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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 thirtieth session**

held in Geneva from 9 to 11 December 2015

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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 thirtieth session from 9 to 11 December 2015, with Ms. Maureen Ruskin (United States of America) as Chairperson and Mr. Robin Foster (United Kingdom) as Vice-Chairman.
2. Experts from the following countries took part in the session: Argentina, Australia, Belgium, Brazil, Canada, China, Finland, France, Germany, Italy, Japan, Kenya, Netherlands, Norway, Poland, Qatar, Republic of Korea, Russian Federation, South Africa, Sweden, United Kingdom, United States of America and.
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 International Maritime Organization (IMO) and the United Nations Institute for Training and Research (UNITAR) were also present.
5. The following intergovernmental organizations were also represented: European Union and Organization 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); Grain and Feed Trade Association (GAFTA); Industrial Federation Paints and Coats of Mercosul (IFPCM); International Association for Soaps, Detergents and Maintenance Products (AISE); International Bulk Terminals Association (IBTA); International Confederation of Container Reconditioners (ICCR); International Council of Chemical Associations (ICCA); International Paint and Printing Ink Council (IPPIC); International Petroleum Industry Environmental Conservation Association (IPIECA); Institute of Makers of Explosives (IME); Responsible Packaging Management Association of Southern Africa (RPMASA); and Sporting Arms and Ammunition Manufacturers' Institute (SAAMI).

II. Adoption of the agenda (agenda item 1)

Documents: ST/SG/AC.10/C.4/59 and Add.1 (Secretariat)

Informal documents: INF.1, INF.2 and INF.5 (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.33.

III. Joint work with the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) (agenda item 2)

8. The TDG and GHS sub-committees held their first joint session¹ in the afternoon of 9 December with Ms. Maureen Ruskin (Chairperson of the GHS Sub-Committee) as Chair. The report on this joint session is reproduced in annex II). Due to lack of time some issues could not be addressed during the joint session and were considered during the GHS Sub-Committee session as follows:

A. GHS labels in transport on outer packagings not subject to transport of dangerous goods regulations

Document: ST/SG/AC.10/C.4/2015/16 (DGAC)

Informal document: INF.30, issue 12 (Secretariat)

9. The Sub-Committee acknowledged the issue raised by DGAC, but did not support the proposal. Some experts considered that the GHS should continue to allow labelling of the outer packaging, for instance when there is not enough space on the inner container, as this provision allows labelling of small packagings or of soluble laundry detergent capsules for which problems had been reported in some jurisdictions. Also, in some jurisdictions the removal of the options to allow the competent authority to decide could lower existing levels of worker protection. It was noted that the issue raised by DGAC was being addressed differently worldwide.

10. Experts from the Sub-Committee were invited to share with the representative of DGAC information about the measures taken in their countries to address this matter so that he can develop a proposal that would not jeopardise the measures already implemented in other jurisdictions.

B. Classification of crude oil

Informal document: INF.23 and -23/Add.1 (Canada)
INF.30, issue 13 (Secretariat)

11. The Sub-Committee noted the information provided by the expert from Canada as well as the research efforts on classification and testing of several types of crude oil. Experts were invited to exchange technical information on this issue with the expert from Canada who will continue sharing research results with both sub-committees as information becomes available. The representative of IPIECA said that he would provide feedback to the expert from Canada after reviewing the information provided.

¹ See the report of the GHS Sub-Committee on its twenty-ninth session (document ST/SG/AC.10/58, par. 29 and 30)

C. Other issues of interest to the Sub-Committee considered by the TDG Sub-Committee

Informal document: INF.30, issues 17 to 21 (Secretariat)

12. The Sub-Committee noted the information concerning issues 17 to 21 of INF.30. As regards issue 20 “safety data sheets and transport”, the Sub-Committee requested that forthcoming documents on this matter be submitted to both sub-committees.

IV. Classification criteria and related hazard communication (agenda item 3)

A. Dust explosion hazards

Informal documents: INF.22 (United States of America)
INF.31 (Russian Federation)
INF.32 (United States of America)

13. The Sub-Committee noted the outcome of the meeting of the informal correspondence group held on Wednesday 9 December.

