



**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 Transport of Dangerous Goods

**Report of the Sub-Committee of Experts on the Transport of
Dangerous Goods on its thirty-eighth session**

held in Geneva from 29 November–7 December 2010

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Report

I. Attendance

1. The Sub-Committee of Experts on the Transport of Dangerous Goods held its thirty-eighth session from 29 November to 7 December 2010.
2. Experts from the following countries took part in this session: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Finland, France, Germany, Italy, Japan, Kenya, Netherlands, Norway, Republic of Korea, Russian Federation, South Africa, Spain, Sweden, Switzerland, United Kingdom and United States of America.
3. Under rule 72 of the rules of procedure of the Economic and Social Council, observers from Romania also took part.
4. The European Union and the Intergovernmental Organisation for International Carriage by Rail (OTIF) were also represented.
5. Representatives of the International Atomic Energy Agency (IAEA), the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO) and the World Health Organization (WHO) were also present.
6. Representatives of the following non-governmental organizations took part in the discussion of items of concern to their organizations: American Biological Safety Association (ABSA); Association of Hazmat Shippers, Inc. (AHS); Compressed Gas Association (CGA); Council on Safe Transportation of Hazardous Articles (COSTHA); Dangerous Goods Advisory Council (DGAC); European Cosmetic, Toiletry and Perfumery Association (COLIPA); European Industrial Gases Association (EIGA); European Metal Packaging (EMPAC); Federation of European Aerosol Associations (FEA); Fuel Cell and Hydrogen Energy Association (FCHEA); International Air Transport Association (IATA); International Association for Soaps, Detergents and Maintenance Products (AISE); International Association for the Promotion and Management of Portable Rechargeable Batteries (RECHARGE); International Confederation of Drum Manufacturers (ICDM); International Confederation of Intermediate Bulk Container Associations (ICIBCA); International Confederation of Plastics Packaging Manufacturers (ICPP); International Council of Chemical Associations (ICCA); International Dangerous Goods and Containers Association (IDGCA); International Federation of Airline Pilots' Associations (IFALPA); International Fibre Drum Institute (IFDI); International Paint and Printing Ink Council (IPPIC); KiloFarad International (KFI); Portable Rechargeable Battery Association (PRBA); Responsible Packaging Management Association of Southern Africa (RPMASA); Sporting Arms and Ammunition Manufacturers' Institute (SAAMI); and World Nuclear Transport Institute (WNTI).
7. The Sub-Committee noted that, pursuant to a decision of the Economic and Social Council of 25 October 2010, the Republic of Korea had become a full member of the Sub-Committee.

II. Adoption of the agenda (agenda item 1)

Documents: ST/SG/AC.10/C.3/75 (Provisional agenda)
ST/SG/AC.10/C.3/75/Add.1 (List of documents)

Informal documents: INF.1, INF.2/Rev.1 (List of documents)
INF.5/Rev.1 (Provisional timetable)

8. The Sub-Committee adopted the provisional agenda prepared by the secretariat after amending it to take account of informal documents (INF.1 to INF.58).

III. Recommendations made by the Sub-Committee at its thirty-fifth, thirty-sixth and thirty-seventh sessions (agenda item 2)

Document: ST/SG/AC.10/C.3/2010/50 (Secretariat)

9. The Sub-Committee confirmed the decisions taken at previous sessions, on the basis of the consolidated text prepared by the secretariat, subject to the new decisions taken in respect of the various agenda items of the current session which could affect the list of amendments (see annex).

IV. Explosives and related matters (agenda item 3)

A. Dangerous goods of Division 1.4, Compatibility Group S

1. Proper shipping name of cartridges, blank, for tools under Division 1.4, Compatibility Group S

Document: ST/SG/AC.10/C.3/2010/51 (SAAMI)

10. The Sub-Committee noted that the proposal by SAAMI followed up on the conclusions of the Working Group on Explosives regarding proposal A in document ST/SG/AC.10/C.3/2010/18 from the last session. According to those conclusions, the proposal by SAAMI could be adopted pending consultations on issues other than transport (see the report of the Working Group in informal document INF.73 of the thirty-seventh session).

11. The Sub-Committee adopted the proposal by SAAMI in its original form (proposal A in document ST/SG/AC.10/C.3/2010/18) (see annex).

2. Questions pending relating to goods under Division 1.4, Compatibility Group S

Document: ST/SG/AC.10/C.3/2010/50 (Secretariat)

12. The Sub-Committee confirmed its acceptance of the limited quantities regime for UN numbers 0012, 0014 and 0055, and thus the related amendments to those three numbers, which had been placed in square brackets.

B. Changes to screening test for substances that may have explosive properties

Document: ST/SG/AC.10/C.3/2010/60 (Japan and ICCA)

13. A few delegations were not in favour of selecting just one method, differential scanning calorimetry (DSC), to determine thermal stability and exothermic decomposition energy.

14. The Sub-Committee agreed that the question could be included in the programme of work for the next biennium of the Working Group on Explosives.

V. Listing, classification and packing (agenda item 4)

A. Gas

1. Materials compatibility requirements for gases in pressure receptacles

Document: ST/SG/AC.10/C.3/2010/45 (ISO)

15. The proposals for the amendment of Tables 2 and 3 of packing instruction P200 were adopted (see annex).

16. The Sub-Committee also noted the information about the compatibility of chlorinated hydrocarbon solvents with aluminium gas cylinders.

