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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

Report of the Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals on its twenty-eighth session

held in Geneva from 10 to 12 December 2014

Contents

Annexes

I. Attendance

1. The Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals held its twenty-eighth session from 10 to 12 December 2014, with Ms. Maureen Ruskin (United States of America) as Chairperson and Mr. Robin Foster (United Kingdom of Great Britain and Northern Ireland) as Vice-Chairman.

2. Experts from the following countries took part in the session: Argentina, Austria, Belgium, Brazil, Canada, China, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Poland, Portugal, Qatar, Republic of Korea, Russian Federation, South Africa, Sweden, United Kingdom of Great Britain and Northern Ireland, United States of America and Zambia.

3. Under rule 72 of the rules of procedure of the Economic and Social Council, observers from the following countries also took part: Romania and Switzerland.

4. Representatives of the United Nations Institute for Training and Research (UNITAR) were present.

5. The following intergovernmental organizations were also represented: European Union 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: American Cleaning Institute (ACI); Australian Explosives Industry and Safety Group Incorporated (AEISG); Compressed Gas Association (CGA); Croplife International; Dangerous Goods Advisory Council (DGAC); European Chemical Industry Council (CEFIC); European Industrial Gases Association (EIGA); Federation of European Aerosol Associations (FEA); Industrial Federation Paints and Coats of Mercosul (IFPCM); International Bulk Terminals Association (IBTA); International Association for Soaps, Detergents and Maintenance Products (AISE); International Confederation of Plastics Packaging Manufacturers (ICPP); International Council of Chemical Associations (ICCA); International Council on Mining and Metals (ICMM); International Fibre Drum Institute (IFDI); International Paint and Printing Ink Council (IPPIC); International Petroleum Industry Environmental Conservation Association (IPIECA); Responsible Packaging Management Association of Southern Africa (RPMASA); Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) and The Grain and Feed Trade Association (GAFTA).

II. Adoption of the agenda (agenda item 1)

Documents: ST/SG/AC.10/C.4/55 (Secretariat)
ST/SG/AC.10/C.4/55/Add.1 (Secretariat)

Informal documents: INF.1, INF.2 and INF.8 (Secretariat)

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.35.

III. Classification criteria and related hazard communication (agenda item 2)

A. Recommendations made by the Sub-Committee on its twenty-fifth, twenty-sixth and twenty-seventh sessions

Document: ST/SG/AC.10/C.4/2014/13 (Secretariat)

8. The Sub-Committee confirmed the decisions taken at its 25th, 26th and 27th sessions on the basis of the consolidated list prepared by the secretariat (see annex I).

B. Work of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG)

1. Physical hazards

(a) Classification of polymeric beads, expandable (UN No. 2211)

Document: ST/SG/AC.10/C.4/2014/14 (CEFIC)

Informal documents: INF.12 (CEFIC)
INF.31 (Secretariat)

9. The Sub-Committee endorsed the recommendation of the TDG Sub-Committee to include a test method for substances evolving flammable vapours as a new section 38.4 in the Manual of Tests and Criteria. The proposed test method in document ST/SG/AC.10/C.4/2014/14 with the amendments listed in INF.31 was adopted (see ST/SG/AC.10/42/Add.2).

10. It was noted, however that although the scope of the test is currently limited to polymeric beads fulfilling the description of UN No.2211, it might need to be extended to other substances and mixtures evolving flammable gases. It was also noted that classification and hazard communication of substances and mixtures evolving flammable gases are a matter of particular interest for the supply and use and workplace sectors (and in particular for storage).

11. The Sub-Committee decided to examine the need for hazard communication associated with the hazards of flammable gases evolved from substances and mixtures and entrusted the work to the practical classification issues informal working group.

(b) Desensitized explosives

Document: ST/SG/AC.10/C.4/2014/16 (Germany)

Informal documents: INF.4 and INF.11 (Germany)
INF.31 (Secretariat)

12. The Sub-Committee noted that the TDG Sub-Committee had endorsed the proposal for the introduction of a new chapter on desensitized explosives in the GHS as well as the relevant test method as contained in document ST/SG/AC.10/C.4/2014/2 considered at the 27th session.

13. The proposal for the new chapter and consequential amendments to the GHS in document ST/SG/AC.10/C.4/2014/16 were adopted with a minor amendment to the decision logic 2.17.1 (see annex I).

(c) Flammable gases

Informal documents: INF.5/Rev.1 (Belgium and Japan)
INF.10 (CEFIC)
INF.31 (Secretariat)

14. The Sub-Committee endorsed the decision of the TDG Sub-Committee to accept the offer from the experts from Belgium and Japan to lead an informal working group dealing with categorization of flammable gases, on the understanding that experts from both sub-committees would participate in the work and that the informal working group would report to both sub-committees. The Sub-Committee also endorsed the mandate for the work proposed in paragraph 6 of INF.5/Rev.1 with the insertion of the words "within Category 1" after "GHS subdivisions" in sub-paragraph (a).

15. The expert from Belgium invited all delegations wishing to participate in the work of the informal group to contact him and said that the first meeting was expected to be held in Brussels in March 2015 at a date still to be confirmed. He said that he would explore other means to facilitate participation by those unable to travel.