14. It was noted in particular that the informal correspondence group had considered workstream 3 of its programme of work and had agreed to address dust explosion hazards as guidance in an annex to the GHS. The annex would be developed on the basis of the “thought-starter” provided by the expert from Germany. It would include definitions and hazard identification criteria and address risk management options, and would provide guidance for harmonized hazard communication for those competent authorities who might wish to require it.

15. As regards the conditions needed to generate a dust explosion, the group agreed that a sufficient concentration of the fuel (dust), the existence of an ignition source, and dispersion in air were necessary. The group also considered a potential definition for “explosive dust atmosphere” and agreed that deflagration without confinement as well as other conditions resulting from confinement should also be taken into account.

16. A draft outline of the annex, which is expected to be circulated to the group by mid-February, will be used as a basis for further discussions within the group.

17. The expert from Argentina reiterated that, in accordance with the mandate given to the group for work stream 3, work at this stage should be focused on defining the conditions under which a dust explosion hazard could be encountered rather than on characterization of a particular substance or mixture.

18. One expert pointed out that the issue raised by Argentina was now covered by the agreements reached by the group during its last meeting.

19. The Sub-Committee noted the information provided by the expert from the Russian Federation in INF.31 in support of the development of guidance addressing dust explosion hazards.

B. Practical classification issues

Informal document: INF.16 (United States of America)

20. The Sub-Committee noted that the informal correspondence group on practical classification issues had examined the items listed in INF.16 and had agreed to the proposals made (in some cases, with additional editorial modifications). An official proposal is expected to be submitted for consideration by the Sub-Committee at its next session. Sub-Committee experts were invited to consider the proposed changes and send any additional comments, if any, to the expert from the United States of America.

21. The expert from the United States of America explained that the informal group had identified two items that could be improved in Chapter 1.5 of the GHS (namely, the cut-off value for compiling a safety data sheet for aspiration hazards in table 1.5.1; and the references to internationally recognized standards in paragraph 1.5.3.3.3). He said that the recommended amendments to Chapter 1.5 of the GHS agreed by the informal working group to address them would be included in the official document to be submitted for consideration by the Sub-Committee at its next session.

22. The Sub-Committee also noted that IPIECA had been invited to provide examples illustrating the impact of diverging interpretations of the GHS classification criteria by different competent authorities on the classification of substances of unknown or variable composition, complex reaction products and biological materials (UVCBs).

C. Aspiration hazard: viscosity criterion for classification of mixtures

Document: ST/SG/AC.10/C.4/2015/8 (IMO)

23. The Sub-Committee invited the expert from Finland, who recognized that some clarification on the issue raised by IMO was needed, to cooperate with IMO and any other interested experts on the development of a proposal.

D. Nanomaterials

Informal documents: INF.20 (France)
INF.30, issue 14 (Secretariat)

24. The Sub-Committee noted that the informal group on nanomaterials, during its meeting on 9 December, had examined the results of a classification exercise for environmental hazards conducted by Finland using data on carbon nanotubes and titanium dioxide and had considered some issues identified by France relating to testing of nanomaterials for physical hazards, and evaluation of the carcinogenic properties of titanium dioxide.

25. The expert from France said that, based on the work undertaken so far, the correspondence group came to the conclusion that GHS criteria can be applied to some extent for classification of nanomaterials and that some technical aspects of the classification might need to be addressed to OECD.

26. Regarding the applicability of test methods for physical hazard characterization of nanomaterials, the expert from France indicated that some shortcomings had been identified, such as the need for a minimum particle size to perform some tests or the impossibility to apply the test conditions to nanomaterials. He considered that these

questions deserved further consideration and said that he would continue to inform both sub-committees of future developments in this respect.

E. Miscellaneous

1. Use of non-animal testing methods for the classification of health hazards

Document: ST/SG/AC.10/C.4/2015/13 (Netherlands and United Kingdom)

Informal document: INF.19 (United States of America)

27. There was general support for reviewing international efforts to non-animal approaches including *in vitro* and *in chemico* test methods for classification. There was also support for discussion on how to incorporate these, considering the limitations and ambiguities identified, in the use of non-animal testing methods for health hazard evaluation in accordance with the GHS.