2. Approval of acetylene cylinders

Document: ST/SG/AC.10/C.3/2010/65 (Germany)

17. Most experts considered that the current wording of paragraph 6.2.1.1.9 was satisfactory and were not in favour of the proposed amendments. The expert from Germany said that she would look into the question further to see whether follow-up was required.

3. New type of confetti-shooters

Document: ST/SG/AC.10/C.3/2010/64 (Germany)

Informal documents: INF.18 (Germany)
INF.25 (Sweden)
INF.41 (Germany)
INF.43 (China)

18. Germany's proposal to introduce a new entry for articles containing pressurized receptacles such as confetti-shooters gave rise to many comments. Further to those comments, the expert from Germany withdrew her proposal and requested delegations to submit their comments in writing so that she could prepare a new proposal.

B. Classification of Class 3 viscous liquids in packing group III

Document: ST/SG/AC.10/C.3/2010/46 (IATA)

Informal document: INF.6 (IPPIC)

19. The Sub-Committee noted that there was some deviation between paragraphs 2.3.2.2 and 2.3.2.3 of the Model Regulations and paragraphs 32.3.1.7 and 32.4.2 of the Manual of Tests and Criteria, in respect of the classification of flammable viscous liquids in packing group III. Opinions were divided regarding an appropriate solution, as some experts considered that the provisions regarding exemption that were in the Manual should instead be in the Model Regulations.

20. In the end it was decided that the problem did not require an immediate response and that it would be submitted to a correspondence group led by IATA, which could submit proposals at the next session.

C. Special provision 272

Document: ST/SG/AC.10/C.3/2010/49 (Germany)

21. The Sub-Committee adopted the proposal to correct special provision 272, with some amendments (see annex).

D. Organic peroxides

Document: ST/SG/AC.10/C.3/2010/53 (ICCA)

22. The Sub-Committee adopted the proposed amendments to the table of 2.5.3.2.4 and packing instruction IBC520 (see annex).

23. The expert from the United Kingdom pointed out that the use of lower case characters, upper case characters, square brackets and asterisks to refer to a new organic peroxide could cause confusion, as square brackets, lower case characters, upper case characters and asterisks usually had a specific meaning in texts.

24. A member of the secretariat pointed out that in the case in question a very complex molecule was involved. The proposed name was apparently in conformity with the rules of chemical nomenclature, by which such lower case characters, upper case characters, square brackets and asterisks did have a particular meaning, especially in the case of complex heterocycles, as they identified isomers and described the configuration of a molecule.

E. Use of flexible IBCs for calcium peroxide (UN No. 1457)

Document: ST/SG/AC.10/C.3/2010/55 (ICCA)

25. Some experts were not in favour of authorizing flexible IBCs to transport calcium peroxide, especially because of possible interference between the product and the packing material, as there would be a risk, in humid conditions, of hydrolysis setting off an explosive reaction. It was also suggested that the issue should be taken up within the framework of the guiding principles for the development of packing instructions.

26. Others pointed out that calcium peroxide could be transported in fibreboard boxes of up to 400 kg. They did not, therefore, understand the arguments made against the proposal, which they supported.

27. The proposal, put to the vote, was not adopted. ICCA would perhaps take up the issue again in the light of the comments made.

F. Amendment to special provision 296 for UN No. 2990 and UN No. 3072 (life-saving appliances, self-inflating and not self-inflating)

Document: ST/SG/AC.10/C.3/2010/56 (United Kingdom and EIGA)

28. The proposal to amend special provision 296 by incorporating wording in it comparable to the wording of special provision 956 of the IMDG Code was adopted, bringing, however, the maximum mass per package to 40 kg instead of the proposed 30 kg (see annex). A proposal by the expert from Norway to refrain from setting a mass limit was not carried.

G. Outer packagings with non-removable heads for combination packagings

Document: ST/SG/AC.10/C.3/2010/66 (Germany)

29. The proposal was to add external packagings with non-removable heads as authorized outer packagings when the same outer packaging was authorized with a removable head. The proposal was adopted, but the secretariat was requested to set out an exhaustive and precise list of all amendments to be made (see annex).

H. UN No. 2381: Dimethyl disulphide

Document: ST/SG/AC.10/C.3/2010/67 (Germany)

30. The proposal for the addition of subsidiary risk 6.1 for the substance and corresponding amendment of the portable tank instructions was adopted with a transitional measure to allow instruction T4 to be used until 31 December 2018 (see annex).

I. New entries for environmentally hazardous paints and printing inks

Informal document: INF.9 (IPPIC)

31. The Sub-Committee noted that IPPIC intended in the next biennium to propose new entries for environmentally hazardous paints and printing inks.

32. The expert from the United Kingdom wished to discuss in more general terms both entries in Class 9, UN Nos. 3077 and 3082, including the possibility of simplifying technical names, using codes or even not assigning to them special provision 274. In that regard, a member of the secretariat recalled that the legal framework for maritime transport, namely annex III to the MARPOL Convention currently required the technical name of the pollutants to be indicated in the transport document for such products.