(d) Water-reactivity

Informal documents INF.18 (United States of America)
INF.31 (Secretariat)

16. The Sub-Committee was informed that the report "HM-14: Test procedures and classification criteria for release of toxic gases from water-reactive materials" had been issued by the United States Transportation Research Board and was available online. Experts were invited to review the report, to invite laboratories to conduct trials to verify the results and ensure test reproducibility, and to provide comments to the expert from the United States of America.

17. The Sub-Committee noted that work on water-reactivity would continue in the biennium 2015-2016 and that the TDG Sub-Committee had agreed to keep this item on its programme of work for that period (see annex III).

(e) Classification of polymerizing (stabilized) substances

Informal document: INF.31 (Secretariat)

18. The Sub-Committee was informed that the TDG Sub-Committee had finalized the work on classification of polymerizing (stabilized) substances and took note of the related provisions adopted by the TDG Sub-Committee to be included in the 19th revised edition of the Model Regulations.

19. Noting that some of these provisions could also be useful for other sectors, the expert from the United States of America volunteered to study them in detail and to consider whether it would be appropriate to address this hazard in the GHS. She welcomed comments from other experts and said that she would consider submitting a proposal on this issue during the next biennium.

(f) Classification of substances and mixtures which in contact with water emit flammable gases

Informal document: INF.31 (Secretariat)

20. The Sub-Committee endorsed the recommendation from the TDG Sub-Committee to align the criteria for the maximum rate of evolution of flammable gas applicable to Division 4.3 substances, packing group III (Category 3 in the GHS) in Chapter 2.4, paragraph 2.4.4.3.3 of the Model Regulations and in Table 2.12.1 (Chapter 2.12) of the

GHS with the criteria in Section 33.4, paragraph 33.4.1.4.4.1 in the Manual of Tests and Criteria (see annex I).

2. Other relevant issues

(a) Classification and hazard communication provisions for crude oil

Informal document: INF.31 (Secretariat)

21. The Sub-Committee was invited to take note of the information provided by IPIECA in information document INF.37, submitted to the 46th session of the TDG Sub-Committee following discussions at a previous session on the information provided in ST/SG/AC.10/C.3/2014/49 on rail accidents involving crude oil in North America.

(b) Revision of Chapter 2.8 of the Model Regulations

Documents: ST/SG/AC.10/C.4/2014/12 (Netherlands)
ST/SG/AC.10/C.4/2014/18 (United States of America)

Informal documents: INF.3 (Netherlands)
INF.6 and INF.7 (CEFIC)
INF.20 (United States of America)
INF.21 (Canada)
INF.24 and INF.25 (Netherlands)
INF.29 (Netherlands, CEFIC)
INF.31 (Secretariat)

22. The Sub-Committee noted the outcome of the discussions of the TDG Sub-Committee contained in INF.31 and concurred with it that further work would be necessary in the next biennium before a final decision on how to address the issues raised could be envisaged.

23. With regard to the TDG Sub-Committee's request to include an item in the programme of work of the Sub-Committee for the revision and simplification of a methodology for the application of the additivity approach, including professional judgement and weight of evidence, several experts considered that a more detailed description of the scope and aim of the revision as well as any other issues to be addressed was needed before a decision could be taken. In the absence of this information the Sub-Committee considered it inappropriate to include a specific item on its programme of work and invited the TDG Sub-Committee to come back with a detailed proposal for the next session. It was made clear that the absence of a specific item in its programme of work would not prevent the Sub-Committee from considering any issues related to corrosivity criteria that might be brought to its attention.

(c) Applicability of in vitro tests for the assessment of substances and preparations to be assigned to Class 8 (corrosive substances)

Informal document: INF.31 (Secretariat)

24. The Sub-Committee noted that the TDG Sub-Committee had deferred the decision on the proposal contained in INF.13 (TDG, 46th session) to the next biennium. The Sub-Committee also noted that the TDG Sub-Committee would also need to consider how to deal with new versions of OECD Test Guidelines. It was noted that the current practice for other standards (e.g. ISO) is that updating of references is done only following consideration of the differences between the old and the updated versions and assessment of the suitability of the new provisions and their implications.

(d) Wording regarding the hazard class "corrosive to metals"

Informal document: INF.31 (Secretariat)

25. The Sub-Committee took note of the decision of the TDG Sub-Committee to keep the words "when tested on both materials" in Chapter 2.8, paragraph 2.8.2.5 (c) of the Model Regulations and noted that as a consequence of this decision, no amendments to the same text in Chapter 2.16, table 2.16.1 of the GHS were necessary.

C. Practical classification issues

Informal document: INF.32 (United States of America)

26. The Sub-Committee noted that the informal working group had continued to work on the items listed in sub-paragraph 2 (a), (b) and (c) in INF.32 and that the additional items listed in sub-paragraphs 2 (d) to (j) had been identified as areas where further work was needed.

27. The Sub-Committee agreed to endorse their consideration by the informal working group during the next biennium (see annex III).

