement could have an unintended impact on the message communicated to users. She welcomed the opportunity to work in close cooperation with the correspondence group and other groups of experts from the health sector.

51. Finally, while some experts welcomed the paper, others indicated that more time would be necessary to consult with stakeholders before commenting on it in detail.

52. The Sub-Committee invited the expert from the United Kingdom to revise the document taking account of the comments received.

IV. HAZARD COMMUNICATION ISSUES (Agenda item 3)

A. Labelling of very small packagings

Document: ST/SG/AC.10/C.4/2008/7 (CEFIC)
Informal documents: UN/SCEGHS/15/INF.34 (Canada)
UN/SCEGHS/15/INF.44 (CEFIC)

53. The representative of CEFIC provided an update on the work of the informal correspondence working group on the labelling of very small packagings and took note of the comments made by several experts. She said that the group was now addressing two main issues: the development of general principles for labelling of very small packagings and terminology.

54. She informed the Sub-Committee that the group intended to submit an official document for the next session containing a proposal for new text on general principles for labelling of very small packagings.
55. She also said that the group intended to request the agreement of the Sub-Committee to have this item included in the programme of work for the next biennium, since the group intended to develop guidance on the application of the general principles for labelling of very small packagings.

B. Proposal of amendment to the pictogram for 1.4S explosives

Informal document: UN/SCEGHS/15/INF.40 (Secretariat) (item 2.3 (a))

56. The Sub-Committee was informed that the representative of SAAMI had withdrawn his proposal (see ST/SG/AC.10/C.4/26, paragraph 18).

V. DEVELOPMENT OF GUIDANCE ON THE APPLICATION OF THE GHS CRITERIA (Agenda item 4)

A. Application of GHS criteria to substances of unknown or variable composition, complex reaction products or biological materials (UVCBs) in specific petroleum substances

Informal document: UN/SCEGHS/15/INF.10 (IPIECA)

57. The representative of IPIECA invited Sub-Committee experts to review the draft guidance provided in the annex to INF.10 and announced that two webcasts would be organized before the next session of the Sub-Committee to facilitate the discussion of the comments received. She added that IPIECA intended to submit the revised draft guidance for consideration of the Sub-Committee at its December session.

B. Work of the correspondence group on classification of mixtures

Informal document: UN/SCEGHS/15/INF.27 (United States of America)

58. The expert from the United States of America provided an update on the work undertaken by the correspondence group for the classification on mixtures since the fourteenth session of the Sub-Committee.

59. She explained that the recommendations of the group were divided into four categories: editorial proposals for revision of the text of the GHS; development of specific examples of classification of mixtures; issues to be deferred to the informal working group on implementation; and other matters for which no action was required.

60. The Sub-Committee noted that the correspondence group intended to submit a document for the sixteenth session requesting approval of the examples developed by the group and the adoption of the recommendations for editorial clarifications to the text of the GHS.

61. The expert from Germany pointed out that any change in the interpretation of the classification criteria for hazard classes or categories implemented in transport of dangerous goods regulations should also be brought to the attention of the TDG Sub-Committee.
VI. IMPLEMENTATION OF THE GHS (Agenda item 5)

A. Reports from Governments or organizations

1. Consideration of issues relevant to Safety Data Sheets (SDS) by the International Maritime Organization

   Informal document: UN/SCEGHS/15/INF.17 (IPIECA)

62. On the question of whether or not the GHS requirements for the information to be displayed on the SDS should address the needs of all sectors involved, there was general agreement that the harmonization of the minimum information elements to be included in the SDS and to be used by all sectors concerned was one of the hazard communication goals of the GHS. However, it was recognized that some sectors might need to include additional SDS elements relevant to their area of work.

63. Several experts suggested that the specific considerations relevant to a particular sector could be included as guidance instead of being part of the harmonized list of minimum information items.

64. The Sub-Committee noted that this issue might require further consideration.

2. Implementation updates

Informal documents: UN/SCEGHS/15/INF.18 (Argentina)
UN/SCEGHS/15/INF.23 (South Africa)
UN/SCEGHS/15/INF.24 (European Commission)
UN/SCEGHS/15/INF.36 (Brazil)

Argentina, South Africa and Brazil

65. Experts from Argentina, South Africa and Brazil provided an update on the status of implementation of the GHS in their countries. The update included information on the development of national legislation or standards for the application of the GHS criteria as well as on training and capacity building activities and participation and organization of workshops at national and regional level.

