REPORT OF THE SUB-COMMITTEE OF EXPERTS ON ITS TWENTY-SIXTH SESSION
(Geneva, 29 November-7 December 2004)

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Annex

Draft amendments to the UN Recommendations on the Transport of Dangerous Goods, Model Regulations (13th revised edition) and to the UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria (4th revised edition) (see ST/SG/AC.10/32/Adds 1 and 2) page 24
REPORT

ATTENDANCE

1. The Sub-Committee of Experts on the Transport of Dangerous Goods held its twenty-sixth session from 29 November to 7 December 2004 with Mr. S. Benassai (Italy) as Chairman and Mr. F. Wybenga (United States of America) as Vice-Chairman.

2. Experts from the following countries took part in the session: Argentina; Australia; Austria; Belgium; Brazil; Canada; China; Finland; France; Germany; Italy; Japan; Mexico; Netherlands; Norway; Poland; Portugal; Russian Federation; South Africa; Spain; Sweden; United Kingdom; United States of America.

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

4. Representatives of the following specialized agencies were present: International Civil Aviation Organization (ICAO); International Maritime Organization (IMO); World Health Organization (WHO); International Atomic Energy Agency (IAEA).

5. The following intergovernmental organizations were also represented: European Commission (EC); World Organization for Animal Health (OIE); Intergovernmental Organization for International Carriage by Rail (OTIF).

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); Compressed Gas Association (CGA); Council on Safe Transportation of Hazardous Articles (COSTHA); Dangerous Goods Advisory Council (DGAC); European Association of Automotive suppliers (CLEPA); European Cosmetic, Toiletry and Perfumery Association (COLIPA); European Industrial Gases Association (EIGA); Federation of European Aerosol Associations (FEA); European Liquefied Petroleum Gas Association (AEGPL); European Secretariat of Manufacturers of Light Metal Packagings (SEFEL); International Air Transport Association (IATA); International Association of the Soaps, Detergents and Maintenance Products Industry (AISE); International Confederation of Container Reconditioners (ICCR); International Confederation of Drums Manufacturers (ICDM); International Confederation of Plastics Packaging Manufacturers (ICPP); International Council of Chemical Associations (ICCA); International Express Carriers Conference (IECC); International Electrotechnical Commission (IEC); International Federation of Freight Forwarders Associations (FIATA); International Fibre Drum Institute (IFDI); International Organization for Standardization (ISO); International Technical Committee for the Prevention and Extinction of Fire (CTIF); International Union of Railways (UIC); International Vessel Operators Hazardous Materials Association (VOHMA); Portable Rechargeable Battery Association (PRBA) and World Nuclear Transport Institute (WNTI).

ADOPTION OF THE AGENDA

Documents: ST/SG/AC.10/C.3/51 (Provisional agenda)
ST/SG/AC.10/C.3/51/Add.1 (List of documents)
ST/SG/AC.10/C.3/51/Add.2 (Provisional timetable)

Informal documents: INF.1 and INF.2 (Lists of documents)

7. The Sub-Committee adopted the provisional agenda prepared by the secretariat after amending it to include late submissions of informal documents (INF.1 to INF.64).
8. The Sub-Committee considered the consolidated text of the draft amendments to the

**Infectious substances**

9. The proposal by the Netherlands to amend packing instruction P650, paragraph (2), was adopted
by a very large majority with some changes, in particular specifying that either the intermediate
packaging or the outer packaging must be rigid (see annex).

10. The Sub-Committee noted that ICAO had recently adopted a provision to the effect that the outer
packaging should be rigid for air transport, and therefore requested ICAO to take account of its decision
and to amend its Technical Instructions accordingly as soon as possible.

11. The Sub-Committee adopted the secretariat’s proposals in paragraph 3 to keep special
provision 319 in Chapter 3.3 (but to delete the first sentence), and in paragraph 16 to specify in Table
1.4.1 that the high consequence dangerous goods of Division 6.2 were UN Nos. 2814 and 2900.

12. With reference to the question of the cultures of pathogens of category B (paras. 4 to 11), several
dellegations considered that the decisions taken at the last session had been conscious decisions that took
account of the opinions of the scientific community (ABSA and WFCC) and of the specialized agencies
concerned (WHO and OIE) that category B cultures posed no more risks during transport than diagnostic
specimens. The secretariat explained that the consequences of these decisions would be the training of
the transport personnel, the provision of information to the carrier concerning the danger existing, the
decontamination of transport units in the event of spillage, and the segregation from foodstuffs would no
longer be required.

13. Other delegations considered that in the case of category B cultures, transport personnel could
usefully be trained at least to be able to identify the hazard and to take steps in the event of an accident or
contamination.

14. It was finally decided that these issues should be left to the appreciation of the competent bodies
for each transport mode, and that the Sub-Committee might possibly come back to them in the course of
the next biennium.

15. With regard to the issue of the carriage in bulk of animal carcasses contaminated by infectious
substances, it was acknowledged that the new provisions for the classification of infectious substances
gave rise to a problem for the classification of these carcasses and the definition of the conditions of
carriage. It was decided to entrust this problem to a working group.
Informal document: INF.52 (Working Group)

16. After consideration of this matter by the working group, it was decided to add a NOTE to 2.6.3.2.2.1 to the effect that carcasses infected by pathogens of category A, as such or only in culture, should be classified under UN Nos. 2814 or 2900 as appropriate and could be carried in bulk according to the conditions of 4.3.2.4 (which had been amended). Carcasses infected by other pathogens would have to be carried according to the conditions determined by the competent authority (see annex).


Informal documents: INF.7 (OIE)
INF.33 (WHO)
INF.35 (United States of America)

17. After a plenary discussion in which opinions were divided, it was decided to entrust the consideration of these documents to a working group.