J. Used health care products

Document: ST/SG/AC.10/C.3/2010/61 (Switzerland)
ST/SG/AC.10/C.3/2010/73 (COSTHA)

Informal documents: INF.37 (Secretariat)
INF. 52 (Switzerland, report of the lunchtime working group)

33. After long discussions in plenary session, the documents were referred to a lunchtime working group. The Sub-Committee adopted a new paragraph 2.6.3.2.3.7 containing the conditions for exemption of used health care products (see annex).

K. UN No. 2809, Mercury

Document: ST/SG/AC.10/C.3/2010/63 (ICAO)

Informal documents: INF.15 (United Kingdom)
INF.44 (United States of America)
INF.51 (Canada)

34. In ST/SG/AC.10/C.3/2010/63, ICAO drew attention of the Sub-Committee to the operational implications, for air transport, of the Sub-Committee's decision to assign a

subsidiary risk of Division 6.1 to mercury, in particular limitation on stowage and segregation of these articles on board passenger aircrafts.

35. In informal document INF.44, the expert from the United States of America questioned the data provided by the expert from Germany which had led to this assignment and proposed to revert back to the decision. There were differences of opinion on the interpretation of the test data. This proposal, put to the vote, was not adopted.

36. Finally, a compromise solution was found in INF.51 on the basis of the United Kingdom and Canada proposals (INF.15) to assign a specific UN number to mercury contained in manufactured articles, whereby such articles would be assigned Division 6.1 subsidiary risk. Articles containing not more than 15 g mercury would be exempted for air transport, those containing less than 1 kg mercury would be exempted for other modes. Those containing not more than 5 kg mercury could be carried under the limited quantity provisions (see annex).

L. Portable tank provisions for chemicals under pressure

Document: ST/SG/AC.10/C.3/2010/54 (ICCA)

Informal documents: INF.14 (Secretariat, French translation)
INF.42 (ICCA)
INF.56 (ICCA)

37. The Sub-Committee adopted new provisions for the carriage of chemicals under pressure in tanks based on the proposals in informal document INF.56 (see annex).

VI. Electric storage systems (agenda item 5)

A. Testing of lithium batteries and cells

1. Proposals by the informal working group

Document: ST/SG/AC.10/C.3/2010/81 (France and PRBA, proposals drawn up by the informal working group)

Informal documents: INF.30 (PRBA)
INF.35 (China)
INF.50 (PRBA)

38. The Sub-Committee adopted the proposals by the informal working group concerning subsection 38.3 of the Manual of Tests and Criteria, subject to editorial changes to 38.3.4.5 (Test T.5: External short circuit) (see annex). The term “no mass loss” was also deleted each time it had been placed in square brackets, as it was covered by the term “no leakage”, since the definition of “leakage” included mass loss.

39. As for the proposal by PRBA (INF.30) to reduce the mass limit for distinguishing between large and small cells from 500 g to 150 g, the Sub-Committee considered that the decision could not be taken until PRBA presented convincing information on some twenty various types of commonly used cells, establishing a relationship between the cell’s mass and current criteria in terms of capacity.

40. As for the proposal by China (INF.35) to apply the impact test (and not the crush test) under Test T.6 to all cylindrical cells (instead of those with a diameter exceeding 20 mm), it was explained that conducting such an impact test on thin cylindrical cells was not

practical. The expert from China then asked that the diameter be reduced from 20 mm to 18.0 mm, as the usual diameter of cells in portable computers was 18.0 mm.

41. Some delegations shared this view that these arguments seemed acceptable, but the experts had not had the opportunity to verify it prior to the session. The Sub-Committee therefore agreed to take up the question at the next session. It was recalled that the provisions adopted at the current session would not be reflected in the international regulations until 2013, and that it would thus be possible to adjust the text if necessary.

42. Following discussions on informal document INF.30, the representative of PRBA presented additional information on the relationship between the watt-hour rating, grams of lithium, and gross mass of cells in the market place for fourteen types of cells. He proposed to maintain, for the time-being, the current definitions for small cell and large cell in place of using 12 g and 150 Wh until further consultation with industry and participants in the working group. This proposal, put to the vote, was not adopted.

2. Test T.4 for large lithium batteries and lithium battery assemblies

Document: ST/SG/AC.10/C.3/2010/72 (COSTHA)

43. Most of the experts considered that the amendments proposed by COSTHA to Test T.4, in particular the reduction of the acceleration value from 50 g_n to 9 g_n in 38.3.4.4.2, called for more justification and discussion.

44. The question could be discussed during the next biennium if industry provided further elements arguing in favour of changing the current procedure.

B. Quality management programme for the manufacture of lithium cells and batteries

Document: ST/SG/AC.10/C.3/2010/80 (France)

Informal document: INF.21 (United States of America)

45. The Sub-Committee adopted the proposal by France to introduce quality management programme requirements for the manufacture of lithium cells and batteries, subject to the following.

46. The provisions were to be placed in a new section 2.9.4, which could be supplemented later to group other provisions relating to lithium cells and batteries.

47. Paragraph (e) (i) would specify that it related to the responsibilities of the staff in charge of product design and quality.