European Commission

66. The Sub-Committee noted that the formal adoption of the Regulation implementing the GHS into Community law was expected by the end of 2008. It was also noted that although the Regulation allows the reclassification of substances and mixtures within a defined transitional period, some suppliers might choose to start applying the new Regulation as from the first day of

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its entry into force (i.e.: on the twentieth day following that of its publication in the Official Journal of the European Union).

67. The representative of the European Commission acknowledged the work of the informal working group on the development of labelling provisions for very small packagings and the rationalization of hazard and precautionary statements since those were issues of concern in the European Union. In that respect, she welcomed any effort made by the Sub-Committee to provide harmonized solutions which could then be incorporated into community law.

68. The expert from Germany said that with the expected entry into force of the Regulation, the European Union will be the first region in the world to have implemented the GHS for transport, supply and use sectors.

69. Regarding the implementation of the GHS in transport, he informed the Sub-Committee that the new Directive\(^2\) implementing the provisions which will be contained in the 2009 edition of RID/ADR/ADN (for rail, road and inland waterways transport of dangerous goods) as from 1 January 2009, was adopted on 19 June 2008 and that its publication in the Official Journal was expected in the second half of 2008. He also mentioned that the relevant GHS classification criteria were also taken into account in the provisions of the International Maritime Dangerous Goods Code (IMDG Code) and the ICAO Technical Instructions for international maritime transport and air transport of dangerous goods, respectively.

B. Other implementation issues

1. Transitional periods for implementation

70. The representative of Thailand raised some concerns about the different dates of entry into force of the GHS legislation in the world as this situation presented some difficulties with regards to the decision making process on when to implement the GHS in his country in order to align its legislation with that of other countries.

71. Several experts did not share that view, since they considered that due to the current lack of harmonization of classification and labelling, companies had to comply with multiple sets of different and sometimes even contradictory requirements applicable to the classification and labelling of chemicals in different countries. They were of the opinion that the implementation of the GHS would help to avoid this situation in the future.

72. It was noted by several experts that even though the GHS focused on the harmonization of classification and labelling, different time schedules and transitional periods for implementation would create some disharmony for a certain period of time until the GHS had been fully implemented.

73. It was also noted that the defined GHS implementation schedules and transitional periods should be respected and notified to the UNECE secretariat who would make this information publicly available on the UNECE website.

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2. Activities of the informal working group on implementation issues

Informal documents: UN/SCEGHS/15/INF.25 (Australia)
                  UN/SCEGHS/15/INF.40 (Secretariat) (item 2.2 (a))

74. The Sub-Committee was informed that the TDG Sub-Committee had endorsed the provisional terms of reference for the informal working group which had been provisionally adopted by the Sub-Committee at its fourteenth session (see ST/SG/AC.10/C.4/28, annex 2).

75. The Sub-Committee confirmed that any transport-related issue identified by the informal working group on implementation would be referred to the TDG Sub-Committee. Similarly the Sub-Committee recognized that some issues identified by the informal working group might have to be deferred to the technical focal points or to the existing informal working groups (e.g. the informal working group on the classification of mixtures) provided that their work would not be discontinued during the next biennium.

76. Regarding the recommendation made by the TDG Sub-Committee on the participation of non-governmental organizations in the work of the informal working group, the Sub-Committee noted with satisfaction that this issue had already been addressed by the informal working group, as indicated in paragraph 15 (b) of INF.25.

77. Finally, the Sub-Committee agreed that the work should proceed as proposed in paragraph 15 of INF.25.

78. The expert from Australia informed the Sub-Committee that a meeting of the informal working group had been scheduled for Friday 11 July 2008, following the closure of its fifteenth session.

3. Implementation of the GHS criteria for corrosion into Class 8 of the UN Model Regulations on the Transport of Dangerous Goods

Informal document: UN/SCEGHS/15/INF.40 (Secretariat) (item 2.2 (b))

79. The Sub-Committee noted with satisfaction that the TDG Sub-Committee had started to examine the possibilities to further improve the harmonization of the classification criteria for Class 8 substances with the GHS classification criteria for corrosion.

80. It was noted in particular that an informal working group had recently been established to address the provisions for determining the proper description of mixtures and solutions for transport purposes.