Informal documents: INF.50 and 50/Rev.1 (Canada)

18. The Sub-Committee discussed once again the issue of whether human or animal specimens for analysis could be completely exempted from the regulations on infectious substances when there was a minimal likelihood that they might contain pathogens.

19. Several delegations opposed this principle. They pointed out that, according to WHO statistics, a significant percentage (between 1 and 5 per cent) of specimens for the purposes of detecting viruses such as hepatitis or HIV were contaminated, and that there was therefore an appreciable probability of contamination during carriage in the event of accidents due to a packaging defect. Some considered, moreover, that entrusting the consignor with the exemption decision based on a judgement involving the probable presence of pathogens would be tantamount to placing a heavy responsibility on him in the event of a problem. Others considered that packing instruction P650 already involved far less stringent conditions than instruction P620, and that it would not be easy in practice for the legislator to explain to the medical, pharmaceutical or veterinary professions that, on the strength of their probability-based risk analysis, they could use any other packaging not required by the regulations they chose, provided that it would not leak. In addition, they did not think it was possible in practice to monitor effective compliance with the regulations.

20. The majority of delegations considered on the contrary that many specimens were carried for the purposes of routine screening, such as the determination of blood glucose levels, and that it was very unlikely that they contained pathogens, and that even if that were the case, the probability of transmission to other humans or animals during carriage would be extremely small. Consequently, they considered that if the opinion of the health professionals was that there was no risk, there was no need to impose the stringent and costly conditions of carriage for infectious substances.

21. At the request of the expert from the Netherlands, a roll-call vote was taken on whether provision should be made for exemptions. The results were as follows:

In favour: Argentina, Australia, Austria, Canada, Finland, Germany, Netherlands, Poland, Portugal, South Africa, Spain, Sweden, United States of America;

Against: Brazil, France, Italy, United Kingdom;

Abstentions: Belgium, China, Japan, Norway;

Absent: India, Iran (Islamic Republic of), Mexico, Morocco, Russian Federation.
22. Following a second meeting of the working group, the Sub-Committee adopted the text of a new paragraph 2.6.3.2.3.6 on the basis of document INF.50/Rev.1, permitting the exemption of human or animal specimens on condition that there was a minimal probability that pathogens were present, that the packaging prevented any leakage and that it was marked with the words “Exempt Human Specimen” or “Exempt Animal Specimen”. A packing method was recommended but not mandatory (see annex).

Informal document: INF.23 (ICAO)

23. The Sub-Committee noted that ICAO had decided to include in a supplement to the 2005 edition of its Technical Instructions the amendments which the Sub-Committee would decide concerning Division 6.2.

24. Several delegations regretted that this decision had been taken although ICAO was perfectly aware that it would not be legally possible to make the same amendments to regulations such as ADR, RID and the IMDG Code. They accordingly feared legal problems for multimodal transport, particularly in the case of category B cultures for which the conditions of carriage would be completely different.

25. Other delegations considered that this legal problem could be settled by means of multilateral agreements.


26. The proposed amendments to the new subsection 2.1.3.5 were adopted with some changes (see annex).

27. The Sub-Committee noted that it was not logical in 2.6.4.2.4 to align the cut-off value of the flash point in the closed-cup test method (currently 60.5 °C) with that of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) without modifying the open-cup test value of 65.6 °C, considered as equivalent but not provided for in the GHS. It was decided, however, to postpone the discussion until the next biennium.

28. The Sub-Committee shared the secretariat’s opinion that the provisions for the exemption from marking of the aquatic pollutant mark should appear in Chapter 5.2 rather than Chapter 3.4, since the conditions for exemption were different from the conditions of carriage in accordance with Chapter 3.4. It further decided that the exemption from marking should also be applicable to single packagings (see annex).

29. The amendments proposed in paragraphs 7.1.9.1 and 7.1.9.3 were adopted (see annex).

Hazard communication for organic peroxides


Informal document: INF.15 (South Africa)

30. The expert from the United States of America proposed that the oxidizer symbol in the new pictogram for organic peroxides adopted at the previous session as proposed by Norway should be replaced by the flame symbol which could be shown in black or white in the red upper half.
31. The expert from Norway said that he could accept this proposal since the symbol was not of prime importance for the emergency services in that they identified the hazard principally in terms of the colours of the pictogram.

32. Several delegations recalled that, according to studies made in the United States, the existing oxidizer symbol was not readily understood by the public which was not familiar with its meaning. The flame would not be the ideal symbol since not all organic peroxides were flammable. The danger of organic peroxides, however, was the activation of combustion and the flame identified the fire hazard and was easy to understand. They therefore supported the proposal.

33. A number of experts noted that this matter had already been discussed at the previous session and that other proposals for modifying the labelling system had been put forward by CTIF in context of the programme of work (ST/SG/AC.10/C.3/2004/89). They considered that it would be premature to take a decision immediately and that it would be preferable to keep the pictograms currently featured in the GHS even if it meant reviewing them at a later date after due reflection and more generally.

34. A member of the secretariat said that many Governments had taken steps to implement the GHS by the target date of 2008. The work involved major efforts in terms of legislation and the training of personnel in the workplace, of users of chemicals in general and the emergency services, particularly in developing countries. It should be possible for these countries to take account of a recommended amendment three years before the target date for implementation, but he did not think it was reasonable to suggest that the system of pictograms could be modified in two or four years’ time, in other words, when all the efforts to bring general harmonization into effect had only just been completed. He therefore recommended that, if there were solid reasons for modifying the pictogram in question, it should be done immediately.