48. The representative of PRBA requested that paragraph (e) (iii) regarding process controls be deleted, in particular because it was difficult to detect internal short circuits in battery assemblies. That proposal was not carried, but it was specified that the subject of the provision was process controls for the manufacture of cells (see annex). The Chairman further recalled that internal short circuit tests had been identified as one of the two fields in which additional improvements could be made, and said that cooperation with IEC could be envisaged (see ST/SG/AC.10/C.3/2010/81, para. 5 (b)).

49. For paragraph (e) (iv), it was specified that the test data was to be saved, and communicated to the competent authority upon request. In the absence of information on the validity of the approval or the service life of the cells themselves, no time limit was set for how long the data should be saved.

50. As for the question of how to mark the batteries to make it possible to verify that they met the requirements, it was decided to return to that question during the next biennium, should the expert from the United States of America intend to follow up on the proposal made in informal document INF.21.

C. Electric Double Layer Capacitors (Ultracapacitors)

1. Special provision 361

Document: ST/SG/AC.10/C.3/2010/76 (KFI)

51. The amendment proposed to paragraph (d) of special provision 361 was adopted, as amended by the expert from Germany with the agreement of the KFI representative (see annex).

2. New proper shipping name for lithium ion capacitors

Informal documents: INF.10 (Japan)
INF.33 (France)

52. The expert from Japan said he intended at the next session to submit a proposal for a new entry for lithium ion capacitors. He invited delegations to send him their comments on the draft contained in informal document INF.10.

53. The expert from France said that there were other kinds of ultracapacitors which could only be transported charged, for example nickel-carbon capacitors, and proposed amending special provision 361 to specify that such capacitors should not be transported under UN No. 3499.

54. The Sub-Committee agreed to add a NOTE at the end of special provision 361 indicating that capacitors which, by design, maintained voltage at their terminals would not be covered by UN No. 3499 (see annex).

55. The Sub-Committee adopted the proposal by Japan to include the question in its programme of work (see also paragraph 116 (c)).

D. Transport of waste lithium batteries and damaged/defective lithium batteries

Informal document: INF.22 (PRBA, RECHARGE, EBRA and Germany)

56. The Sub-Committee agreed that the subject should be included in its programme of work for the next biennium. RECHARGE set up a correspondence group, and would organize a new workshop around the end of March 2011.

E. Packagings for large lithium batteries

1. Packaging for prototype and low production lithium batteries (special provision 310)

Document: ST/SG/AC.10/C.3/2010/74 (PRBA)

Informal documents: INF.45 (PRBA)

57. Some experts expressed concern at the proposal to add “annually” in association with low production runs and the packaging provisions for large lithium ion and lithium metal batteries exceeding 12 kg. The representative of PRBA submitted a revised proposal in INF.45 to take account of the comments made, but several experts felt that this subject

needed further discussion. The representative of PRBA withdrew his proposal and said that he would prepare a new one.

2. Addition of a packing instruction LP903 for large packagings

Document: ST/SG/AC.10/C.3/2010/75 (PRBA)

58. The representative of PRBA withdrew his proposal.

VII. Miscellaneous proposals of amendments to the Model Regulations on the Transport of Dangerous Goods (agenda item 6)

A. Packages containing carbon dioxide, solid

Document: ST/SG/AC.10/C.3/2010/84 (IATA)

Informal document: INF.13 (Netherlands)

59. Most of the experts considered that the IATA proposal would go too far in countering the decisions taken previously regarding new section 5.5.3 and packing instructions P650 and P904.

60. It was noted that IATA considered that additional requirements, in particular for marking and labelling, were needed for the carriage of packages containing dry ice used as a refrigerant. However, the Sub-Committee decided for the time being to wait and see how the new provisions would be transposed into the various modal regulations before casting doubt on them. If additional measures would be required for air transport, it would be necessary to ensure that they would be compatible with those applicable to the other modes of transport.

61. The Sub-Committee adopted the amendments proposed in informal document INF.13 for the additional requirements for packing instructions P650 and P904, with some adjustments (see annex).

B. Packaging with a capacity exceeding 450 litres

Informal document: INF.19 (Austria and Germany)

62. The Sub-Committee agreed to take up the issue of such packagings in the next biennium. It was recalled, however, that under 6.1.1.1, packagings exceeding 450 litres did not fall within the scope of Chapter 6.1. It was therefore necessary to discuss whether to introduce provisions to Chapter 6.6 for large packagings or to amend Chapter 6.1.

C. Use of the term “conveyance” in special provisions 289 and 356

Document: ST/SG/AC.10/C.3/2010/47 (IATA)

63. The proposed amendment of special provisions 289 and 356 so as to avoid the use of the term “conveyance” was adopted with some changes (see annex). It was noted that, as defined in 1.2.1, that term could not be used in a systematic manner in the Model Regulations in every sense in which it might be understood. Use of the term, as defined, also raised problems with the modal regulations. However, as the definition came from the IAEA regulations and the term was used for the transport of radioactive material, it was considered preferable not to change the definition.

D. Marks and labels

1. Stacking symbol

Document: ST/SG/AC.10/C.3/2010/59 (Sweden)

64. This document was intended to clarify the interpretation of paragraphs 6.5.2.2.2 and 6.6.3.3 as regards the minimum dimensions of the stacking symbol, pursuant to discussions that took place at the last session (ST/SG/AC.10/C.3/74, paras. 65-68).