28. The experts from the Netherlands, the United Kingdom and the United States of America volunteered to work on the terms of reference for the work to be submitted to the Sub-Committee for consideration at its next session. It was recognized that two different approaches might be needed to address the issues raised, i.e:

- evaluation of “read-across” methods; and
- evaluation of *in vitro* and *in chemico* test methods;

29. Several experts suggested that a “pilot” hazard class be selected for evaluation of the test methods and considered that once the evaluation had been completed for this hazard class, the exercise could be extended to other hazard classes.

30. The Chairman of the TDG Sub-Committee urged that the needs for transport of dangerous goods be considered during this work.

2. Classification for floaters

Informal document: INF.3 (IMO)

31. The Sub-Committee noted the information provided by IMO.

V. Hazard communication issues (agenda item 4)

A. Labelling of small packagings

Document: ST/SG/AC.10/C.4/2015/14 (CEFIC)

Informal document: INF.25 (CEFIC)

32. The Sub-Committee noted that the informal group on labelling of small packagings had reviewed the example for fold-out labels in ST/SG/AC.10/C.4/2015/14 during its meeting on 9 December and that a revised proposal would be submitted for the next session. Sub-Committee experts were invited to provide comments on the examples for sets or kits in information document INF.25.

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

1. Application of precautionary statement P502 to explosives

Document: ST/SG/AC.10/C.4/2015/9 (Sweden)

Informal documents: INF.11 (France)
INF.24 (SAAMI)
INF.26 (United States of America)
INF.30, issue 15 (Secretariat)
INF.28 (SAAMI, United States of America, Sweden)

33. The proposal in INF.28 for a new precautionary statement P503 for explosives was adopted without modifications (see annex I). As a consequence, the decision taken by the Sub-Committee at its twenty-ninth session² on this issue is superseded.

2. Amendment of precautionary statement P280 for hearing or ear protection

Document: ST/SG/AC.10/C.4/2015/15 (Sweden)

34. There was general support for option 1. However, some experts considered that a condition for use should be developed to provide guidance on the selection of the appropriate phrases depending on the hazards to be addressed. One other expert suggested that instead of adding further specific protection equipment to the current text of precautionary statement P280, an option with “/...” could be considered. The Sub-Committee invited the expert from Sweden to revise his proposal taking into account the comments made.

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

Informal documents: INF.17 (United Kingdom)
INF.33 (United Kingdom)

35. The Sub-Committee noted the progress report on the work of the informal group on improvement of annexes 1 to 3 of the GHS in INF.33.

C. Miscellaneous

New example for portable tanks and multi-element gas containers

Informal document: INF.15 (DGAC)

36. There was support in principle for the introduction of a new example in Annex 7 of the GHS addressing labelling of portable tanks and multiple element gas containers (MEGCs). However several experts expressed concern about option 2 in paragraph 14 of the document and in particular, about the proposed paragraph 1.4.10.5.5.4 since they considered that some of the statements in that paragraph were either inappropriate or conflicting with existing GHS implementing legislation in some countries or regions.

² Refer to ST/SG/AC.10/58, paragraph 39 and annex

37. The Sub-Committee invited the representative of DGAC to revise the proposal taking account of the comments made on the example.

VI. Implementation of the GHS (agenda item 5)

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

Informal documents: INF.18 (Canada)
INF.21 (United States of America)

38. The informal group on the development of a list of chemicals classified in accordance with the GHS met on 10 December. The expert from the United States of America provided an update on the status of the pilot project on chemical classification, as detailed in INF.21 paragraph 4.

39. The expert from Canada provided information about the resources needed for classifying hazardous chemicals as a part of the review of claims submitted by companies seeking to protect information from disclosure on Safety Data Sheets. It was noted in particular that an average of 13 days of full time work by experts in the field of toxicology and regulatory affairs were required to review one product, with 300-400 reviews conducted per year. The expert from Canada also indicated that in January 2016, Canada will begin classification of hazardous chemicals in accordance with the GHS building blocks adopted in the Canadian Hazardous Products Regulations and that she will report back to the Sub-Committee on this issue.

40. Finally, the representative of OECD delivered a presentation on the IOMC Toolbox for Decision Making in Chemicals Management and the OECD eChemPortal.