35. When this proposal was put to the vote, the Sub-Committee decided by a large majority in favour of an immediate modification of the pictogram as proposed by the expert from the United States of America, subject to the agreement of the GHS Sub-Committee*. It was understood, however, that the existing pictogram could continue to be used for transport operations up to 2011 on a transitional basis.

**Note by the secretariat:** These changes were later endorsed by the GHS Sub-Committee, see ST/SG/AC.10/C.4/16, para. 14.

36. The Sub-Committee decided to keep the reference to Division “5.2” in the pictogram, and considered that if a new pictogram were to be used, this would be useful in identifying its meaning.

**Definition of self-reactive substances**

**Document:** ST/SG/AC.10/C.3/2004/107 (United States of America)

**Informal document:** INF.46 (France)

37. The Sub-Committee adopted the amendments to 2.4.2.3.1 (b) and NOTE 3 in accordance with the proposal by France (see annex). Corresponding amendments should be made to the Manual of Tests and Criteria and the endorsement of the GHS Sub-Committee should be required since such changes involved amendments to the GHS**.

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*Note by the secretariat:* This amendment was later endorsed by the GHS Sub-Committee, see ST/SG/AC.10/C.4/16, para. 18.
Radioactive material

Informal document: INF.51 (IAEA)

38. The representative of IAEA reported that the Agency’s Board of Governors had adopted all the amendments in square brackets in document ST/SG/AC.10/C.3/2004/80 for the 2005 edition of the IAEA Regulations for the Safe Transport of Radioactive Material, and that they could therefore be taken into account in the fourteenth revised edition of the United Nations Model Regulations with some drafting changes (see annex).

Default classification of fireworks

39. The expert from the United States of America said that he was not opposed to the adoption of the new subsection 2.1.3.5, but that he considered that the specifications given for default classification in Division 1.4, compatibility group G, did not seem sufficiently restrictive in the context of consumer safety. He would also like the default classification to be studied for all the applications covered by the GHS.

40. It was recalled that the default classification had been proposed for the sole purpose of regulating transport and that if it was necessary to deal with this issue in the context of the GHS a proposal would have to be submitted to the GHS Sub-Committee for its programme of work.

Packing instruction P200, special provision “k”

41. Since work was still in progress on determining the minimum wall thickness for pressure drums, it was decided to come back to this issue during the forthcoming biennium and meanwhile to refer to the competent authority (see annex).

Assemblies of cylinders for the carriage of fluorine (P200, special provision “n”)

Informal document: INF.8 (Germany)

42. The proposal by Germany was put to the vote and was adopted (see annex).

Packagings of waste aerosols sent for disposal or recycling


Informal documents: INF.14 (VOHMA)
INF.31 (United Kingdom)
INF.32 (Belgium)
INF.44 (FEA)

43. Consideration of these documents was entrusted to a working group.

Informal document: INF.52 (working group)

44. On considering the texts submitted by the working group, the expert from France requested the deletion of the provision to the effect that the transport of aerosols as waste in containers would be prohibited. She considered that the possibility of transporting them in maritime containers from countries or islands where there were no disposal or recycling infrastructures to countries where such facilities existed should be maintained.
45. Several delegations considered that currently-used aerosols for the most part contained flammable propellants, and that in view of the packing methods proposed for used or damaged aerosols, the risk of leakage and accumulation of flammable gases inside containers was too high for maritime transport.

46. The provision prohibiting transport in containers was kept but only for closed freight containers, and the text proposed by the working group was adopted as amended (see annex).

OUTSTANDING ISSUES OR PROPOSALS OF AMENDMENTS TO THE RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Transport of gases

Reference to ISO standards


47. The Sub-Committee agreed to introduce references to ISO standard 21029-1:2004 in paragraph 6.2.2.1.4 and to standard 11119-3:2002 in paragraph 6.2.2.1.1 (see annex).

UN No. 2495 Iodine pentafluoride


48. The Sub-Committee decided to accept the carriage of UN No. 2495 in pressure drums (P200, table 3) and also to apply this decision to UN Nos. 1745 and 1746 (bromine pentafluoride and bromine trifluoride) (see annex).

Gas definitions


Informal documents: INF.27 (United States of America)
INF.42 (Belgium)

49. Rather than amend the definition of the gases, the Sub-Committee preferred to indicate that gases of Division 2.2 were not subject to the Regulations if they were transported at a pressure less than 280 kPa at 20°C, as the expert from Belgium proposed.

Filling specifications (P200)


50. The proposal to amend packing instruction P200, paragraphs 3 (b) and 3 (c), was adopted with some changes (see annex).

Periodic stampmarking of acetylene cylinders on a ring


51. The proposal that periodic stampmarking was possible on a ring trapped between the valve and the cylinder was put to the vote and adopted (see annex).
Packagings for pressure receptacles


Informal documents: INF.4 (EIGA)
INF.25 (United States of America)

52. Following a discussion on the validity of the proposal and the problems that a change in terminology might lead to in other parts of the Model Regulations, the representative of IATA agreed that the problem raised should preferably be discussed in the forthcoming biennium.

Values for filling ratios (P200)

Informal document: INF.24 (United States of America)

53. The expert from the United States of America withdrew his proposal, noting that the review of the filling ratios in packing instruction P200 could be undertaken in the forthcoming biennium after further consultation.

Use of aluminium alloy cylinders in acetylene service

Informal document: INF.28 (United States of America)

54. The expert from the United States of America withdrew the proposal in paragraph 4 to add a special provision “a” for UN No. 1001 in packing instruction P200.

55. The Sub-Committee adopted the proposal to delete the reference to ISO standard 7866:1999 in 6.2.2.1.3, but noted, however, that this standard was in the process of being revised and that it would be possible to refer to it once it had been amended.