65. Following explanations by the representative of ICCP on the industry practices in this respect, the Sub-Committee considered that the word “symbol” in 6.5.2.2.2 and 6.6.3.3 included the virtual square frame, and as a consequence the minimum dimensions of 100 mm x 100 mm required in the Model Regulations are those of this virtual frame. The symbol itself is reduced in the proportions to be deducted from the figure.

66. The proposal of Sweden to clarify the meaning of these minimum dimensions on the figure itself was adopted (see annex).

2. Description of the dimensions and shape of labels or marks

Document: ST/SG/AC.10/C.3/2010/62 (United Kingdom)

67. The Sub-Committee accepted the offer of the expert from the United Kingdom to prepare a proposal for a review of provisions dealing with marks and labels for the purpose of better describing their shapes and dimensions. This work would be carried out in the next biennium.

3. Permissive use of the environmentally hazardous substance mark

Document: ST/SG/AC.10/C.3/2010/52 (DGAC)

68. This document was withdrawn by the representative of DGAC.

E. Prevention of dangerous electrostatic discharge

Document: ST/SG/AC.10/C.3/2010/68 (Germany)

69. After a general discussion which showed that there was not much support for this proposal, the expert from Germany withdrew it.

F. “De minimis” quantities of dangerous goods

Document: ST/SG/AC.10/C.3/2010/79 (Norway)

70. After discussion, the expert from Norway said that he withdrew his proposal for the time-being and that he might raise the issue again in the next biennium.

G. Technical (pathogen) name requirements for Category A infectious substances

Document: ST/SG/AC.10/C.3/2010/48 (IATA)

71. The proposal to amend special provision 318 did not receive any support.

H. Flexible bulk containers

Documents: ST/SG/AC.10/C.3/2010/58 (IDGCA)
ST/SG/AC.10/C.3/2010/82 (Chairman of the correspondence working group)

Informal documents: INF.8 (IDGCA)
INF.47 (Report of the working group)

72. As agreed at the previous session, the proposal for inclusion of new provisions for flexible bulk containers was discussed first by a working group which met in parallel from 29 to 30 November 2010 under the chairmanship of the Sub-Committee's vice-chairman.

73. Before discussing the report of the working group, some experts said that they were opposed to the introduction of such new provisions at this stage. They felt that such bulk containers were not suitable for carriage by road as they would cause problems of vehicle stability. They also felt that such carriage could be performed under bilateral and multilateral agreements between the countries concerned and the provisions could be introduced at a later stage when experience has been gained with such transport.

74. Other experts did not share this view. It was recalled that such flexible bulk containers were already carried internationally under special agreements, and it was felt that the time had come to include provisions in the Model Regulations. Even if modal organizations decided not to integrate them in their regulations immediately, these provisions would provide guidance to governments for ensuring safety and harmonization.

75. The Sub-Committee agreed to include such provisions in the Model Regulations, and it was underlined that the modal specific aspects would remain to be discussed by modal organizations or national authorities as appropriate.

76. The Sub-Committee discussed the text proposed by the working group and decided as follows.

77. The period of use should be limited to two years, and no reference should be made in 4.3.1.16.1 to a possibility of extension under competent authority approval. If provisions for extended use had to be included, they should be accompanied with periodic test or inspection provisions.

78. If a venting device had to be fitted to prevent accumulation of gases, it should be designed to prevent penetration of foreign substances.

79. The transport of goods of Division 4.3 should not be allowed.

80. Stacking during rail or road transport should not be allowed but could be envisaged and discussed for transport by sea or inland waterways by the relevant rule-making organizations.

81. A NOTE should be added after 7.1.1.11 drawing attention to NOTE 2 to 7.1.1.10 for precautions to be taken for loading flexible bulk containers in cargo transport units.

82. Upon completion of the review of the report of the working group, the text, as modified, was put to the vote and adopted, on the understanding that it would remain subject to improvements during the next biennium (see annex).

I. Updating of references to ISO standards

Document: ST/SG/AC.10/C.3/2010/83 (secretariat)

83. The proposal intended to reflect decisions already taken for the GHS was adopted (see annex).

J. Correction to 6.5.6.2.1

Informal document: INF.23 (secretariat)

84. The correction proposed was adopted (see annex).

K. Portable tanks and MEGCs

1. Transitional arrangements for portable tanks intended for the transport of liquids

Informal document: INF.28 (United Kingdom)

85. The Sub-Committee accepted the proposal to discuss transitional arrangements for portable tanks in the next biennium.

2. Dynamic longitudinal impact testing of MEGCs

Informal document: INF.31 (Germany)

86. The Sub-Committee confirmed the amendments to section 41.2.2 of the Manual of Tests and Criteria which had been placed between square brackets in the list of amendments of document ST/SG/AC.10/C.3/2010/50, and agreed to add the NOTE proposed by the expert from Germany in INF.31.

3. Closing of service equipment and closures in using portable tanks

Informal document: INF.36 (Belgium)

87. In this document, the expert from Belgium sought clarification as to whether all closures and service equipment have to be closed during transport. Since some service equipment may have to remain open, the expert from Belgium said that he would prepare a proposal for clarification in the next biennium.