B. Reports on the status of implementation

41. The representative of IPIECA invited competent authorities to communicate their plans for national implementation of the GHS and to ensure that deadlines for entry into force of GHS implementing legislation allowed industry sufficient time to prepare for compliance.

C. Cooperation with other bodies or international organizations

42. As no document had been submitted, this sub-item was not discussed.

D. Miscellaneous

43. As no document had been submitted, this sub-item was not discussed.

VII. Development of guidance on the application of GHS criteria (agenda item 6)

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

VIII. Capacity building (agenda item 7)

Informal documents: INF.27 (UNITAR)
INF.29 (RPMASA)

45. The Sub-Committee took note of various projects, capacity-building and awareness raising activities related to the implementation of the GHS conducted between June and December 2015 around the world, as indicated in informal documents INF.27 and INF.29.

46. The representative of UNITAR invited Sub-Committee experts to provide comments on the GHS scheme included in the “IOMC Toolbox for Decision Making in Chemicals Management”, which will remain open for peer review until 31 January 2016.

47. The representative of RPMASA invited experts interested in sharing their experience in GHS implementation, particularly as it regards preparation of GHS compliant safety data sheets and labels, to join the GHS expert database.

48. The expert from South Africa indicated that capacity building activities for regulators continued in her country.

IX. Other business (agenda item 8)

A. Resolution 2015/7 of the Economic and Social Council

Informal document: INF.6 (Secretariat)

49. The Sub-Committee took note of resolution 2015/7 on the work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals adopted by the Economic and Social Council on 8 June 2015.

50. The Sub-Committee noted that pursuant to this resolution, the 6th revised edition of the GHS was available in English, French, Russian and Chinese; the 19th revised edition of the Model Regulations on the Transport of Dangerous Goods and the 6th revised edition of the Manual of Tests and Criteria were available in English, French and Spanish. The remaining linguistic versions should be available by the end of the year.

B. Classification of ammonium nitrate based fertilizers

Informal documents: INF.10 (Sweden)
INF.30, issue 16 (Secretariat)

51. The Sub-Committee was informed about on-going work on the possible revision of the classification of ammonium nitrate based fertilizers. The Chairman of the Working Group on Explosives of the TDG Sub-Committee said that the Group supported this initiative and the expert from the United States of America indicated that she would communicate the comments made by the National Fire Association Protection (NFPA) on the flow-chart included in the Annex to INF.10 to the expert from Sweden.

52. The expert from Sweden invited comments from other interested experts and announced that he intended to submit an official document to the next session of both sub-committees.

C. Organization of the thirty-first session

Informal document: INF.30, issue 22 (Secretariat)

53. Considering that the joint session had been productive, there was general support from both sub-committees for the organization of further joint sessions to address issues of common concern.

54. Regarding the dates for the next session, the Sub-Committee noted that 6 July 2016 would be an official holiday (Eid Al-Fitr) in the United Nations and therefore no secretariat services would be available in that day. Taking into account that the joint session for both sub-committees had been scheduled on that day, the Sub-Committee concurred with the TDG Sub-Committee that the best option would be to hold the joint session on Tuesday 5 July. As meeting rooms could be made available on 6 July 2016 for informal meetings without interpretation services, the Sub-Committee agreed that informal working group meetings should take place on that day. Further details would be communicated by the secretariat at a later stage.

55. The Sub-Committee noted that the deadlines for submission of documents for the July 2016 session is as follows:

- for documents submitted for consideration at the second joint TDG-GHS session: 1 April 2016
- for documents submitted for consideration at the thirty-first session of the GHS Sub-Committee: 12 April 2016

X. Adoption of the report (agenda item 9)

56. In accordance with established practice, the Sub-Committee adopted the report on its thirtieth session on the basis of a draft prepared by the secretariat.