Explosives

Self-reactive substances


56. The Sub-Committee adopted the proposal to introduce a new substance into the list of self-reactive substances in 2.4.2.3.2.3 (see annex).

Fireworks


Informal document: INF.45 (United Kingdom)

57. The proposals for amendments concerning the new default firework classification table in 2.1.3.5.7 were adopted with some changes (see annex).
Ammonium nitrate emulsions

Informal document: INF.6 (Spain)

58. The Sub-Committee noted the invitation from the expert from Spain to take part in an informal working group on ammonium nitrate emulsions and Test Series 8 of the Manual of Tests and Criteria, in the Ministry of Labour, Madrid, on 14 February 2005, and thanked it warmly for this invitation which would contribute to the progress of work in the forthcoming biennium.

Miscellaneous proposals

Alcoholic beverages


59. It was noted that the exemption of special provision 145 did not apply to air transport but that, according to the ICAO Technical Instructions, the carriage of alcoholic beverages of packing group III was not subject to the air regulations in quantities not exceeding 5 litres per packaging. Consequently, the indication of cut-off values in Column (7) was unnecessary.

60. Several delegations, however, objected to entering “None” in Column (7), since there was nothing to prevent a consignor from carrying these alcoholic beverages in accordance with the provisions of Chapter 3.4.

61. A proposal to add “see special provision 145” under the value entered in Column (7) was put to the vote but was not adopted and no change was therefore made to the existing text.

New entries for fuel cell devices and metal hydride cartridges


62. Following an exchange of views on the proposal for new entries, the expert from Japan was requested to prepare a new proposal for the next session taking into account the comments made.

New entry for fuel cell cartridges containing flammable liquids


63. The proposal was adopted with some amendments (deletion of the packing group, packing instruction P003) (see annex).

Special provisions 162, 182 and 298


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

64. The proposal to replace special provisions 162, 182 and 298 by a single special provision was adopted with some amendments (see annex).
Indication of subsidiary risk(s) on dangerous goods transport document

**Document:** ST/SG/AC.10/C.3/2004/81 (IATA)

**Informal documents:** INF.19 (United States of America)

65. The proposed amendment to 5.4.1.4.1 to the effect that the subsidiary risk should be entered in the transport document when indicated by a special provision was adopted (see annex).

Packing instructions P601 and P602

**Document:** ST/SG/AC.10/C.3/2004/82 (Germany)

**Informal documents:** INF.26/Rev.1 (United States of America)
INF.34 (Belgium)

66. Amendments to instructions P601 and P602 were adopted after a drafting group had considered the proposals (see annex).

Vibration test

**Document:** ST/SG/AC.10/C.3/2004/88 and Add.1-3 (France)

**Informal documents:** INF.11 (ICDM)
INF.17 (SEFEL)
INF.18 (Germany)
INF.29 (ICCR)

67. The Sub-Committee welcomed the research work carried out by the Government of France and the report of the study analysing the performance of packagings in random vibration tests and low-frequency vibration tests (repetitive shocks).

68. The debate led, however, to a discussion on the principle of the vibration test.

69. Despite the interesting results furnished by the French study, several delegations considered that accident statistics concerning packagings tested in accordance with the methods of the current Model Regulations, which did not include the vibration test, showed that the current test system was satisfactory. In view of the considerable cost of the equipment for the vibration test, particularly for developing countries, it did not seem to them to be justified to require an additional vibration test. Nevertheless some delegations felt it necessary to improve the performance testing even though they could not support the French proposal.

70. Other delegations recalled that the policy decision had already been taken in 1999. Vibrations were part of normal transport conditions, and in an approval system based on performance tests rather than on minimum specifications, it seemed normal to require a vibration test representative of those conditions. They considered that the cost argument was not valid insofar as only the design type was required to be tested and millions of packagings were subsequently produced on the basis of this design type. The cost of a test of this nature was thus minimal compared with the investments needed to manufacture the packagings and the profits generated by their sale.

71. In view of the turn the discussion had taken, the Chairman requested that the experts should vote on whether the issue of the vibration test should again be included in the programme of work for the next biennium.
72. After a first vote in which the votes were equally divided, the expert from France, supported by the expert from Spain, requested a new vote.

73. Since the votes were once again equally divided, it was decided that the finalization of provisions for the vibration test would not be included in the programme of work for the next biennium.

**Mixture of alcohol with petroleum products**

**Document:** ST/SG/AC.10/2004/91 (United States of America)

74. The Sub-Committee decided to add a special provision for UN Nos. 1170, 1987 and 1993, specifying that alcohols containing up to 5 per cent of petroleum products must be carried under entry 1987 (see annex).

**Harmonization with the IAEA Regulations for the Safe Transport of Radioactive Material**

**Document:** ST/SG/AC.10/C.3/2004/103 (United Kingdom)

75. The Sub-Committee noted that paragraph 1.1.2.4.1 concerning the special arrangements required correction (see annex).

76. The Sub-Committee requested the secretariat to review and edit the definitions of 1.2.1 so as to ensure consistency in the use of singulars and plurals, and the use of the term “means” in the English version.

77. The harmonization of the definitions of overpack, consignee and competent authority would require further reflection since these terms could possibly be used in a different context in applying the IAEA Regulations.

78. The Sub-Committee expressed the hope that the IAEA and UNECE secretariats would continue to maintain close contacts in order to bring out any problems of consistency between the IAEA Regulations and the United Nations Model Regulations and would pursue solutions to resolve them within the competent IAEA bodies and the Sub-Committee.

**Safety devices on vehicles**

**Document:** ST/SG/AC.10/C.3/2004/92 (Germany)

79. The Sub-Committee noted that, since air bag inflators, air bag modules and seat belt pretensioners had been listed under UN No. 3268 in Class 9, technological progress had been made in the motor vehicle industry. Several other motor vehicle components intended for vehicle safety and activated by pyrotechnic mechanisms had been developed, and the expert from Germany proposed that they should be listed under the same number.