D. Work of the TDG-GHS working group on corrosivity criteria

28. Corrosivity related matters were discussed in the plenary session of the TDG and the GHS Sub-Committees with participation of experts from both bodies (see paragraphs 22 and 23).

29. The Sub-Committee shared the TDG Sub-Committee's appreciation for the work done by all those who participated in the work of the joint TDG-GHS working group, in particular to its chairman and to the expert from the Netherlands.

30. Acknowledging that the joint working group had achieved all the progress possible at this stage, the Sub-Committee endorsed the view of the TDG Sub-Committee that the activities of the joint TDG-GHS working group should be discontinued for the time being. Work on corrosivity would continue in each Sub-Committee, on the understanding that the sub-committees could reactivate the joint working group in the future if need be.

E. Dust explosion hazards

Informal document: INF.26 (United States of America)

31. The Sub-Committee took note of the report of the meeting of the informal working group on dust explosion hazards held on 10 December, as follows:

- The informal working group started consideration of the questions listed in Appendix A to Annex II in informal document INF.26.
- Following an intervention from the expert from Argentina about the scope of the work of the informal working group as regards the applicability of the GHS to grain, flour and cereal, it was pointed out that the work undertaken by the informal working group fell within the scope of the GHS, as explained in its Chapter 1.1, section 1.1.2 and specifically in paragraph 1.1.2.4. The informal working group was of the opinion that consideration of changes to the scope of the GHS was not within the mandate of the informal working group, and therefore concluded that any questions about the applicability of the GHS to dusts originating from grain, flour or cereal should be raised at Sub-Committee level.

- The informal working group agreed to continue the work by teleconference (tentatively scheduled in February and April 2015).

32. During an intervention in the plenary session, the expert from Argentina expressed concern about the inclusion of dust originating from food and agricultural products such as flours, grains and cereals under the definition of "combustible dust", on the grounds that neither flours, grain nor cereal were chemicals, and that the dust originating from them did not have intrinsic hazardous properties (i.e.: it was not dangerous in itself). For these reasons he believed that these products should be explicitly excluded from the GHS. The expert from Brazil shared this view.

33. Other sub-committee experts however did not agree with this interpretation since they considered that the GHS currently does not exempt any product, nor should it in the future. They pointed out that the GHS specifically notes in 1.1.2.4 that although pharmaceuticals, food additives, cosmetics and pesticide residues in food will not be covered by the GHS in terms of labelling at the point of intentional intake, they will be covered where workers may be exposed and in transport if potential exposure warrants. In addition, they recalled that it is in the purview of each competent authority to decide the building blocks and overall scope that would be covered within their jurisdictions.

34. The chair invited the expert from Argentina to consider submitting an official document to the Sub-Committee should he wish to pursue this issue further.

F. Aspiration hazard: viscosity criterion for classification of mixtures

Document: ST/SG/AC.10/C.4/2014/23 (IPPIC)

35. The Sub-Committee agreed to keep this item in its programme of work for the next biennium (see annex III).

G. Nanomaterials

Document: ST/SG/AC.10/C.4/2014/25 (France)

Informal document: INF.28 (France)

36. The Sub-Committee noted that the informal working group would focus its work on the classification of some selected nanomaterial substances. The informal working group stressed the importance of exchanging information with OECD on available classification data.

37. The Sub-Committee agreed to keep this item in its programme of work for the next biennium. The terms of reference for the work of the group agreed by the Sub-Committee at its 26th session remained unchanged (see annex III).

H. Miscellaneous

1. Pyrophoric gases

Document: ST/SG/AC.10/C.4/2014/17 (United States of America)

Informal document: INF.31 (Secretariat)

38. The Sub-Committee noted that the TDG Sub-Committee had confirmed its endorsement of the inclusion of pyrophoric gases as a hazard category within the hazard class "flammable gases" of the GHS, following consideration of the answers provided by the expert from the United States of America to the questions raised at its 45th session.

2. Updating of references to OECD guidelines

Informal document: INF.14 (OECD)

INF.31 (Secretariat)

39. The Sub-Committee agreed with the updates proposed in INF.14 with the following exceptions (see annex I):

(a) The Sub-Committee agreed to introduce the reference to OECD guideline 460 in note (d) under Figure 3.3.1 but considered that the text of the last two sentences was still relevant and did not agree to its deletion;

(b) The insertion of additional text in the note against the reference to OECD test guidelines 484 (in Chapter 3.5, paragraph 3.5.2.6) and 204 (in Appendix V, section 2) was not considered necessary on the grounds that the GHS considers all data and is test method neutral. The Sub-Committee concluded that the existing note was no longer necessary and agreed to its deletion.

40. The Sub-Committee also noted that the TDG Sub-Committee had agreed to endorse the consequential amendment to paragraph 2.9.3.2.5 in Chapter 2.9 of the Model Regulations pending the decision of the Sub-Committee on the insertion of the reference to Test Guideline 123 in paragraph 4.1.1.5 of Chapter 4.1 of the GHS. Since the amendment was adopted, the secretariat was requested to amend the text of the Model Regulations accordingly.