81. The expert from Germany welcomed this initiative to increase the harmonization between transport regulations and the GHS and noted that the work might have to be extended in the future to cover other hazard classes (e.g.: acute toxicity).
4. Reference to “in vitro” skin corrosion tests in the UN Model Regulations on the Transport of Dangerous Goods


82. The Sub-Committee confirmed that “in vitro” skin corrosion tests, as described in OECD test guidelines 435, 430 and 431, could be used as an alternative to the “in vivo” test method in OECD Guideline 404 and confirmed that the changes to paragraph 2.8.2.4 of the UN Model Regulations on the Transport of Dangerous Goods, provisionally adopted by the TDG Sub-Committee at its thirty-second session (ST/SG/AC.10/C.3/64, paras. 26-28 and annex 1) were relevant.

5. Development of lists of classification

Informal document: UN/SCEGHS/15/INF.32 (UNITAR)

83. The Sub-Committee welcomed the feedback provided by UNITAR on the proliferation of lists of classification of chemicals according to the GHS and considered that this might be an issue that will have to be considered in the near future.

84. The Sub-Committee asked the informal working group on implementation to consider this issue when defining the priorities for matters to be addressed by the group.

VII. CAPACITY BUILDING (Agenda item 6)

Informal documents: UN/SCEGHS/15/INF.16 (UNITAR)
UN/SCEGHS/15/INF.40 (Secretariat) (item 2.2 (c))

85. The representative of UNITAR informed the Sub-Committee about the latest developments regarding GHS implementation in pilot countries, such as: awareness raising workshops and development of legislation to implement the GHS in Cambodia and Laos; completion of the national GHS implementation strategies in Indonesia, Nigeria, Philippines, Thailand and Gambia; and, development and initiation of GHS capacity building projects in Uruguay, Jamaica and Viet Nam.

86. She also mentioned that a regional workshop for the Economic Community of West African States (ECOWAS) was organized in Nigeria in May 2008 (“Regional Workshop on chemical hazard communication and GHS implementation for countries of ECOWAS”).

87. Regarding training materials, she said that UNITAR is planning to pilot test an updated draft version of the training course “Introduction to the GHS” and is continuing work on the training course “Classifying chemicals according to the GHS and GHS labels and SDSs”.

88. The Sub-Committee also took note of the exchange of information between the TDG Sub-Committee and UNITAR held during the thirty-third session of the TDG Sub-Committee regarding the development of training materials for the GHS. The Sub-Committee noted that GHS implementation implied also implementation of the classification and labelling provisions of the UN Model Regulations on the Transport of Dangerous Goods and its related modal instruments, and the representative of UNITAR was encouraged to provide feedback to the TDG
Sub-Committee on any matter related to the implementation of the GHS for the transport sector, as deemed necessary.

89. The expert from Brazil acknowledged the importance of the work of UNITAR for countries in development and with economies in transition.

90. The observer from Jamaica expressed its appreciation to UNITAR and its funding partners for their support to GHS capacity building activities in her country, and added that she would keep the Sub-Committee informed about any progress on GHS implementation in the Caribbean region.

91. The representative of UNITAR recalled that the availability and development of activities related to GHS implementation and capacity building was subject to the availability of funds from donors and therefore invited countries and organizations to consider providing financial support to UNITAR for GHS related activities.

VIII. OTHER BUSINESS (Agenda item 7)

A. Membership of the Sub-Committee

Informal documents: UN/SCEGHS/15/INF.6 (Secretariat)

92. The Sub-Committee noted with satisfaction that the application by Nigeria for full membership in the Sub-Committee had been accepted by the Economic and Social Council, at its resumed organizational session for 2008.

B. Requests for consultative status

Informal documents: UN/SCEGHS/15/INF.7 (Secretariat)  
UN/SCEGHS/15/INF.8 (Secretariat)  
UN/SCEGHS/15/INF.11 (Secretariat)

93. The Sub-Committee endorsed the decisions taken by the TDG Sub-Committee and therefore both the US Fuel Cell Council (USFCC) and the International Fireworks Association (IFA) were granted consultative status, while the request by the British Fireworks Association (BFA) was rejected.

C. Draft summary record of the 17th meeting of the Task Force on Harmonization and Classification of Chemicals

Informal document: UN/SCEGHS/15/INF.15 (OECD)

94. The Sub-Committee took note of the draft summary record of the 17th meeting of the OECD Task Force on Harmonization and Classification of Chemicals, held in Paris on 24 and 25 April 2008.

95. The representative of the OECD said that no meeting of the Task Force had been scheduled for 2009 so far, given that it was not expected that any of the tasks that the Sub-
Committee may wish to include in the programme of work for the OECD for the next biennium would be developed enough to be ready for approval by the Task Force during 2009.