80. Several experts recalled that the classification of these components in Class 9 rather than in Class 1 had been accepted because the industry had shown that the specific transport methods of these components ensured safety. They were not convinced that this was the case of the new components for which no detailed information as to their nature and transport technology had been submitted.

81. The proposal was put to the vote but was not adopted.
Air bags and seat belts


82. The Sub-Committee amended special provision 289 in order to specify that the exemption of air bags and seat belts, when installed in vehicles or in completed vehicle components, applied to all conveyances, and not only to road vehicles (see annex).

Lithium batteries

Informal document: INF.20 (PRBA)

83. Several experts said that they were not opposed to the principle of raising the exemption limits for lithium ion cells or batteries bearing in mind the progress of technology and the growing demand for more powerful batteries for laptops and other portable devices for general consumption.

84. They said, however, that studies were still in progress in this regard, and it was decided to postpone the decision until the next biennium.

Correction to 5.3.1.1.3

Informal document: INF.58

85. The Sub-Committee corrected 5.3.1.1.3 in order to specify that a subsidiary risk placard was prescribed each time that a subsidiary risk label was prescribed, even when the subsidiary risk was not indicated in column 4 of the List of dangerous goods. Paragraph 5.2.2.1.2 was also redrafted (see annex).

Substances hazardous to the environment


Informal documents: INF.3 (Secretariat)
INF.9 (Secretariat)
INF.16 (IMO)
INF.59 (United Kingdom)
INF.61 (Secretariat)

86. It was recalled that the provisions for marking substances hazardous to the aquatic environment had been agreed at the last session subject to confirmation at this session taking account of the advice that would be given by IMO notably as regards the possibility of adjustments of the IMDG Code and of the MARPOL Convention.

87. The Sub-Committee was informed (INF.16) that the IMO’s Maritime Environment Protection Committee had agreed that the criteria of the Model Regulations for aquatic pollutants should also be adopted under MARPOL Annex III and reflected in the IMDG Code to define substances hazardous to the marine environment, and that amendments to MARPOL Annex III and other related IMO instruments would be considered once all issues related to appropriate amendments to the IMDG Code would have been resolved. IMO would also agree to replace the term “Marine pollutant” by “Aquatic pollutant” provided that this term be adopted as an amendment to the UN Recommendations.
88. On the basis of the decisions taken at the last session, and in order to speed up implementation of the GHS through transport regulations for the target date of 2008, the secretariat had prepared a preliminary list of substances, presently mentioned by name in the dangerous Goods List, that met the criteria of Chapter 2.9 for substances hazardous to the aquatic environment. This non-exhaustive list was based on the list of marine pollutants in the IMDG Code which had been checked against the data provided in the IMO “BLG/Circ. 13” and in the European “N-Class” data base compared with the GHS criteria. The secretariat proposed that substances in the Model Regulations Dangerous Goods List, known as meeting the Chapter 2.9 criteria, be identified as such by a special provision.

89. Many delegations expressed their appreciation for the work done by the secretariat, and several of them supported this approach. Some of them however considered that it was premature to take a decision on this list at this session and that work should be carried out in the next biennium once the principle has been agreed upon.

90. The representatives of ICCA, DGAC and UIC said that if the principle of marking and identifying all aquatic pollutants adopted by the Sub-Committee at its last session was agreed upon, they could support the approach of the secretariat, but they did not support applying the principle for substances of Classes 1 to 8 since they were already deemed to be hazardous to the environment. They considered that their identification as aquatic pollutants was not useful for emergency services.

91. The expert from the United Kingdom also shared this view. He considered that only substances not meeting the criteria of Classes 1 to 8 should be identified and marked as aquatic pollutants in Class 9. He acknowledged the efforts by the secretariat to meet the goals of the World Summit for Sustainable Development, but felt that sectors other than transport would not be able to meet to 2008 target date. As a consequence, he did not feel that the transport sector had to be more diligent in this respect. He considered in any case that the GHS was based on a building-block approach, and that the transport sector could choose not to identify dangerous goods as environmentally hazardous substances when they are already subject to transport regulations under Classes 1 to 8.

92. A member of the secretariat recalled that for maritime transport the master of a ship is required, under Article 8 of the MARPOL convention and Protocol 1 to this convention, to report any loss or spillage of substances considered as pollutants to the marine environment in packaged form, and that this requirement can be complied with only if the substances are declared and identified as such.

93. The expert from the United States of America said that he shared the views of the expert from the United Kingdom that substances of Classes 1 to 8 need not be specifically identified as aquatic pollutants. He said that maritime transport represented only 10% of transport of dangerous goods and that it would not be appropriate under inland transport regulations to require the identification of dangerous goods of Classes 1 to 8 as aquatic pollutants, since emergency responders would treat all dangerous goods as potential pollutants.

94. Several experts recalled that the provisions placed between square brackets in ST/SG/AC.10/C.3/2004/80 had been adopted at a large majority at the previous session after lengthy discussions, and they were opposed to reopening this debate without written proposals.

95. After an extensive debate on this question, the chairman put to the vote the question of whether the Sub-Committee could agree with the deletion of the words “without additional labelling” from paragraph 2.0.1.2. By a majority vote, the Sub-Committee decided that dangerous goods should be considered, a priori, as pollutants to the environment and that therefore their identification as pollutants to the aquatic environment by the GHS marking was not necessary.
96. It was agreed to maintain the amendment to 2.9.2.1 (a) according to which Class 9 covers only environmentally hazardous substances which are not covered by other classes.