41. On the question of whether or not references to standards should include the year of issuance, the Sub-Committee concurred with the TDG Sub-Committee on the importance to date test methods as well as on the need to be informed when an update was available. This would allow experts to consider the updates made, assess their implications and check whether they are consistent with the provisions they support.

IV. Hazard communication issues (agenda item 3)

A. Revision of section 9 of Annex 4

Document: ST/SG/AC.10/C.4/2014/21 (Germany)

Informal document: INF.13 (Germany)

42. The Sub-Committee noted that the group had finalized its work and adopted the proposal in Annex 1 to document ST/SG/AC.10/C.4/2014/21 as amended by INF.13, for a revised section 9 in Annex 4 of the GHS, as well as the consequential amendments to Table 1.5.2 contained in Annex 2 (see annex I).

43. It was noted that the order of items in Table 1.5.2 was not mandatory and that the competent authority had the discretion to prescribe a specific order or leave the choice to the person responsible for the preparation of the Safety Data Sheet.

B. Labelling of small packagings

Document: ST/SG/AC.10/C.4/2014/22 (CEFIC)

Informal document: INF.27 (CEFIC)

44. The Sub-Committee adopted the proposed example to be included in Annex 7 of the GHS with some minor editorial corrections (see annex I).

45. The Sub-Committee agreed to keep this item on its programme of work for the next biennium and noted that the group intended to develop additional examples (see annex III).

C. Improvement of annexes 1 to 3 and further rationalization of precautionary statements

1. Corrections to precautionary statements

Document: ST/SG/AC.10/C.4/2014/20 (United Kingdom)

46. The Sub-Committee adopted the proposed corrections without modification (see annex II).

2. Work of the informal working group on the improvement of annexes 1 to 3

47. The Sub-Committee noted that the informal working group, at a meeting held on 11 December 2014 had considered and agreed the revised terms of reference for its programme of work for the next biennium. These would include:

(a) Continuing work to reduce the number of precautionary statements on "seeking medical advice/attention" and "calling a poison center/doctor" by introducing some adjustments to the precedence principles in A3.3.2.2 and A3.3.4.6 of the GHS.

(b) Detailed consideration of the introductory texts to annex 3 and the development of additional examples.

(c) Addressing the issue of minor linguistic variations in hazard and precautionary statements which do not affect the obvious meaning of these statements. The informal working group will identify and collect examples and will provide comments on a document on this issue submitted by the European Aerosol Federation for consideration by the informal working group.

48. The Sub-Committee endorsed the proposed terms of reference for the work of the informal working group for the next biennium (see annex III).

D. Miscellaneous

Large GHS pictograms not in labels on portable tanks and multiple element gas containers (MEGC) during transport

Document: ST/SG/AC.10/C.4/2014/24 (DGAC)

Informal document: INF.34 (DGAC)

49. The Sub-Committee adopted the proposal for a new paragraph 1.4.10.4.4 as amended in INF.34 with some additional modifications (see annex I).

V. Implementation of the GHS (agenda item 4)

A. Development of a list of chemicals classified in accordance with the GHS

Informal document: INF.22 (United States of America)

50. The expert from the United States of America provided a summary report on the outcome of the meeting of the informal working group which met on 11 December 2014, as follows:

(a) The pilot classification work plan set out in Annex I to INF.22 was agreed;

(b) Three chemicals were selected for the first round of the classification exercise:

(i) Dimethyltin dichloride (CAS No. 753-73-1)

(ii) Dicyclopentadiene (CAS No. 77-73-6)

(iii) Di-n-butyl phthalate (CAS No. 84-74-2)

(c) The timeframe for the classification exercise would be as specified in INF.22 (paragraph 4).

(d) The proposed programme of work for the biennium 2015-2016 outlined in INF.22 (paragraph 10) was agreed.

51. The informal working group recalled that the aim of the classification exercise at this stage was to investigate the feasibility of the process and the resources needed to achieve consensus on the application of the classification criteria to the available data.

52. The informal working group also discussed how industry participants could participate in discussions at OECD during the pilot exercise. The representative from OECD encouraged them to participate, to the extent possible, on the basis of common positions representing the views of the industrial sectors involved with a common spokesperson. Where there were alternative views, it would be possible for multiple spokespersons to participate.

53. The Sub-Committee took note of the outcome of the meeting of the informal working group and agreed that it should continue its work during the next biennium in accordance with the programme outlined in INF.22 (paragraph 10).

B. Reports on status of implementation

1. United States of America

54. The Sub-Committee noted that US OSHA had announced its intention to update its Hazard Communication Standard to maintain alignment with the revised versions of the GHS. This regulatory action was placed on the Fall 2014 Unified Regulatory Agenda published on 2 December 2014.

2. Japan

55. The Sub-Committee noted that the Japanese Government had classified about 2.800 substances in accordance with the GHS, that the classification results, including the rationale for classification, were available on the website of the National Institute of Technology and Evaluation in Japanese, and that this information, with the exception of the rationale for the classification of some substances, was also available in English. It was also noted that software for classification of mixtures was now freely available on the website of the Ministry of Economy, Trade and Industry in Japanese and that an English version would be available in the near future.