L. Aerosols (UN 1950): Maximum volume of the liquid phase at 50 °C

Document: ST/SG/AC.10/C.3/2010/44 (FEA)

88. The Sub-Committee noted that the latest modification of the European Aerosol Dispensers Directive 75/324/EEC (Directive 2008/47/EC) included a more stringent requirement for the maximum volume of the liquid phase at 50 °C which must not exceed 90 % of the net capacity of the aerosol container, instead of 95 % in the previous version. FEA proposed to update the requirements of 6.2.4.2.1.1 and 6.2.4.2.2.2 accordingly.

89. Non-European members of the Sub-Committee were reluctant to proceed with such an amendment without having been provided with appropriate technical justification. It was also noted that this directive had to be complied with for placing aerosol dispensers on the market in the European Union, but retaining the provisions in the Model Regulations would neither impede international transport of aerosol dispensers meeting the provisions of this Directive nor affect other countries for their domestic traffic or international transport outside the European Union, since the European Union Directive is more stringent.

90. The representative of FEA said that he would prepare a new proposal in the next biennium with appropriate justification.

VIII. Electronic data interchange (EDI) for documentation purposes (agenda item 7)

Informal document: INF.34 (IATA)

91. The Sub-Committee took note with interest of the progress of the IATA pilot project on e-freight for dangerous goods.

92. The Chairman drew attention to the activities of the RID/ADR/ADN Joint Meeting concerning telematics, and in particular informal document INF.11 submitted at the September 2010 session of the Joint Meeting summarizing the important information for the carriage of dangerous goods that can be provided by means of telematics applications.

IX. Cooperation with the International Atomic Energy Agency (IAEA) (agenda item 8)

A. Security in transport of radioactive material

Document: ST/SG/AC.10/C.3/2010/77 (IAEA)

Informal documents: INF.4 (IATA)
INF.58 (Report of the lunchtime working group)

93. The Sub-Committee noted that, following discussion of the IAEA proposal to apply the provisions of the IAEA Guidance for the security in transport of radioactive material to all dangerous goods at the last session, the IAEA proposed to apply some of these provisions to radioactive material only. Most experts considered that it was not realistic to expect implementation of most of such provisions in international transport. It was agreed to refer the examination of the IAEA proposal to a lunchtime working group that would consider, on the basis of the provisions accepted at the last session, whether new specific provisions could be introduced for radioactive material.

94. On the basis of the report of the working group, the Sub-Committee agreed to add a new 1.4.1.4 exempting excepted packages of UN Nos. 2908 and 2909, excepted packages of UN Nos. 2910 and 2911 with an activity level not exceeding the A_2 value, and LSA-I and SCO-I radioactive material from the application of security provisions of Chapter 1.4.

B. Excepted packages for uranium hexafluoride with less than 0.1 kg UF₆ per package

Document: ST/SG/AC.10/C.3/2010/78 (IAEA)

Informal document: INF.29 (Sweden)

95. The Sub-Committee noted the request of IAEA to create a new entry for Uranium Hexafluoride in excepted package, with less than 0.1 kg uranium hexafluoride per package, in class 7 with a subsidiary risk of class 8. However, since IAEA did not propose to include the corresponding transport conditions in the next edition of the Model Regulations, as these had not yet been approved, the Sub-Committee felt that it was premature to reserve a UN number for this entry. A new UN number could be communicated to IAEA once a final

decision has been taken by IAEA. In this respect, several experts noted that, in view of the chemical hazards of this substance, the assignment of a toxic by inhalation subsidiary risk should also be considered, and that packing instruction P002 proposed by IAEA was not appropriate since the corrosivity hazard should rather lead to Packing Instruction P800.

C. Proposed terms of reference for a Joint Group

Document: ST/SG/AC.10/C.3/2010/88 (IAEA)

Informal documents: INF.11 (IAEA)
INF.12 (IAEA)

96. The Sub-Committee agreed that efficient cooperation had to be maintained to ensure harmonization, but most experts felt that the proposal by IAEA would lead to the creation of a kind of steering group rather than a true joint meeting of IAEA and United Nations experts.

97. For provisions of the Model Regulations qualified as Category D by IAEA, i.e. general transport provisions applicable to all dangerous goods, it was recalled that the IAEA, as all other international organizations, had the possibility to express its views on all proposals submitted to the Sub-Committee, as well as on all decisions taken by the Sub-Committee before they were finally adopted at the end of a biennium. It was suggested that IAEA should develop a mechanism to provide feedback to the Sub-Committee on such general provisions.

98. For provisions qualified as Category A, it was recalled that all requirements which affect only radioactive material were systematically transposed into the Model Regulations without discussion on the basis of IAEA and United Nations Economic Commission for Europe secretariat proposals.