97. The expert from the United States of America said that, as it was agreed not to require the GHS labelling for aquatic pollutants for Classes 1 to 8, it would not be logical to require such labelling/marking for substances assigned to UN Nos. 3077 and 3082 in Class 9, since they were already assigned the Class 9 label. Therefore, he proposed not to adopt the new provisions related to the GHS labelling/marking in 5.2.1.7. This proposal, put to the vote, was not adopted.

98. It was agreed to assign a new special provision to UN Nos. 3077 and 3082 requiring the GHS marking provided the substances assigned to these UN numbers met the criteria of 2.9.3 (see annex).

99. On the basis of informal document INF.59 (United Kingdom), the Sub-Committee agreed to adopt a new sub-section 5.2.1.7 and a paragraph 5.3.2.3 according to which the GHS marking/placard should be assigned to UN Nos. 3077 and 3082.

100. The Sub-Committee did not agree to adopt paragraph 5.4.1.4.3 (e) according to which substances hazardous to the aquatic environment would be identified by the words “AQUATIC POLLUTANT” in the transport document.

101. The Sub-Committee considered that the decisions taken should not prevent IMO from requiring an identification of substances of Classes 1 to 8 by the GHS labelling or a designation of substances of Classes 1 to 9 as aquatic pollutants or marine pollutants in the transport document for the purposes of implementation of the MARPOL Convention.

102. The Sub-Committee confirmed that substances assigned to UN Nos. 3077 and 3082 should be exempted from the GHS marking when carried in quantities of 5 kg/5 l or less in single packagings or in inner packagings of combination packagings.

103. The experts from the Netherlands, Belgium and Germany expressed a reservation on all these decisions. They considered that the principle of identifying substances hazardous to the aquatic environment of Classes 1 to 8 had been adopted at the previous session, subject to eventual comments that could be made by IMO on the whole set of draft amendments related to such substances. Since IMO could agree with these draft amendments, they considered that it was not correct for the Sub-Committee to revoke this decision simply on the basis of an oral proposal that will prevent implementation of the GHS criteria and labelling provisions through transport regulations. They said that they would raise this question again in the next biennium in this Sub-Committee as well as in other relevant international bodies to ensure worldwide cross-sectoral harmonization.

**Impact testing of UN portable tanks and MEGCs**


104. The proposal by Canada to replace the reference to various standards in sections 6.7.2.19.1, 6.7.3.15.1, 6.7.4.14.1 and 6.7.5.12.1 by a reference to a single standard to be included in the Manual of Tests and Criteria was adopted (see annex).
**Transport of dangerous goods in limited quantities**

**Informal documents:** INF.16 (IMO)  
INF.47 (France)

105. The Sub-Committee noted the views expressed by the IMO Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC) and by the Joint Meeting of the RID Safety Committee and of the UNECE Working Party on the Transport of Dangerous Goods on the question of transport of dangerous goods packed in limited quantities, excepted quantities and consumer commodities, which would have to be taken into account in the discussions in the next biennium.

106. The expert from the United States of America said that the comments expressed by ICAO in information paper INF.6 submitted at the previous session were still valid.

**Definition of transport units and closed transport units**

**Informal document:** INF.40 (Australia)

107. There was general support for transferring the definition of transport units from Chapter 5.3 to Chapter 1.2 and to add a new definition for closed transport units. However, it was considered that this transfer might entail consequential changes in other chapters of the Model Regulations and therefore this should be done carefully in the next biennium on the basis of an official proposal that would take all consequences into account.

**Approval of IBCs**

**Informal document:** INF.41 (Australia)

108. Several delegations shared the concern expressed by the expert from Australia over the multiple use of composite IBCs normally intended for one single trip, which led to the question whether the present performance testing and certification system, which allowed the use of IBCs for five years, was appropriate for such IBCs presenting ageing problems.

109. It was agreed to discuss this problem in the next biennium.

**Revision of 4.1.3**

**Documents:** ST/SG/AC.10/C.3/2004/55 (United Kingdom)  

**Informal documents:** INF.64 (submitted at the last session) (Belgium)  
INF.21 (United Kingdom)  
INF.64 (Drafting group)

110. The proposals for the revision of 4.1.3 were considered by a drafting group and the text proposed by the group (INF.64) was adopted with some modifications (see annex).
Re-inspection and testing of IBCs

Informal document: INF.63 (Drafting group)

111. The proposal by Germany was considered by a drafting group and the text submitted by the drafting group (INF.63) was adopted with some modifications (see annex).

World convention on the transport of dangerous goods

Informal document: INF.36 (ICAO)
Informal document: INF.26, submitted at the July 2004 session (AISE, CEFIC, CEPE, EFMA, FEA, FIATA, IECC, IRU, ITCO)

112. The representative of CEFIC said that the organizations which had been the joint authors of the last session’s informal document INF.26 supported the proposal by Italy for a world convention since multimodal transport was in constant development and the existing differences between international regulations applicable to the different transport modes and domestic regulations caused considerable difficulties internationally.

113. The representative of ICAO introduced the views of the ICAO Legal Bureau, and said that if a convention of that nature were envisaged, its terms would have to be determined in such a way that ICAO could continue to exercise its responsibility in defining the safety standards applicable to air transport.

114. Several experts supported the principle of a convention. They said that the international transport of dangerous goods was currently governed by a number of legal instruments applicable to the five transport modes (by sea, air, road, rail and inland waterway), obliging them to prepare translations for five different voluminous legal texts, each containing the essential elements of the United Nations Model Regulations but nevertheless forcing them to take account, mode by mode, of differences that were sometimes minimal. They also considered that the lack of simultaneous implementation of the United Nations Model Regulations worldwide through national and international modal regulations led to major legal difficulties for international multimodal transport and intergovernmental cooperation.