3. Brazil

56. The Sub-Committee noted that the Brazilian Labour Regulation (Ordinance No.26) on the GHS which was in force since May 2011 for substances would also enter into force in June 2015 for mixtures.

57. The updating of Brazilian Standard No.14725, currently based on the 1st edition of the GHS, for alignment with the 5th revision of the GHS is expected to be completed to allow its publication for public consultation during the second half of 2015.

4. Zambia

58. The Sub-Committee noted that in November 2013, the Environmental Management (Licensing) Regulation No. 112 of 2013 had been signed into law. The regulation covers, among other aspects, pesticides and toxic substances and contains provisions in Part V enforcing GHS classification and labelling for these substances, in accordance with the national GHS standard. It was also noted that the GHS national implementation strategy provided for a 5-year transitional period for implementation.

C. Cooperation with other bodies or international organizations

59. As no document had been submitted, this item was not discussed.

D. Miscellaneous

60. As no document had been submitted, this item was not discussed.

VI. Development of guidance on the application of GHS criteria (agenda item 5)

A. Guidance on hazard assessment of ores and concentrates for marine transport

Informal document: INF.16 (ICMM)

61. The Sub-Committee took note of the information provided by ICMM and requested the secretariat to make the guidance available on the webpage for "guidance on the application of GHS criteria" of the UNECE website[1].

B. Guidance on classification of metal and metal compounds in aqueous media

Informal document: INF.17 and INF.33 (ICMM)

62. The Sub-Committee noted that the informal working group expected to complete the updating of the guidance on classification of metal and metal compounds in aqueous media in Annex 9 (section 9.7) and Annex 10 of the GHS in 2015. The Sub-Committee took note

[1] http://www.unece.org/trans/danger/publi/ghs/guidance.html

of the outcome of the meeting of the informal working group described in INF.33 and agreed to keep this item on its programme of work for the next biennium (see annex III).

VII. Capacity building (agenda item 6)

Informal documents: INF.15 (UNITAR)
INF.23 (RPMASA)
INF.30 (Sweden)

63. The Sub-Committee took note of the various projects, capacity-building and awareness raising activities related to the implementation of the GHS conducted in Benin, Bolivia, Cameroon, Chile, Colombia, Democratic Republic of Congo, Guatemala, Haiti, Kiribati, Madagascar, Mali, Mexico, Kyrgyzstan, Tajikistan, Thailand, Togo, Tunisia, South Africa and Viet Nam.

64. The representative of UNITAR invited Sub-Committee experts to provide comments on the management scheme for implementing the GHS, which is being developed as part of the IOMC Toolbox for Decision Making in Chemicals Management. Comments should be submitted by email (ghs[at]unitar.org) before 15 January 2015.

65. The Sub-Committee also noted that the next UNITAR e-learning course "Classifying and Labelling Chemicals according to the GHS" was planned for the second quarter of 2015.

VIII. Programme of work for the biennium 2015–2016 (agenda item 7)

A. Proposal for review of Chapter 2.1 (Explosives) in the GHS

Document: ST/SG/AC.10/C.4/2014/15 (Australia, AEISG)
Informal document: INF.31 (Secretariat)

66. The Sub-Committee noted the outcome of the discussions on this issue at the 46th session of the TDG Sub-Committee. Views were divided among experts. While some were of the opinion that the TDG Sub-Committee should be entrusted with the work as the GHS focal point for physical hazards, others considered that the issues to be solved were mainly related to hazard communication and therefore they should be addressed directly within the GHS Sub-Committee. Some others did not share this view since they considered that it was not possible at this stage to foresee whether or not it would be necessary to amend the classification criteria.

67. The Sub-Committee agreed to the proposed scope for the revision as contained in paragraphs 10 to 13 of document ST/SG/AC.10/C.4/2014/15.

68. After some discussion on procedural issues, the Sub-Committee agreed to entrust the revision to the TDG Sub-Committee, with the following procedure:

(a) The expert from Australia would lead the first developments of the work in an intersessional informal correspondence working group with participation from experts from both sub-committees.

(b) The proposals from the informal correspondence group would be submitted to the Working Group on Explosives for consideration.

(c) The Working Group on Explosives would submit its recommendations simultaneously to both sub-committees for consideration and final decision.

(d) The steps outlined in (a) to (c) above would be repeated as often as necessary until a final proposal was ready to be submitted for adoption by both sub-committees.

69. It was noted that in view of the workload of the Working Group on Explosives, it would have two additional meetings during the next biennium. The Expert from Australia was invited to liaise with Mr. Ed de Jong (Chairman of the Working Group on Explosives) to organize the work.

70. Experts interested in participating in the work were invited to contact the expert from Australia (Mr. Drew Wagner: drew.wagner[at]swa.gov.au).

B. Use of cellulose in test O.2 (oxidizing liquids) and in test O.3 (oxidizing solids)

Document: ST/SG/AC.10/C.4/2014/19 (France)
Informal document: INF.31 (Secretariat)

71. The Sub-Committee approved the calendar for the testing programme proposed by the expert from France. Experts interested in the work who had not yet indicated their wish to join the project were invited to contact the expert from France (Mr. Christian Michot: christian.michot[at]ineris.fr).