99. For provisions qualified as Category B and C, it was noted that these provisions could be relevant to both IAEA and the Sub-Committee, in the sense that they could apply to radioactive material possessing other hazards. Should these provisions need further clarification, or should they be deemed unsuitable for transport of radioactive material, there would be merit to establish a joint group of experts. Moreover, most experts felt that such a group could function in the same way as a specialized working group of the Sub-Committee, such as the Working Group on Explosives or the Working Group on Tanks, i.e. that such a group could be open to all interested delegations, and that it should either meet officially in parallel to plenary sessions of the Sub-Committee, or as an informal working group hosted by a Member State or an organization such as IAEA. Such groups do not take decisions, but prepare proposals for consideration. Before convening such groups, it would be necessary to define a mandate, and both the United Nations Economic Commission for Europe secretariat and the IAEA secretariat were invited to prepare a list of identified problems. These could be considered by both the IAEA TRANSSC Committee and the Sub-Committee at their June 2011 sessions for defining the mandate of such a group.

100. The representative of IAEA suggested that such a group could be convened by IAEA at the occasion of the "International Conference on the Safe and Secure Transport of Radioactive Material" that will take place on 17 October 2011.

X. Global harmonization of transport of dangerous goods regulations with the Model Regulations (agenda item 9)

A. Chapter 3.4: Dangerous goods packed in limited quantities

Document: ST/SG/AC.10/C.3/2010/87 (Secretariat)

101. The proposal prepared by the secretariat as a follow-up to the discussions at the last sessions (ST/SG/AC.10/C.3/72, para.107 and ST/SG/AC.10/C.3/74, paras.108-109) was adopted.

102. The Sub-Committee noted that a consequential amendment to 5.3.1.1.2(a) should be made to delete the reference to dangerous goods in limited quantities. This was adopted, together with the deletion of the reference to radioactive material in excepted packages, since the provisions are already covered by the new 3.4.1(e) and the existing 1.5.1.5.1.

103. The expert from Switzerland said that he was not satisfied with the current provisions. He regretted in particular that no transport document was required for land transport and that the segregation requirements within a cargo transport unit did not apply. He said that he would envisage submitting proposals during the next biennium.

104. The expert from France recalled that it had been agreed not to include cargo transport unit marking requirements for limited quantities. Nevertheless, since such marking was required for sea transport, as well as for land transport in Europe, she suggested to prepare a proposal in the next biennium for a paragraph stating that if marking was required for a mode of transport, it should take the form of an enlarged limited quantity mark. This was accepted, although some delegations felt that it would not be consistent to recommend on the one hand not to mark cargo transport units and to suggest, on the other hand, a possible harmonized marking.

105. Following adoption of the secretariat proposal, the Sub-Committee confirmed the adoption of amendments placed between square brackets in ST/SG/AC.10/C.3/2010/50 concerning UN Nos. 0012, 0014 and 0055, and new special provision 364.

XI. Guiding Principles for the Model Regulations (agenda item 10)

A. De minimis quantities

Document: ST/SG/AC.10/C.3/2010/57 (United Kingdom)

106. The Sub-Committee adopted the proposals by the expert from the United Kingdom .

B. Updating the Guiding Principles

Informal document: INF.17 (Secretariat)

107. The Sub-Committee adopted the changes proposed by the secretariat for bringing the current Guiding Principles, based on the 15th revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations, in line with the provisions contained in the 16th revised edition, on the understanding that comments could still be conveyed to the secretariat.

C. Special provision 274

Document: ST/SG/AC.10/C.3/2010/89 (ICCA)

108. The Sub-Committee adopted the text proposed by ICCA for explaining the rationale behind the assignment of special provision 274. The text should be placed in a section related to Chapter 3.3 rather than Chapter 3.2.

XII. Issues related to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (agenda item 11)

A. Chemically unstable gases

Documents: ST/SG/AC.10/C.3/2010/69 (Germany)

ST/SG/AC.10/C.3/2010/70 (Germany)

Informal documents: INF.3 and INF.20 (Germany)
INF.57 (United States of America)

109. The Sub-Committee approved the proposals by Germany for amendments to Chapter 2.2 of the GHS and a new section of the Manual of Tests and Criteria for determination of chemical instability of gases and gas mixtures subject to minor modifications that will be brought to the attention of the GHS Sub-Committee by the expert from Germany.

110. It was underlined that these amendments to the GHS and to the Manual of Tests and Criteria did not affect the Model Regulations on the Transport of Dangerous Goods and had to be endorsed by the GHS Sub-Committee.

B. Hazard communication for supply and use of aerosols

Document: ST/SG/AC.10/C.3/2010/86 (United Kingdom/FEA)

Informal document: INF.7 (United Kingdom and FEA)

111. The Sub-Committee supported the proposal by the United Kingdom and FEA that the GHS provisions concerning aerosols should be grouped in the same chapter and that aerosols should not be assimilated to gases under pressure. It also considered that the gas cylinder symbol on the GHS pictogram was not appropriate and the transport pictogram of a gas cylinder on a green background is not used in practice under transport regulations.

C. Results on UN Test N.5 (water-reactivity)

Informal documents: INF.27 (Germany)
INF.32 (United States of America)

112. The Sub-Committee agreed that work on UN Test N.5 and water-reactivity should be pursued during the next biennium.

XIII. Programme of work for the biennium 2011–2012 (agenda item 12)

A. Alignment with the GHS corrosivity criteria in Chapter 2.8

Documents: ST/SG/AC.10/C.3/2010/71 (Netherlands)
ST/SG/AC.10/C.3/2010/85 (Secretariat)

Informal document: INF.24 (China)

113. The Sub-Committee agreed to continue work in the next biennium on the alignment of the Class 8 criteria with the corrosivity criteria of GHS Chapter 2.8, in cooperation with the GHS Sub-Committee in line with the terms of reference proposed by the GHS Sub-Committee for further work as defined in ST/SG/AC.10/C.3/2010/85.