115. The expert from China said that his Government applied the United Nations Recommendations for international transport mainly in maritime and air transport but that there was no legal framework for international transport by other transport modes and that, consequently, it supported the idea of a global international convention.

116. Other experts considered that the existing system of recommendations was satisfactory because it enabled each country or region to adapt its regulations for land transport in a flexible form while ensuring a harmonized global framework for transcontinental transport through the IMDG Code and the ICAO Instructions.

117. Others agreed to the advantage of a world convention, but were of the opinion that the idea was premature, would require significant resources and that it would be impossible at this moment to reach a result that would be acceptable to all Parties involved.

118. A member of the secretariat said that the outstanding problem to be resolved in the context of trade globalization was not that of unimodal transport, which was effectively governed satisfactorily on
the basis of the United Nations Recommendations in the case of maritime and air transport and at national and regional levels in the case of land transport, but rather that of multimodal transport since at the start or close of international maritime or air transport operations, the land regulations were rarely aligned in time and substance with the maritime and air regulations.

119. In reply to the questions raised, he said that (1) an international convention normally comprised an agreement proper and annexes with specific procedures for amendment; (2) the amendment procedures of the annexes were more flexible than those of the agreement proper and were included in the agreement if the negotiators so wished; (3) a convention applicable to international transport in no way affected the right of States to regulate national transport on their territories as they pleased; (4) an international convention could include provisions whereby the contracting parties could regulate land transport regionally under different conditions; (5) the ADR was an international agreement applicable to international road transport which was opened to all UN Member States, and which contained already an article that would give precedence to the provisions of a world convention if such a convention existed and contained conflicting provisions; (6) an international convention would not necessarily call in question the role of IMO or ICAO, in that it could either refer to the IMDG Code and the ICAO Technical Instructions for maritime and air transport, or provide that the conditions for the maritime and air modes should be dictated by IMO and ICAO.

120. He also recalled Economic and Social Council resolution 1973 (LIX) which requested the Committee of Experts to study, in consultation with other bodies concerned, particularly the United Nations Conference on Trade and Development (UNCTAD), IMO, ICAO, IATA and the regional commissions, the possibility of a joint approach to the drafting of an international convention on the transport of dangerous goods by all modes of transport which would take into account the general scope of a future convention on international intermodal transport. This request had never received a genuine follow-up, on the pretext that, at the time, modal regulations were too different from each other, something which was no longer the case at the present time.

121. He also stressed that at the Euro-Asian level, the UNECE and the Economic and Social Commission for Asia and Pacific (ESCAP) are working on corridor development projects in order to develop Euro-Asian land transport. Once the infrastructure projects had been determined, it would be logical to harmonize conditions of carriage in order to facilitate transport operations. If there were no global legal framework for international transport, it would probably be necessary to use existing regional unimodal legal frameworks such as ADR for road transport.

122. The Sub-Committee finally decided that the issue of further harmonization with the UN Model Regulations should be discussed in greater depth during the forthcoming biennium with the development of a world convention being one possible solution. It requested the secretariat to prepare documents for the possible drafting of a convention of this nature and to consult the pertinent bodies of the United Nations system in this regard, in particular, IMO, ICAO, IAEA and the regional commissions. At the same time, the Sub-Committee should study alternatives to a convention in order to improve internationally the assurance of the simultaneous harmonization of legislation applicable to the international transport of dangerous goods in all countries by all modes of transport.
NEW PROPOSALS OF AMENDMENTS TO THE RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Compatibility testing


123. Some experts agreed that it would be useful to develop harmonized methods for testing the chemical compatibility of packagings and IBCs, and to introduce in the Model Regulations provisions similar to those included in RID/ADR. Others said that a more generic approach such as that recently submitted by the Netherlands to ICAO was more appropriate.

124. Others experts considered that there were several possible methods of testing chemical compatibility of packagings. They said that the percentage of packaging failure due to problems of chemical compatibility was extremely low and they did not feel that there would be a need for developing or imposing specific standards in that respect.

125. The expert from the Netherlands, pursuant to this debate, said that, at this time, it might be preferable not to amend the existing provisions of the Model Regulations.

Security provisions

Informal document: INF.10 (Secretariat)

126. A member of the secretariat pointed out that when security provisions were adopted in Chapter 1.4 of the thirteenth revised edition of the Recommendations, the provisions of Chapters 3.4 and 2.7.9.7 had not been amended, which meant that dangerous goods in limited quantities and radioactive material in excepted packages were subject to the general security provisions of 1.4.1 and 1.4.2.

127. When the latest edition of the Model Regulations was transposed into RID/ADR/ADN, however, the Joint Meeting of the RID Safety Committee and the UNECE Working Party on the Transport of Dangerous Goods had decided not to apply the general security provisions of 1.4.1 and 1.4.2 to these substances and material.

128. Similarly, during a technical meeting for the revision of the IAEA Regulations for the Safe Transport of Radioactive Material, several delegations had expressed surprise that the security provisions applied to excepted packages.

129. The Sub-Committee was therefore requested to clarify whether the situation was intentional or was a result of an omission, in which case amendments were proposed to 3.4.1 and 2.7.9.7.

130. The experts from the United States of America and the United Kingdom confirmed that the Sub-Committee had not intended to exempt these substances and material from the security provisions and that no amendment was necessary. They stressed the importance of these provisions in training.

131. Several experts considered that it was not logical to exempt substances from the safety provisions but not to exempt them from the security provisions. It seemed to them that it was all the more out of proportion to require the securing of transit zones or temporary storage areas when in certain cases, like that for which 3.4.9 provided, no marking, labelling or transport document informed the carrier or the forwarder of the dangerous nature of the products carried.