C. Use of the Manual of Tests and Criteria in the context of the GHS

Informal document: INF.19 and INF.31 (Secretariat)

72. The Sub-Committee agreed to include this item in its programme of work for the next biennium in accordance with the scope defined in INF.19, paragraph 6 (see annex III).

73. Experts were invited to provide comments on the first draft prepared by the secretariat (informal documents INF.5 and Adds. 1 to 5 submitted at the last session), pending the availability of a consolidated text of the 6th revised edition of the Manual of Tests and Criteria.

D. Consolidated programme of work for 2015-2016

Informal document: INF.35 (Secretariat)

74. The Sub-Committee adopted its programme of work for the next biennium on the basis of a draft prepared by the secretariat containing the proposals in sections A to C above as well as those approved under other agenda items during the current or at the previous sessions (see annex III).

IX. Draft resolution 2015/… of the Economic and Social Council (agenda item 8)

Informal documents: INF.9 (Secretariat)
INF.31 (Secretariat)

75. The Sub-Committee adopted without modifications the part of the resolution dealing with its work during the biennium 2013-2014 on the basis of a draft prepared by the secretariat.

X. Election of officers for the biennium 2015–2016 (agenda item 9)

76. On a proposal for Chairpersonship by the expert from the United Kingdom, seconded by Canada, and for Vice-Chairpersonship by the expert from Canada, seconded by Brazil, the Sub-Committee re-elected by acclamation Ms. Maureen Ruskin (United States of America) as Chairperson and Mr. Robin Foster (United Kingdom) as vice-chair for the period 2015-2016.

XI. Other business (agenda item 10)

Tribute to Mr. Hart

77. The Sub-Committee was informed that Mr. Jeffrey Hart, Chairman of the Sub-Committee of Experts on the Transport of Dangerous Goods since 2011 will retire in 2015. The Sub-Committee expressed its appreciation for his dedication and contribution to the work of the Sub-Committee as a member of the United Kingdom delegation and as Chairman of the TDG Sub-Committee.

XII. Adoption of the report (agenda item 11)

78. In accordance with established practice the Sub-Committee adopted the report on its twenty-eighth session on the basis of a draft prepared by the secretariat.

Annex I

Draft amendments to the fifth revised edition of the Globally Harmonized System of Classification and Labelling of Chemicals (ST/SG/AC.10/30/Rev.5)

Recommendations made by the Sub-Committee on its twenty-fifth, twenty-sixth and twenty-seventh sessions

Document ST/SG/AC.10/C.4/2014/13 adopted.

Chapter 1.4

1.4.10.4.4 Insert a new paragraph 1.4.10.4.4 to read as follows:

"1.4.10.4.4 *Use of GHS pictograms in transport*

In transport, a GHS pictogram not required by the UN Model Regulations on the Transport of Dangerous Goods should only appear as part of a complete GHS label (see 1.4.10.5.4.1) and not independently.".

(Reference document: ST/SG/AC.10/C.4/2014/24 as amended)

Chapter 2.12

Table 2.12.1, criteria for Category 3

Replace "equal to or greater than 1 litre" by "greater than 1 litre".

(Reference doc: informal document INF.31, annex II)

Decision logic 2.12

In the second box, replace "flammable gas is ≥ 1 litre per kg" by "flammable gas is > 1 litre per kg".

(Consequential amendment)

Chapter 2.17

Document ST/SG/AC.10/C.4/2014/16 adopted with the following modification:

2.17.1 In the decision logic replace

Not a desensitized explosive May fall within the scope of other physical hazard classes	by	Not classified as a desensitized explosive May fall within the scope of other physical hazard classes

Chapter 3.3

Figure 3.3.1, Note (d), amend the end of the second sentence to read:

"…OECD Test Guideline 437 (Bovine Corneal Opacity and Permeability (BCOP)), 438 (Isolated Chicken Eye (ICE)), and 460 (Fluorescein leakage (FL)).".

(Reference doc: informal document INF.14 as amended)

Chapter 3.5

3.5.2.6 Delete the reference "Mouse spot test (OECD 484),".

Delete footnote 1 ("[1] This Test Guideline has been cancelled but may continue to be used until 2 April 2014.").

(Reference doc: informal document INF.14 as amended)

Chapter 3.7

3.7.2.5.1 Insert ", 443" at the end of the paragraph.

(Reference doc: informal document INF.14)

Chapter 4.1

4.1.1.5 Amend the end of the first sentence to read as follows:

"…OECD Test Guidelines 107, 117 or 123.".

(Reference doc: informal document INF.14)

Annex 4, Section 9

Document ST/SG/AC.10/C.4/2014/21 adopted with the following modification:

Table A4.3.9.2 Add a new row at the end to read as follows:

2.17	Desensitized explosives	– indicate what desensitizing agent is used – indicate the exothermic decomposition energy – indicate the corrected burning rate A_c

(Reference doc: informal document INF.13)

Annex 7, new example to be added:

Document ST/SG/AC.10/C.4/2014/22 adopted with the following modifications:

In paragraph 2, replace "of a substance" by "of a product".

In paragraph 3, replace "containing the substance" by "containing the product".