D. Documenting changes in the GHS

Informal documents: UN/SCEGHS/15/INF.30 (United States of America)  
UN/SCEGHS/15/INF.31 (Secretariat)

96. The Sub-Committee noted the importance of documenting changes in the GHS, took note of the explanations regarding the corrections to table 1.5.1 listed in INF.31 and expressed its deep appreciation for the work of the secretariat. There was general agreement that it was not necessary to issue a corrigendum to further document these changes.

IX. ADOPTION OF THE REPORT (Agenda item 8)

97. The Sub-Committee adopted the report on its fifteenth session and the annexes thereto on the basis of a draft prepared by the secretariat.
Annex 1

Draft amendments to the second revised edition of the
Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

PART 2

Chapter 2.6

2.6.2 In Note 2, insert "and not more than 60 °C" after "more than 35 °C ".

(Ref. Doc.: ST/SG/AC.10/C.4/2008/5 as amended)

PART 3

Chapter 3.1

3.1.3.3 Add the following new sub-paragraph:

"(c) If the converted acute toxicity point estimates for all ingredients of a mixture are within the same category, then the mixture should be classified in that category."

(Ref. Doc.: UN/SCEGHS/15/INF.42 as amended)

Chapter 3.8

Amend in accordance with the proposal in document ST/SG/AC.10/C.4/2008/3, with the following additional modifications:

3.8.5.1 In decision logic 3.8.1, in the last box against Category 3, amend the first sentence to read as follows:

"Following single exposure,

Can the substance or mixture produce transient narcotic effects or respiratory tract irritation or both?¹"

Insert a new footnote 1, to read as follows:

"¹ Classification in Category 3 would only occur when classification into Category 1 or Category 2 (based on more severe respiratory effects or narcotic effects that are not transient) is not warranted. See 3.8.2.2.1 (e) (respiratory effects) and 3.8.2.2.2 (b) (narcotic effects)."

Renumber subsequent footnotes accordingly.

(Ref. Doc.: UN/SCEGHS/15/INF.19, as amended by UN/SCEGHS/15/INF.43)
Chapter 3.10

3.10.1.6.4 Amend to read as follows:

"3.10.1.6.4 Although the definition of aspiration in 3.10.1.2 includes the entry of solids into the respiratory system, classification according to (b) in table 3.10.1 for Category 1 or for Category 2 is intended to apply to liquid substances and mixtures only."

Current paragraph 3.10.1.6.4 becomes 3.10.1.6.5.

(Ref. doc: ST/SG/AC.10/C.4/2008/11 as amended)

PART 4

Amend in accordance with the proposal in document ST/SG/AC.10/C.4/2008/1, adopted without modifications.

ANNEXES 1 and 2

Amend in accordance with the proposal in document ST/SG/AC.10/C.4/2008/1, adopted without modifications.
## Annex 2

**Corrections to the second revised edition of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)**

### PART 3

#### Chapter 3.8

In table 3.8.1:
- under the heading “units”, for “Inhalation (rat) gas”, replace “ppm” with “ppmV/4h” and for “Inhalation (rat) vapour”, replace “mg/l” with “mg/l/4h”
- under the guidance value ranges for Category 2, for “Inhalation (rat) gas”, replace “5000 ≥ C > 2500” with “20000 ≥ C > 2500”


#### Chapter 3.9

In table 3.9.1:
- under the heading “units”, for “Inhalation (rat) gas”, replace “ppm/6h/d” with “ppmV/6h/d” and
- under the heading “Guidance values (dose/concentration)” insert “≤” before each of the numeric values (10 to 0.02)


In table 3.9.2:
- under the heading “units”, for “Inhalation (rat) gas”, replace “ppm/6h/d” with “ppmV/6h/d” and
- replace the last column with the following:

<table>
<thead>
<tr>
<th>Guidance value range (dose/concentration)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10 &lt; C ≤ 100</td>
<td></td>
</tr>
<tr>
<td>20 &lt; C ≤ 200</td>
<td></td>
</tr>
<tr>
<td>50 &lt; C ≤ 250</td>
<td></td>
</tr>
<tr>
<td>0.2 &lt; C ≤ 1.0</td>
<td></td>
</tr>
<tr>
<td>0.02 &lt; C ≤ 0.2</td>
<td></td>
</tr>
</tbody>
</table>

*(Ref. Doc.: ST/SG/AC.10/C.4/2008/13 as amended by UN/SCEGHS/15/INF.4)*