Annex I

Draft amendments to the sixth revised edition of the GHS (ST/SG/AC.10/30/Rev.6)

The amendments in the annex to the report of the Sub-Committee on its twenty-ninth session (ST/SG/AC.10/C.4/58) are withdrawn and replaced by the following amendments:

Annex 3, Section 2, Table A3.2.5

Insert a new entry P503 to read as follows:

Code (1)	Disposal precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P503	Refer to manufacturer/ supplier/... for information on disposal/recovery/recycling	Explosives (Chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4 and 1.5	... Manufacturer/supplier or the competent authority to specify appropriate source of information in accordance with local/regional/national/international regulations as applicable

Consequential amendment

For P501, delete the entry for explosives in columns (3) and (4).

Annex 3, Section 3, matrix tables in A3.3.5

In the tables for Explosives (Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4 and 1.5), replace precautionary statement P501 by the following:

“P503

Refer to manufacturer/supplier/... for information on disposal/recovery/recycling.

Manufacturer/supplier or competent authority to specify appropriate source of information in accordance with local/regional/national/international regulation as applicable.”.

(Reference documents: ST/SG/AC.10/C.4/2015/9 as amended by informal document INF.28)

Annex II

Report of the TDG and GHS sub-committees on their first joint session

1. The TDG and GHS sub-committees held their first joint session³ on 9 December with Ms. Maureen Ruskin (Chairperson of the GHS Sub-Committee) as Chair. During the joint meeting, the sub-committees addressed items A to F below.

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

Document: ST/SG/AC.10/C.4/2015/10 - ST/SG/AC.10/C.3/2015/50
(Chairman Working Group on Explosives)

Informal documents: GHS/INF.13 – TDG/INF.46 (Canada)
GHS/INF.14 – TDG/INF.47 (Canada)
GHS/INF.30, issue 7 (Secretariat)

2. The recommendations for the revision of the Manual proposed by the Working Group on Explosives of the TDG Sub-Committee were endorsed. These include the proposals in the bulleted list under issue 7 of INF.30 as well as those made by Canada in informal documents INF.13 and INF.14.

3. Experts from both sub-committees were invited to submit comments on all the proposals made so far to the Chair of the Working Group on Explosives so that they can be considered by the Group when preparing revised proposals for submission to both sub-committees. It was noted that the Group expected to complete the work on this issue during the current biennium of work.

B. Classification and hazard communication for flammable gases

Informal documents: GHS/INF.4 – TDG/INF.15 (Belgium, Japan)
INF.7 (Belgium, Japan)
GHS/INF.8 – TDG/INF.26 (Germany, CEFIC, EIGA)
GHS/INF.12 – TDG/INF.43 (CEFIC)
GHS/INF.30, issue 10 (Secretariat)

4. There was full support for the criteria in option 3 in INF.4 (i.e. allowing for sub-categorization of current category 1 into category 1A and 1B, with category 1B addressing gases with a lower flammability limit greater than 6% or a fundamental burning velocity less than 10 cm/s). It was noted that the new sub-category 1B would allow the classification of gases and gas mixtures with a lower burning velocity developed by the refrigeration and foam plastics industries following the phasing down of high global warming potential substances. It was also noted that the criteria in option 3 would not entail any change in classification for transport purposes.

5. As regards the proposed hazard communication elements in INF.7, there was no support for the proposed hazard statement for category 2 “combustible gas” on the grounds that it was a completely new and undefined term. In addition, some experts considered that

³ See the report of the GHS Sub-Committee on its twenty-ninth session (document ST/SG/AC.10/58, par. 29 and 30)

the current signal word and hazard statement (warning/flammable gas) for this category was appropriate. For categories 1A and 1B, views were divided and agreement either on the signal word or on the hazard statement could not be reached. Several experts considered that the proposed hazard statement for sub-category 1B did not properly convey the hazard and suggested using “highly flammable gas” instead. Others were concerned that using “extremely flammable” for category 1A and “highly flammable” for category 1B did not reflect the lower hazard for 1B gases. Finally, some experts were of the opinion that flammability of category 1B gases being significant, the signal word “danger” should be used.