In paragraph 6, amend the beginning of the first sentence to read as follows: "This ensures that the user is aware of the product identity (enables identification of the associated safety

data sheet), its hazards (indicates that the product is hazardous…". *(Remainder of the paragraph unchanged).*

In paragraph 7, for "**Inner packaging**", replace "immediate container" by "sleeve".

Annex 9

A9.3.5.1 In the fourth sentence, delete " is in the process of finalizing a" and the "." at the end. In the fifth sentence delete "This latter document".

(Reference doc: informal document INF.14)

A9.5.2.4.2 In the first paragraph, at the end of the first sentence, delete "the pH-metric method (OECD Test Guideline in preparation).".

In the sixth sentence, replace "(OECD Test Guideline in preparation)" by "(OECD Test Guideline 123)" and delete "(OECD draft Guideline, 1998)".

(Reference doc: informal document INF.14)

A9.5.3.2.1 In the first sentence, replace "(DoE, 1996; ECETOC 1996; and US EPA 1996)" by "(DoE, 1996; ECETOC 1996; US EPA 1996; OECD, 2000)".

Delete the second sentence.

Amend the beginning of the third sentence to read as follows: "The OECD Guidance Document on Aquatic Toxicity Testing of Difficult Substances and Mixtures (OECD, 2000), is also a good source of information for bioconcentration studies, in relation to…". *(Remainder of the paragraph unchanged).*

(Reference doc: informal document INF.14)

Annex 9, Appendix I

Section 2.4.1 Delete the first and second sentences.

Amend the beginning of the third sentence to read as follows: "According to the definitions set out in the OECD Guidance Document concerning aquatic direct photolysis (OECD, 1997), phototransformation…". (*Remainder of the paragraph unchanged).*

(Reference doc: informal document INF.14)

Section 2.4.2 Amend the end of the first sentence to read as follows: "…*water by sunlight*, OECD Guideline 316 *Phototransformation of chemicals in water-direct photolysis*, and OPPTS 835.5270 *Indirect photolysis screening test*.".

In the second sentence, insert "as well as OECD Guideline 316" after "The OPPTS 835.2210 test".

(Reference doc: informal document INF.14)

Section 3.7.4 Amend the first sentence to read as follows: "Two OECD Guidelines address aerobic and anaerobic transformation in soil and in aquatic sediments (OECD Test Guidelines 307 and 308, respectively).".

(Reference doc: informal document INF.14)

Annex 9, Appendix III

Section 2.2.1 At the end of the third sentence, replace "OECD draft Guideline, 1998" by "OECD Guideline 123".

Delete the last sentence.

(Reference doc: informal document INF.14)

Annex 9, Appendix V

Section 2 Delete "(in preparation)" after "OECD Test Guideline 221" and the reference to OECD Test Guideline 204 (1998) and its related footnote.

(Reference doc: informal document INF.14)

Section 3 Amend the references to the OECD Test Guidelines listed hereafter as follows:

For "OECD Test Guideline 303A (1981)", delete "Draft update available 1999".

Replace "OECD (1998). Aerobic and anaerobic transformation in aquatic sediment systems. Draft proposal for a new guideline, December 1999" by "Test Guideline 308: Aerobic and Anaerobic Transformation in Aquatic Sediment Systems. OECD guidelines for testing of chemicals".

Replace "OECD (1999). Aerobic and anaerobic transformation in soil. Final text of a draft proposal for a new guideline, October 1999" by "Test Guideline 307: Aerobic and Anaerobic Transformation in Soil".

Replace "OECD (2000) Simulation test - Aerobic Transformation in Surface Water. Draft proposal for a new guideline, May 2000" by "Test Guideline 309 Aerobic Mineralisation in Surface Water – Simulation Biodegradation Test. OECD guidelines for testing of chemicals".

Replace "OECD draft Test Guideline, 1998. Partition Coefficient n-Octanol/Water Pow. Slow-stirring method for highly hydrophobic chemicals. Draft proposal for an OECD Guideline for Testing of Chemicals" by "Test Guideline 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method. OECD guidelines for testing of chemicals".

(Reference doc: informal document INF.14)

Annex 9, Appendix VI

Section 1 Amend the reference to OECD 2000 to read as follows: "OECD (2000). Guidance Document on Aquatic Toxicity Testing of Difficult Substances and Mixtures, Series on Testing and Assessment No.23, OECD, Paris".

(Reference doc: informal document INF.14)

Annex II

Corrections to the fifth revised edition of the Globally Harmonized System of Classification and Labelling of Chemicals (ST/SG/AC.10/30/Rev.5)

Annex 3

Document ST/SG/AC.10/C.4/2014/20 adopted.

Annex III

Programme of work of the Sub-Committee for 2015-2016

1. Classification criteria and related hazard communication

(a) Explosives and related matters, including the review of Chapter 2.1 (Explosives) in the GHS

Focal point: TDG Sub-Committee

For the review of Chapter 2.1 (Explosives)

Lead country: Australia

Mandate/Terms of reference: ST/SG/AC.10/C.4/2014/15 and paragraphs 66 to 70 of the present report.