114. The Sub-Committee agreed also to further consider the criteria for corrosivity to metals and of how to apply these criteria to Class 8 dangerous goods in parallel to or separately from the skin corrosion criteria.

B. Test series 8

Informal document: INF.38 (AEISC)

115. The Sub-Committee agreed to include the review of Test Series 8 in its programme of work.

C. Consolidated programme of work for 2011-2012

116. On the basis of the above proposals and those discussed under other agenda items or at the last session, the Sub-Committee agreed to include the following items in its work programme for 2011-2012:

- (a) Explosives and related matters (including review of Test Series 8; screening test for substances that may have explosive properties; desensitized explosives; DDT Test and Criteria for flash composition; additional criteria for Division 1.4 classification);
- (b) Listing, classification and packing (including classification of Class 3 viscous liquids in Packing Group III);
- (c) Electric storage systems (including testing of lithium batteries, lithium-ion capacitors, waste or damaged/defective lithium batteries, packagings for large batteries);
- (d) Miscellaneous proposals of amendments to the UN Model Regulations (including packagings with a capacity exceeding 450 litres; dimensions and shape of labels or marks; and transitional arrangements for portable tanks intended for the transport of liquids);
- (e) Electronic data interchange;
- (f) Cooperation with IAEA;
- (g) Global harmonization of transport of dangerous goods regulations with the UN Model Regulations;
- (h) Guiding principles for the Model Regulations (updating);

- (i) Issues relating to the GHS (including corrosivity criteria; criteria for water-reactivity; improvement of Test O.1 for oxidizing solids; interpretation of the concept of “known experience”).

XIV. Draft resolution 2011/... of the Economic and Social Council (agenda item 13)

Informal documents: INF.26 (United Kingdom)
INF. 54 (Secretariat)

117. The Sub-Committee adopted the part of the draft resolution dealing with its work during the biennium 2009-2010, on the basis of a draft prepared by the secretariat with the modifications proposed by the United Kingdom.

XV. Election of officers for the biennium 2011-2012 (agenda item 14)

118. On a proposal by the expert from Canada, supported by the expert from the United States of America, the Sub-Committee elected Mr. J. Hart (United Kingdom) and Mr. C. Pfauvadel (France) as Chair and Vice-Chair respectively.

XVI. Other business (agenda item 15)

A. Request for consultative status by the Australian Explosives Industry and Safety Group Incorporated (AEISG)

Informal document: INF.52 (AEISG, submitted at the 37th session)

119. The Sub-Committee agreed that AEISG could participate in its work in consultative status.

B. United Nations Economic Commission for Europe Inland Transport Committee

Informal document: INF.55 (Secretariat)

120. The Sub-Committee was reminded that the theme selected for the policy-oriented segment of the next session of the United Nations Economic Commission for Europe Inland Transport Committee was “Transport of Dangerous Goods: global and regional dimensions”. The subject will be discussed on 1 March 2011 (15h -18h), and the Sub-Committee was provided with the draft programme (INF.55). Additional contributions from non European government or industry speakers would still be welcome.

C. Tribute to Ms L. Hume-Sastre and Mr M. Sastre

121. The Sub-Committee, on being informed that Ms L. Hume-Sastre and Mr M. Sastre (Canada) would not return in future meetings, wished to record its appreciation of the services they had rendered and sent them their best wishes.

D. List of very high consequence dangerous goods

Informal document: INF.16 (United Kingdom)

122. The Sub-Committee took note of the information provided about a project to develop a short list of goods that are of most concern in the context of their misuse in a terrorist incident.

E. Transitional measures for the marking of open cryogenic receptacles

Informal document: INF.48 (IATA)

123. The Sub-Committee agreed that the marking provisions of paragraph (9) of Packing Instruction P203 introduced in the Model Regulations annexed to the 16th revised edition of the Recommendations on the Transport of Dangerous Goods should not be of mandatory application for open cryogenic receptacles constructed before 1 January 2012. Governments and international organizations concerned were invited to take the necessary legal steps to continue to allow transport of receptacles which are not marked in accordance with P203 (9) as long as they are still in use provided they have been manufactured before 1 January 2012.

XVII. Adoption of the report (agenda item 16)

124. The Sub-Committee adopted the report on its thirty-eight session and its annex on the basis of a draft prepared by the secretariat.

Annex

Draft amendments to the Recommendations on the Transport of Dangerous Goods, Model Regulations and Manual of Tests and Criteria

The draft amendments adopted during the session were listed in documents ST/SG/AC.10/C.3/2010/CRP.4 and addenda 1-7.

They were adopted with some minor corrections and transmitted to the Committee, which endorsed them, as corrected, at its fifth session (10 December 2010). The adopted texts may be found as annexes I and II to the Committee's report as follows:

- Amendments to the Recommendations on the Transport of Dangerous Goods, Model Regulations: ST/SG/AC.10/38/Add.1;
- Amendments to the Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria: ST/SG/AC.10/38/Add.2.