132. The representative of IAEA said that in the case of excepted packages activity limits were very low.
133. The Chairman requested the Sub-Committee to vote on the issue; the Sub-Committee decided that dangerous goods in limited quantities and radioactive material in excepted packages should not be subject to security measures. The provisions proposed by the secretariat, if that was the opinion of the Sub-Committee, were adopted (see annex).

134. The experts from the United States of America and the United Kingdom expressed their deep disappointment that the Sub-Committee should have gone back on a decision taken in the previous biennium simply on the basis of a request for clarification by the secretariat.

Aluminium witness screens used in Series 6 (c) testing

Informal document: INF.38 (Australia)

Classification criteria for Class 8 materials

Informal document: INF.39 (Australia)

135. Consideration of these two proposals was deferred to the next biennium.

PROGRAMME OF WORK FOR THE BIENNIAUM 2005-2006

Systematic approach for colours and appearance of pictograms according to the GHS


136. Several delegations said that although the present system of hazard communication for transport of dangerous goods may not be perfect, drastic changes such as those proposed by CTIF could not be easily implemented by emergency responders since they would complicate the present situation, would be costly for the industry and would require extensive training of consignors, carriers and emergency responders. They noted that the proposal would also concern the GHS and felt that this was not the appropriate time to amend a system of labelling which had just been adopted for multisectoral implementation at worldwide level by 2008. They did not agree that a working group should be established for that purpose.

137. The representative of CTIF withdrew his proposal to establish a working group. He said that his organization did not wish the system to be amended regularly because this would require substantial and repeated training exercises, and would prefer a global change to occur at a definite time.

138. The Sub-Committee agreed that the question of a systematic approach for hazard communication could be discussed in the next biennium.

Harmonization of emergency measures


Informal document: INF.12 (Canada)

139. The Sub-Committee noted that the governments of Canada, the United States of America and Mexico had issued a 2004 multilingual version of the North America Emergency Response Guidebook.

140. The Sub-Committee did not agree with the proposal of CTIF to include the harmonization of emergency measures in the programme of work for 2005-2006.
141. After consideration of the various proposals, the Sub-Committee agreed that the programme of work for 2005-2006 should be as follows:

- Transport of gases (harmonization and standardization);
- Explosives (Test series 8);
- Listing, classification and harmonization with the GHS (including list of aquatic pollutants);
- Packagings (including packaging performance and review of Chapter 6.3);
- Limited quantities;
- Cooperation with IAEA;
- Improvement of hazard communication;
- Guiding principles for the Model Regulations;
- Other options to facilitate global harmonization and implementation of the Model Regulations, including a world convention for the international transport of dangerous goods;
- Miscellaneous amendments to the Model Regulations, as necessary.

**Documents carried forward to the next session**

142. The discussion of the following documents submitted in 2004 was postponed to the next session:

- ST/SG/AC.10/C.3/2004/74, -/75 and -/76 (China);

**DRAFT RESOLUTION 2005/… OF THE ECONOMIC AND SOCIAL COUNCIL**

**Informal document:** INF.62 (Secretariat)

143. The Sub-Committee adopted a draft resolution for approval by the Committee and submission to the Council.
ELECTION OF OFFICERS

144. On a proposal by the expert from the United States of America, the Sub-Committee elected Mr. Sergio Benassai (Italy) and Mrs. Linda Hume-Sastre (Canada) respectively Chairman and Vice-Chairman for the biennium 2005-2006.

ANY OTHER BUSINESS

Applications for consultative status

Informal documents:
INF.5 (COLIPA)
INF.13 (COSTHA)

145. The Sub-Committee agreed to grant consultative status to these two organizations.

Corrections to the UN Recommendations on the Transport of Dangerous Goods, Model Regulations

Informal document: INF.43 (Secretariat)

146. The Sub-Committee approved the corrections to the thirteenth revised edition presented by the secretariat to be issued as ST/SG/AC.10/1/Rev.13/Corr.1 (English version), -/Corr.2 (French version) and -/Corr.3 (Spanish version).

Tribute to Mr. F. Wybenga, Mr. W. Visser and Mr. G. Dicke

147. The Sub-Committee, on being informed that its Vice-Chairman, Mr. F. Wybenga (United States of America), would retire in 2005, wished to record its appreciation of the services he had rendered and send him its best wishes. It extended similar sentiments to Mr. W. Visser (UIC) and Mr. G. Dicke (IAEA) who were also retiring.

Condolences

148. The Sub-Committee was informed that Captain H. E. H. S. Wardelmann, who had represented IMO at nearly all sessions of the Group of Rapporteurs, the Group of Experts on Explosives, the Sub-Committee and the Committee between 1972 and 1991 had passed away on 25 October 2004. He had devoted the major part of his working life, as a seafarer and later as member of the IMO secretariat, to the safety of the transport of dangerous goods, and was considered as the “father” of the modern IMDG Code. Within his secretariat responsibilities, he had played a most prominent role in ensuring the worldwide implementation of the UN Recommendations by the maritime community, and had remained active as representative of various NGOs until his death. The Sub-Committee observed a minute of silence in his memory and requested the Chairman to convey its condolences to his family.

ADOPTION OF THE REPORT

149. The Sub-Committee adopted the report on its twenty-sixth session and annexes thereto on the basis of a draft prepared by the secretariat.

* * * * *
Annex


The draft amendments adopted during the session were listed in:

They were adopted with some minor corrections and transmitted to the Committee, which endorsed them, as corrected, at its second session (10 December 2004). The adopted texts may be found as annexes 1 and 2 to the Committee’s report as follows:
- Amendments to the Recommendations on the transport of Dangerous Goods, Model Regulations: ST/SG/AC.10/32/Add.1;