(b) Revision of the Manual of Tests and Criteria, including:

- Revision of test methods in Parts I and II of the Manual of Tests and Criteria

  Focal point: TDG Sub-Committee

  Mandate/Terms of reference: ST/SG/AC.10/C.4/46 (paragraph 13) and INF.10 (23rd session), paragraph 5.

- Use of the Manual of Tests and Criteria in the context of the GHS

  Mandate/Terms of reference: INF.19 and paragraphs 72 and 73 of the present report.

(c) Corrosion to metals: Consider pitting corrosion and suitability of Test C.1 for solids

Focal point: TDG Sub-Committee

Lead country: France

Mandate/Terms of reference: INF.16 (16th session).

(d) Water-reactivity

Work on Test method N.5 for the assessment of water-activated toxicity, in relation to:

(i) the accurate and precise measurement of gas evolution rates for substances which in contact with water emit flammable or toxic gases;

(ii) its possible application to substances which in contact with water emit corrosive gases;

(iii) the improvement of the reproducibility of test results; and

(iv) its suitability as a new method for the development of classification criteria, as appropriate;

Focal point: TDG Sub-Committee

Mandate/Terms of reference: ST/SG/AC.10/C.4/40 (Annex II) and paragraphs 16 and 17 of the present report.

(e) Classification of flammable gases

Focal point: TDG Sub-Committee

Lead countries: Belgium and Japan

Mandate/Terms of reference: INF.5/Rev.1 and paragraphs 14 and 15 of the present report.

(f) Use of cellulose in Test O.2 (oxidizing liquids) and Test O.3 (oxidizing solids)

Focal point: TDG Sub-Committee

Lead country: France

Mandate: Report of the Sub-Committee of Experts on its 27th session (document ST/SG/AC.10/C.4/54, paragraph 9) and paragraph 71 of the present report.

(g) Practical classification issues

Focal point: Informal working group on practical classification issues

Lead country: United States of America

Mandate/Terms of reference: INF.32 and paragraphs 26 and 27 of the present report.

(h) Corrosivity criteria

Continue work with the aim of achieving consistent classification outcomes for skin corrosivity that meet the needs of all sectors.

(i) Dust explosion hazards

Lead country: United States of America

Mandate/Terms of reference: INF.26

(j) Aspiration hazard: viscosity criterion for classification of mixtures

Lead organization: IPPIC

Mandate/Terms of reference: ST/SG/AC.10/C.4/2014/23 and paragraph 35 of the present report.

(k) Nanomaterials

Take into account the progress of international scientific work to review the applicability of the GHS to manufactured nanomaterials, if necessary.

Lead country: France

Mandate/Terms of reference: ST/SG/AC.10/C.4/52, annex II and paragraphs 36 and 37 of the present report.

2. Hazard communication issues

(a) Labelling of small packagings

Development of guidance and/or examples on the application of the general principles for the labelling of small packagings.

Lead organization: CEFIC

Mandate/Terms of reference: INF.27 and paragraph 45 of the present report.

(b) Improvement of Annexes 1-3 and further rationalization of precautionary statements

(i) Workstream 1: to develop proposals to rationalize and improve the usability of hazard and precautionary statements. These may include proposals to eliminate redundancies among these statements, and proposals for further guidance and precedence rules for use of the statements;

(ii) Workstream 2: to consider giving more freedom to labelling practitioners and/or enforcement authorities in assigning precautionary statements and in the precise wording used in precautionary statements, including to consider whether to address minor linguistic variations in hazard and precautionary statements which do not affect the obvious meaning of these statements and, if appropriate, to develop proposals;

(iii) Workstream 3: to address any other issues relating to Annexes 1-3 and the use of hazard and precautionary statements that the Sub-Committee wishes to refer to the informal correspondence group;

Lead country: United Kingdom

Mandate/Terms of reference: Paragraphs 47 and 48 of the present report.

3. Implementation issues

(a) Assessing the possible development of a list of chemicals classified in accordance with the GHS

Lead country: United States of America

Mandate/Terms of reference: INF.22 and paragraphs 50 to 53 of the present report.

(b) Facilitate the coordinated implementation of the GHS in countries and monitor the status of implementation of the GHS

(c) Cooperate with other bodies or international organizations responsible for the administration of international agreements and conventions dealing with the management of chemicals so as to give effect to the GHS through such instruments

4. Guidance on the application of the GHS criteria

(a) Development of examples illustrating application of criteria and any related hazard communication issues, as needed

Focal point: Informal correspondence group on practical classification issues

Lead country: United States of America

Mandate/Terms of reference: INF.32 and paragraphs 26 and 27 of the present report.

(b) Alignment of guidance in Annex 9 (section A9.7) and Annex 10 of the GHS with the criteria in Chapter 4.1

Lead organization: ICMM

Mandate/Terms of reference: INF.17 and paragraph 62 of the present report.

5. Capacity building

(a) Review reports on training and capacity-building activities;

(b) Provide assistance to United Nations programmes and specialized agencies involved in training and capacity-building activities, such as UNITAR, ILO, FAO and WHO/IPCS through the development of guidance materials, advice with respect to their training programmes and identification of available expertise and resources.