6. Views were also divided as regards the alternative classification proposal in INF.8. Some experts considered that it was out of the scope agreed by both sub-committees for the revision of the classification criteria (i.e. sub-categorization within category 1, with category 2 unchanged). They also noted that the proposed extension of Division 2.1 to cover all gases with a flammable range (i.e. GHS category 1 and category 2 gases) could entail changes to current transport provisions and considered that the need for and the impact (including the regulatory impact) of such changes for all sectors and downstream users needed to be carefully evaluated before an informed decision could be taken. Others on the contrary showed sympathy for the proposal since they considered that it provided simplified criteria for classification of all flammable gases (including chemically unstable and pyrophoric gases) without further sub-dividing a hazard class for which two additional sub-categories already existed.

7. After some discussion, it was agreed that both proposals should continue to be developed in parallel:

- The informal working group led by Belgium and Japan was invited to further develop the proposal for hazard communication elements for the agreed option 3 in INF.4 taking account of the comments made; and
- The authors of INF.8 together with any other interested experts were invited to continue working on the proposal, to include the consequential amendments to current provisions in the GHS and in the Model Regulations and to provide a detailed impact assessment on the consequences and benefits of the proposed changes.

8. Both proposals should be submitted to the sub-committees for consideration.

C. Revision of Chapter 2.1 of the GHS

Informal documents: GHS/INF.9 – TDG/INF.32 (Sweden)
GHS/INF.30, issue 8 (Secretariat)

9. It was noted that work on the revision of Chapter 2.1 of the GHS continued, that the principles listed in paragraph 6 of INF.9 had received support from the Working Group on Explosives of the TDG Sub-Committee and that a draft revised text for the notes under the tables in Chapter 2.1 had been circulated within the group for comments.

10. It was also noted that some complementary work had been identified but that priority would be given to the work on the three workstreams listed in paragraph 6 of INF.13⁴, as agreed by the Sub-Committee at its 29th session.

⁴ <http://www.unece.org/fileadmin/DAM/trans/doc/2015/dgac10c4/UN-SCEGHS-29-INF13.pdf>

11. Work on the workstreams identified in INF.13 is expected to be completed during the current biennium.

D. Test and criteria for oxidizing liquids (Test O.2) and oxidizing solids (Test O.3)

Document: ST/SG/AC.10/C.4/2015/12 - ST/SG/AC.10/C.3/2015/49 (France)

Informal document: GHS/INF.30, issue 9 (Secretariat)

12. It was noted that the Round Robin test for oxidizing liquids had already been completed with participation of 11 laboratories from 7 countries. As a result, two grades of cellulose had been provisionally retained as suitable replacements for the reference cellulose currently required for tests O.2 and O.3. It was also noted that the Round Robin Test for oxidizing solids had been launched in September with participation of 13 laboratories from 9 countries and that test results were being collected.

13. The expert from France indicated that a proposal for the replacement of the reference cellulose could be expected as defined by the mandate for this work. Other improvements of the test procedures, if any, would be submitted separately.

E. Prohibition in transport of non-transport GHS pictograms when not in a complete GHS label

Document: ST/SG/AC.10/C.4/2015/11 - ST/SG/AC.10/C.3/2015/54 (DGAC)

Informal document: GHS/INF.30, issue 11 (Secretariat)

14. It was noted that the TDG Sub-Committee had agreed to introduce a NOTE at the end of paragraph 5.1.1.2 in the Model Regulations to prevent the use in transport of stand-alone GHS pictograms not required by the Model Regulations on the transport on dangerous goods.

F. Corrosivity criteria

Informal document: GHS/INF.30, issue 21 (Secretariat)

15. It was noted that work on corrosivity criteria (revision of Chapter 2.8 of the Model Regulations) continued within the TDG Sub-Committee to study the possibility of using, instead of criteria based on testing, new approaches for the assignment of packing groups based on the additivity approach, bridging principles and extreme pH.

16. The Chairman of the TDG Sub-Committee indicated that the TDG Sub-Committee had reconfirmed its commitment to consider GHS non-test methods (extreme pH, bridging principles, and additivity) for corrosivity to the extent those methods could provide the level of precision necessary to determine a packing group for transport. The TDG Sub-Committee agreed that CEFIC and AISE further develop a proposal including the additivity method as a priority based on informal document INF.20 (submitted to the 48th session of the TDG Sub-Committee)⁵.

⁵ <http://www.unece.org/fileadmin/DAM/trans/doc/2015/dgac10c3/UN-SCETDG-48-INF20.pdf>